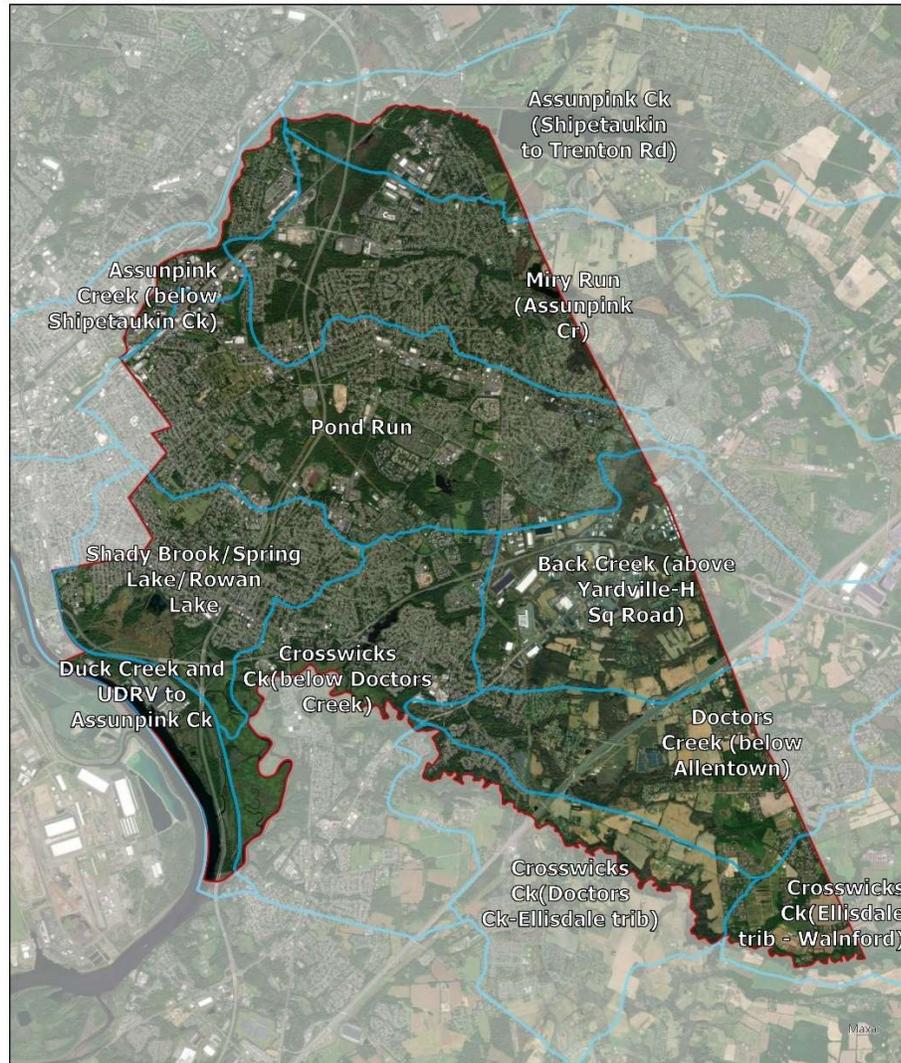




RUTGERS UNIVERSITY

Water Resources Program

New Jersey Agricultural Experiment Station



Hamilton Township (Mercer County) Watershed Assessment Report

Developed by the Rutgers Cooperative Extension Water Resources Program

Funded by Hamilton Township, Mercer County, New Jersey

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Table of Contents

LIST OF FIGURES	4
LIST OF TABLES	5
ACKNOWLEDGEMENTS	7
INTRODUCTION	8
SUBWATERSHEDS OVERVIEW	9
EXISTING WATERY QUALITY PROBLEMS	11
WATER QUALITY IMPAIRMENTS.....	11
TMDLs	14
<i>Fecal Coliform TMDLs</i>	18
<i>PCB TMDLs</i>	18
<i>Phosphorus TMDLs</i>	20
<i>Mercury TMDL</i>	20
TMDL TARGETS (SEE TMDL REPORTS).....	21
SOURCES OF PROBLEMS	22
LAND USE	22
IMPERVIOUS COVER	27
POINT SOURCES.....	30
OTHER POTENTIAL SOURCES	31
<i>Septic systems</i>	31
<i>Leaf litter and road debris</i>	34
<i>Wildlife</i>	34
LOADING ANALYSIS	35
TOTAL PHOSPHORUS	36
TOTAL NITROGEN	40
TOTAL SUSPENDED SOLIDS.....	44
RUNOFF VOLUME & FECAL COLIFORM.....	48
LOAD REDUCTION TARGETS	57
PHOSPHORUS [TMDL/IMPAIRMENT]	57

FECAL COLIFORM [TMDL/IMPAIRMENT]	58
PCBS [TMDL].....	59
TOTAL SUSPENDED SOLIDS (TSS) [IMPAIRMENT]	59
OTHER CONTAMINANTS OF CONCERN	59
<i>Mercury [TMDL]</i>	59
<i>Dissolved Oxygen [Impairment]</i>	60
<i>pH [Impairment]</i>	60
<i>Turbidity</i>	60
<i>Low Priority Impairments</i>	60
EXISTING MANAGEMENT.....	61
STORMWATER MANAGEMENT STRUCTURES.....	61
<i>Reductions from Existing Management Structures</i>	66
<i>Total Phosphorus</i>	67
<i>Fecal Coliform</i>	68
<i>Total Suspended Solids</i>	68
STORMWATER MANAGEMENT ORDINANCES AND PROGRAMS	69
<i>New Jersey Fertilizer Law</i>	71
<i>Municipal separate storm sewer system (MS4) permit requirements</i>	72
<i>Community-wide Ordinances</i>	72
<i>Community-wide Measures</i>	72
<i>Quantifying Removals from MS4 Activities</i>	74
PROPOSED MANAGEMENT	79
GENERAL APPROACHES	79
TOTAL PHOSPHORUS, FECAL COLIFORM, TOTAL SUSPENDED SOLIDS.....	79
<i>Total Phosphorus</i>	81
<i>Fecal Coliform</i>	82
<i>Total Suspended Solids</i>	82
<i>Additional Strategies</i>	83
PCBS	83
MANAGEMENT AREA GOALS.....	83
PROJECT IMPLEMENTATION	86
<i>Identifying additional projects</i>	86
POTENTIAL MANAGEMENT SUMMARY	88

COSTS AND FUNDING SOURCES	90
COST BREAKDOWN	90
FUNDING SOURCES	92
<i>Stormwater Utility</i>	92
<i>Grants</i>	92
<i>Loans</i>	93
SCHEDULE	93
RECOMMENDATIONS	95
CONCLUSION	95
REFERENCES.....	96
APPENDIX 1: NJPDES PERMITS.....
APPENDIX 2: LAND USE CODE TO AREAL LOADING COEFFICIENTS
APPENDIX 3: LAND USE CODE TO CN VALUE
APPENDIX 4: HAMILTON STORMWATER MITIGATION PLAN CONCEPTS
APPENDIX 5: PROPERTY CLASS 15 PARCELS FOR RETROFITS

List of Figures

Figure 1: Hamilton Subwatersheds.....	10
Figure 2: 303(d) Impaired Waters by Year First Listed	13
Figure 3: Hamilton Township HUC14s with TMDLs (Mercury & Phosphorus)	16
Figure 4: Hamilton Township HUC14s with TMDLs (PCB & Fecal Coliform).....	17
Figure 5: Land Use Map.....	23
Figure 6: Land Use Area by Percentage.....	26
Figure 7: Impervious Cover throughout Hamilton Township.....	29
Figure 8: Sewer Service Area and Residential Septic Parcels.....	33
Figure 9: Annual Total Phosphorus Loading from Land Use [lb/yr]	39
Figure 10: Annual Phosphorus Loading from Land Use [%].....	39
Figure 11: Annual Total Nitrogen from Land Use [lb/yr].....	43
Figure 12: Annual Total Nitrogen from Land Use [%]	43
Figure 13: Total Suspended Solids Loading from Land Use [lb/yr]	47
Figure 14: Total Suspended Solids Loading from Land Use [%]	47
Figure 15: Curve Numbers	49
Figure 16: Annual Runoff Volume [Acre-ft/yr]	52
Figure 17: Annual Runoff Volume [%].....	52
Figure 18: Annual Fecal Coliform Loading from Land Use [CFUs/yr].....	56
Figure 19: Annual Fecal Coliform Loading from Land Use [%/yr)	56
Figure 20: New Development During Regulatory Eras	63
Figure 21: Existing Stormwater Management Infrastructure	65
Figure 22: Hamilton Property Class 15 Parcels.....	87

List of Tables

Table 1: Hamilton Subwatershed Areas	9
Table 2: Low Priority Water Quality Impairments	12
Table 3: Medium Priority Water Quality Impairments	12
Table 4: Approved TMDLs for waterbodies in Hamilton Township, Mercer County, NJ	15
Table 5: Required Pollutant Load Reduction to Achieve TMDLs	21
Table 6: Land Use by HUC 14 (Area in Acres)	24
Table 7: Land Use by HUC 14 (% of total HUC area).....	25
Table 8: Impervious Cover by HUC14.....	28
Table 9: Estimated Residential Parcels on Septic	32
Table 10: Areal Loading Coefficients and Coliform EMC	35
Table 11: Annual Total Phosphorus Loading from Land Use [lb/yr]	37
Table 12: Annual Total Phosphorus Loading from Land Use [%].....	38
Table 13: Annual Total Nitrogen Loading from Land Use [lb/yr].....	41
Table 14: Annual Total Nitrogen Loading from Land Use [%].....	42
Table 15: Total Suspended Solids Loading from Land Use [lb/yr]	45
Table 16: Total Suspended Solids Loading from Land Use [%].....	46
Table 17: Annual Runoff Volume [acre-ft/yr]	50
Table 18: Annual Runoff Volume [%]	51
Table 19: Annual Runoff Volume [Qmax = 1 in] [acre-ft/yr].....	53
Table 20: Annual Fecal Coliform Loading from Land Use [CFUs/yr * 10 ¹²].....	54
Table 21: Annual Fecal Coliform Loading from Land Use [%]	55
Table 22: Phosphorus Target Load Reductions [lb/yr]	57
Table 23: Fecal Coliform Load Reductions [CFU/yr * 10 ¹²].....	58
Table 24: TSS Target Load Reductions [lb/yr]	59
Table 25: Area of New Development During Regulatory Eras [Acres].....	62
Table 26: Area of New Development During Regulatory Eras [%].....	62
Table 27: Existing Management Reductions.....	66
Table 28: Phosphorus Load Reductions from Existing Management (lb/yr).....	67
Table 29: Fecal Coliform Load Reductions from Existing Management (CFU/yr * 10 ¹²)..	68

Table 30: TSS Load Reductions from Existing Management (lb/yr).....	68
Table 31: MS4 Permit Actions Impact on Pollutants of Concern	69
Table 32: Reduction in TP Loading due to NJ Fertilizer Law (lb/yr)	72
Table 33: Removal Efficiencies of Street Sweepers (Zarriello, et. al, 2002).....	75
Table 34: Total Phosphorus Loading and Reductions from Roadways	76
Table 35: Total Suspended Solids Loading and Reductions from Roadways.....	76
Table 36: Total Fecal Coliform Loading and Reductions from Roadways.....	76
Table 37: Total Phosphorus Load Reduction Due to Leaf Collection from Late September through November	78
Table 38: Proposed Best Management Practices (BMPs) Reductions	80
Table 39: Total Phosphorus Proposed Project Reduction Potential [lb/yr].....	81
Table 40: Fecal Coliform Proposed Project Reduction Potential [CFU/yr *10 ¹²]	82
Table 41: Total Suspended Solids Proposed Project Reduction Potential [lb/yr]	82
Table 42: Total Phosphorus Estimated Management Areas (acres).....	84
Table 43: Fecal Coliform Estimated Management Areas (acres).....	85
Table 44: Stormwater Mitigation Plan Project Management	86
Table 45: Total Phosphorus Potential Management Strategies for TMDLs (lb/yr)	88
Table 46: Fecal Coliform Potential Management Strategies for TMDLs (CFU *10 ¹² /yr) ..	89
Table 47: Costs for Proposed Management Strategies for Phosphorus	91
Table 48: Costs for Proposed Management Strategies fpr Fecal Coliform	91
Table 49: Schedule	94

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Introduction

Located in Mercer County in central New Jersey, Hamilton Township covers over 40 square miles east of Trenton with a population of 92,297 (2020 United States Census). Hamilton Township contains portions of eight watersheds: Assunpink Creek, Back Creek, Crosswicks Creek, Doctors Creek, Duck Creek, Miry Run, Pond Run, and Shady Brook. There are approximately 131 miles of rivers and streams within the municipality; these include the Assunpink Creek along the northern edge of the municipality, Miry Run and its tributaries, Pond Run and tributaries, Edges Brook, Back Creek, Doctors Creek and tributaries, and a section of the Delaware River. Hamilton Township is within the New Jersey Department of Environmental Protection (NJDEP) Watershed Management Areas (WMA) 11 (Central Delaware Tributaries) and WMA 20 (Assiscunk, Crosswicks, and Doctors Creeks).

The purpose of this watershed assessment report is to take the inventory created by the Watershed Inventory Report and understand what watershed improvements are needed. The Watershed Inventory Report provided a comprehensive understanding of key, defining features within the watersheds throughout Hamilton Township. This involved gathering, organizing, and presenting information about existing conditions and infrastructure within each watershed. The primary focus of this assessment will be on understanding what existing stormwater management is present, identifying the key water quality issues present, and identifying potential projects that can be implemented to improve the water quality. While the focus of analysis will be on water quality, water quantity concerns will be discussed as well. The report aims to serve as a tool for informed decision-making, planning, and implementation of sustainable watershed management strategies aimed to protect and enhance the health of the watershed, its associated ecosystems, and the surrounding communities.

A geographic information system (GIS) was used to visualize data pertaining to the existing stormwater infrastructure, land cover, watershed delineation, and water quality classification and impairments within separate layers. Datasets from the New Jersey Department of Environmental Protection's (NJDEP's) GIS database was used to populate the watershed inventory map, from which the relevant data were isolated. Datasets representing Hamilton

Township’s existing stormwater infrastructure were provided by the township and were manipulated, if necessary, for the specific purposes of this report.

Subwatersheds Overview

Hamilton Township includes portions or the entirety of 11 HUC 14s. Table 1 lists the HUC 14s, their areas as the portion of the areas that is inside of Hamilton Township, and the total area of the HUC14.

Table 1: Hamilton Subwatershed Areas

HUC 14	Subwatershed Name	Hamilton Area (acres)	Total Area (acres)
2040105230050	Assunpink Ck (Shipetaukin to Trenton Rd)	1,017	6,182
2040105240030	Miry Run (Assunpink Cr)	3,721	8,555
2040105240040	Pond Run	5,954	6,405
2040105240060	Assunpink Creek (below Shipetaukin Ck)	798	3,051
2040201030010	Duck Creek and UDRV to Assunpink Ck	902	2,124
2040201050050	Crosswicks Ck(Ellisdale trib - Walnford)	754	4,383
2040201050070	Crosswicks Ck(Doctors Ck-Ellisdale trib)	1,099	4,144
2040201060030	Doctors Creek (below Allentown)	3,012	5,596
2040201070010	Back Creek (above Yardville-H Sq Road)	3,009	4,171
2040201070020	Crosswicks Ck(below Doctors Creek)	2,657	5,518
2040201070030	Shady Brook/Spring Lake/Rowan Lake	2,824	3,150

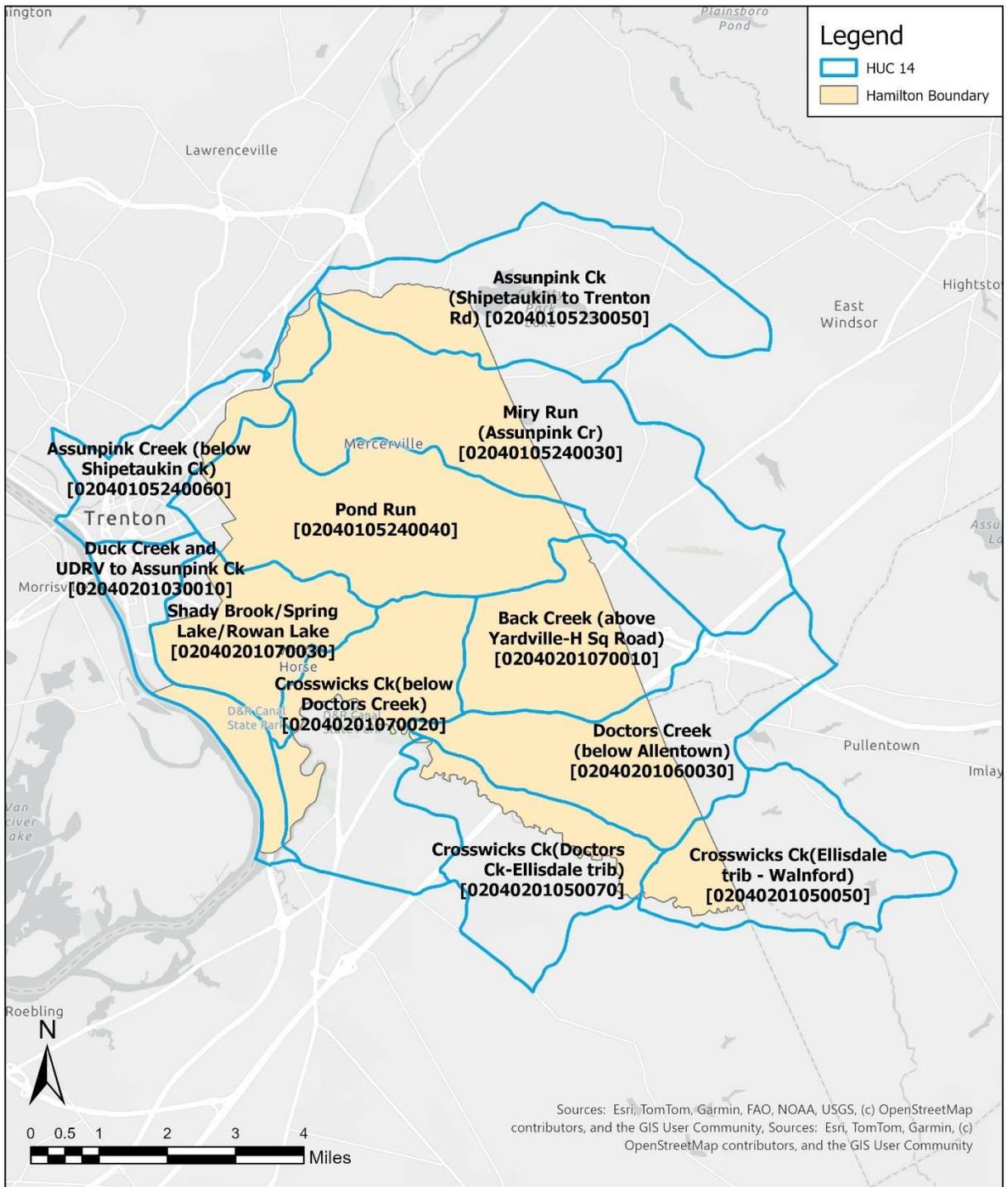


Figure 1: Hamilton Subwatersheds

Existing Watery Quality Problems

The first goal of this report is to identify where the existing problems are. The place to start is by identifying the established water quality impairments and TMDLs (total maximum daily loads). This data is primarily extracted from the Watershed Inventory Report. The starting goals should be to target the TMDLs since these have clear maximum loadings that can be referenced to identify what reductions are needed. The impairments are more difficult, but land use loadings can be used to evaluate existing loads for some parameters and goals can be set to reduce them by reasonable levels.

Water Quality Impairments

Section 303(d) of the Clean Water Act requires states to identify and list waters that do not meet water quality standards after the implementation of technology-based controls. These waters are impaired, meaning they do not meet water quality standards designed to protect public health and the environment. If a water body is found to be impaired, it is included in the 303(d) list, and a total maximum daily load (TMDL) may be developed for that impairment. Table 2 and Table 3 summarize the impairments identified by the 303(d) list published in 2020 for each subwatershed in Hamilton Township. They are divided between low and high priority for TMDL development. Their prioritization for management should be handled similarly. Figure 2 depicts the areas to which each of these impairments apply, and the sections are formatted by the year the impairment was first listed in the 303(d) list.

Table 2: Low Priority Water Quality Impairments

Low Priority Water Quality Impairments according to 2020 303(d) list by year first listed							Total Impairments by HUC
HUC14: Impaired Segments	Arsenic	Biological- Cause unknown	Chlordane in Fish Tissue	Lead	Mercury in Fish Tissue	PCBs in Fish Tissue	
HUC02040105230050: Assunpink Ck (Shipetaukin to Trenton Rd)	1998	2006	2014			2012	4
HUC02040105240030: Miry Run (Assunpink Cr)	2012	2016					2
HUC02040105240040: Pond Run	2018	2016					2
HUC02040105240060: Assunpink Ck (below Shipetaukin Ck)	1998	2016		1998	2010		4
HUC02040201030010: Duck Creek and UDRV to Assunpink Ck					2006	2006	2
HUC02040201050050: Crosswicks Ck (Ellisdale trib - Walnford)	2006			2012			2
HUC02040201050070: Crosswicks Ck (Doctors Ck-Ellisdale trib)	2006				2006	2006	3
HUC02040201060030: Doctors Creek (below Allentown)		2016					1
HUC02040201070010: Back Creek (above Yardville-H Sq Road)	2018	2016					2
HUC02040201070020: Crosswicks Ck (below Doctors Creek)	2016	2008				2016	3
HUC02040201070030: Shady Brook/Spring Lake/Rowan Lake					2006	2006	2
Total Impairments by Parameter	8	7	1	2	4	5	27

Table 3: Medium Priority Water Quality Impairments

Medium Priority Water Quality Impairments according to 2020 303(d) list by year first listed							Total Impairments by HUC
HUC14: Impaired Segments	Dissolved Oxygen	Escherichia Coli (E. COLI)	pH	Phosphorus, Total	Total Suspended Solids (TSS)	Turbidity	
HUC02040105230050: Assunpink Ck (Shipetaukin to Trenton Rd)		2014					1
HUC02040105240030: Miry Run (Assunpink Cr)							
HUC02040105240040: Pond Run			2020	2020	2006		3
HUC02040105240060: Assunpink Ck (below Shipetaukin Ck)				2010			1
HUC02040201030010: Duck Creek and UDRV to Assunpink Ck							
HUC02040201050050: Crosswicks Ck (Ellisdale trib - Walnford)				2002			1
HUC02040201050070: Crosswicks Ck (Doctors Ck-Ellisdale trib)				2002	2018	2006	3
HUC02040201060030: Doctors Creek (below Allentown)	2018						1
HUC02040201070010: Back Creek (above Yardville-H Sq Road)		2018		2006			2
HUC02040201070020: Crosswicks Ck (below Doctors Creek)		2012		2006	2006		3
HUC02040201070030: Shady Brook/Spring Lake/Rowan Lake							
Total Impairments by Parameter	1	3	1	6	3	1	15



Figure 2: 303(d) Impaired Waters by Year First Listed

TMDLs

In accordance with Section 305(b) and 303(d) of the Federal Clean Water Act, New Jersey is required to assess the overall water quality of the state's waters and identify those waterbodies with a water quality impairment for which total maximum daily loads (TMDLs) may be necessary. NJDEP fulfills its assessment obligation under the Clean Water Act through the Integrated Water Quality Monitoring and Assessment Report (i.e., Integrated Report), which includes the Integrated List of Waterbodies, issued biennially. A TMDL represents the assimilative or carrying capacity of a waterbody, taking into consideration point and nonpoint sources of pollutants of concern, the natural background, and surface water withdrawals. A TMDL can be thought of as a "budget" for the total amount of a pollutant that can enter a waterbody while still maintaining surface water quality standards. TMDLs have been developed for various pollutants in various waterbodies throughout the state. Tier A MS4 discharges are considered point sources under the Clean Water Act which Hamilton Township is classified as. For MS4 discharges, best management practices (BMPs) are generally considered the most appropriate form of effluent limitation when designed to satisfy technology-based requirements and to protect water quality.

The NJDEP has created a TMDL Look-Up Tool to find applicable TMDLs for each municipality. This tool can be found at <https://www.nj.gov/dep/dwq/msrp-tmdl-rh.htm>. This tool will be reviewed every year to determine if new TMDLs have been approved and adopted, so they can be incorporated into the Stormwater Pollution Prevention Plan (SPPP) and a revised Watershed Improvement Plan. NJDEP Open Data also has GIS layers pertaining to published and lakesheds and streamsheds. Table 4 below shows the approved TMDLs for the waterbodies in Hamilton Township, and Figure 3 and Figure 4 depicts the region to which each TMDL applies.

Table 4: Approved TMDLs for waterbodies in Hamilton Township, Mercer County, NJ

Date	Pollutant	Waterbody
Stream TMDLs		
2003	Fecal Coliform	Assunpink Creek (below...), Pond Run, Crosswicks Creek (Doctors..), Crosswicks Creek((Ellisdale...), Miry Run, Doctors Creek
2003	PCBs	Back Creek (above Yardville-H Sq Road)
2003	PCBs	Crosswicks Creek (Doctors Ck-Ellisdale trib)
2003	PCBs	Crosswicks Creek (Ellisdale Tributary - Walnford)
2003	PCBs	Crosswicks Creek (below Doctors Creek)
2003	PCBs	Doctors Creek (below Allentown)
2003	PCBs	Duck Creek and UDRV to Assunpink Creek
2003	PCBs	Shady Brook/Spring Lake/Rowan Lake
2007	Total Phosphorus	Doctors Creek and Miry Run
2011	Mercury	Crosswicks Ck(Ellisdale trib - Walnford)
2017	Mercury	Assunpink Ck (Shipetaukin to Trenton Rd)
Lake TMDLs		
2003	Total Phosphorus	Spring Lake

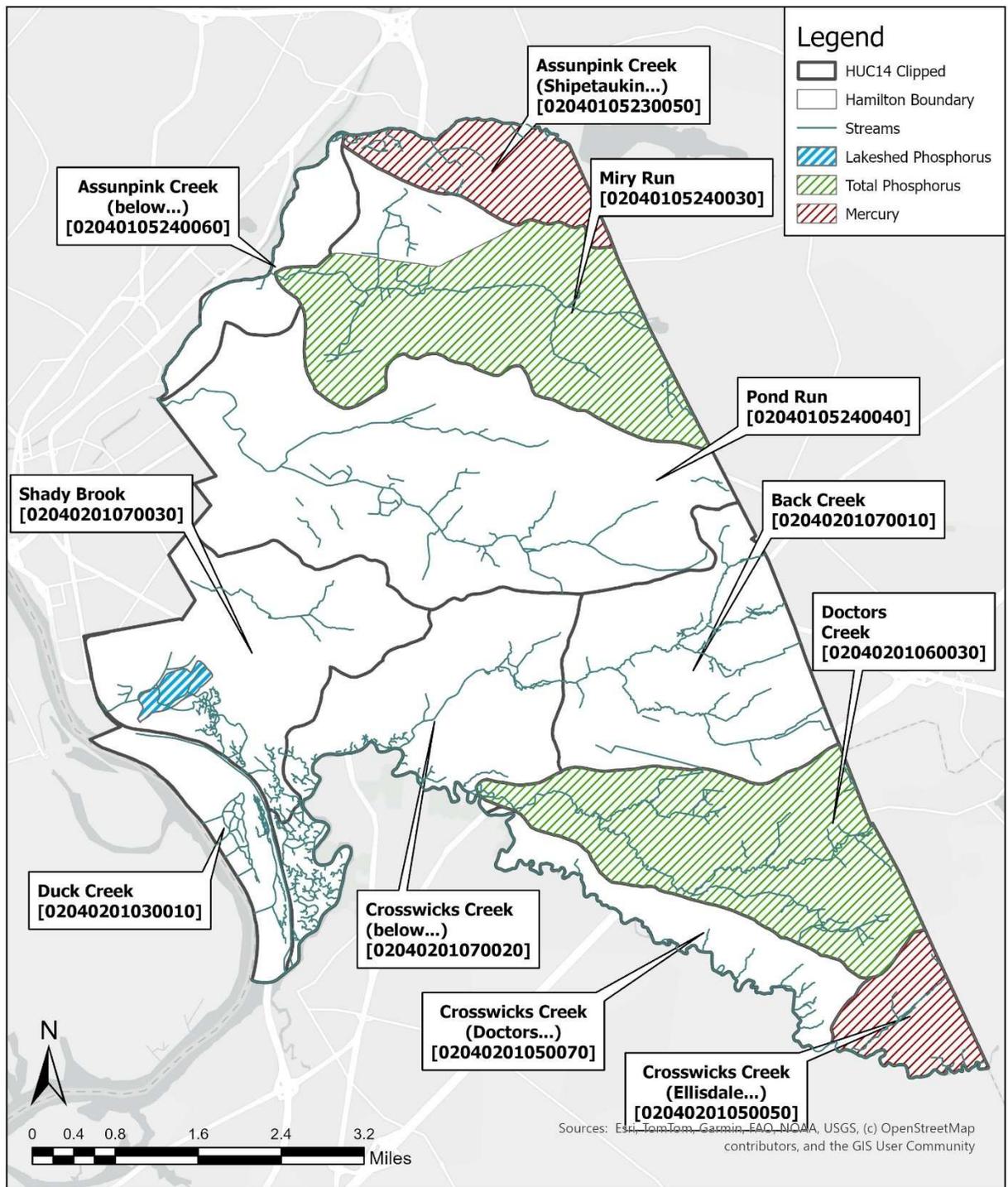


Figure 3: Hamilton Township HUC14s with TMDLs (Mercury & Phosphorus)

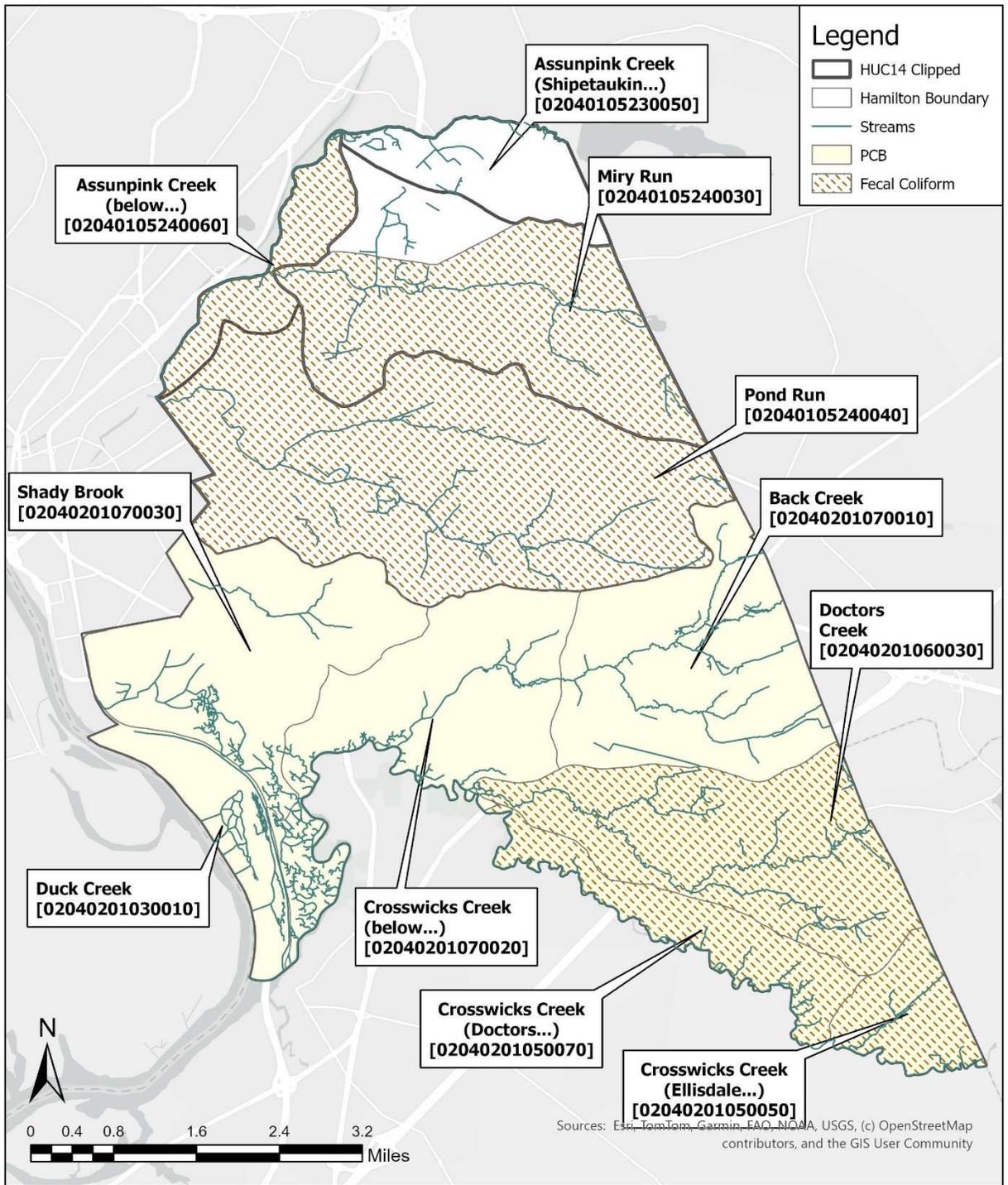


Figure 4: Hamilton Township HUC14s with TMDLs (PCB & Fecal Coliform)

Fecal Coliform TMDLs

Prior to October 2006, New Jersey had water quality standards for fecal coliform as an indicator for pathogen impairment. The regulations stated that “Fecal coliform levels shall not exceed a geometric average of 200 CFU/100 ml nor should more than 10 percent of the total sample taken during any 30-day period exceed 400 CFU/100 ml in FW2 waters.” In 2003, TMDLs were developed for fecal coliform. These TMDLs included the load reductions required to achieve instream fecal coliform concentrations. Nonpoint and stormwater point sources are the primary contributors to fecal coliform loads in these streams and can include storm-driven loads transporting fecal coliform from sources such as geese, farms, and domestic pets to the receiving water. Nonpoint sources also include steady inputs from sources such as failing sewage conveyance systems and failing or inappropriately located septic systems. Because the total point source contribution other than stormwater (i.e., publicly-owned treatment works, POTWs) is an insignificant fraction of a percent of the total load, these fecal coliform TMDLs will not impose any change in current practices for POTWs and will not result in changes to existing effluent limits.

Fecal coliform TMDLs were developed for Assunpink Creek, Pond Run, Crosswicks Creek, Pleasant Run, Miry Run, and Doctors Creek in Hamilton Township. The TMDLs identified load reductions from 86% to 99% to achieve the instream fecal coliform criteria. For each waterway that has a fecal coliform TMDL, there are recommended strategies for achieving the required load reductions. Most of the strategies include complying with the MS4 permit requirements including passing pet waste ordinances, street sweeping, and catch basin cleaning. In watersheds where there are agricultural land uses, the recommended strategies included helping the farmer obtain United States Farm Bill funding to implement agricultural best management practices that will reduce the impact of stormwater runoff from their farm.

PCB TMDLs

The states of Delaware, New Jersey, and Pennsylvania have identified the Delaware Estuary as being impaired based on their findings of elevated levels of polychlorinated biphenyls (PCBs) in the tissue of fish caught in this portion of the Delaware River. As a result of this

finding, the Delaware River Basin Commission (DRBC) prepared a TMDL for polychlorinated biphenyls (PCBs) for water quality management zones 2-5 of the Tidal Delaware River. Hamilton Township is in water quality management zone 2.

PCBs are classified as a probable human carcinogen by the U.S. Environmental Protection Agency (EPA). They also have been shown to have an adverse impact on human reproductive and immune systems and may act as an endocrine disruptor. Due to their stable properties, PCBs were used in hundreds of industrial and commercial applications, including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; and in pigments, dyes, and carbonless copy paper, among other applications. PCB laden oil is often associated with electrical transformers. More than 1.5 billion pounds of PCBs were manufactured in the United States before their manufacture and general use, with a few small exceptions, was banned by the EPA in the late 1970s. Existing uses in some electrical equipment continue to be allowed. PCBs are hydrophobic and thus tend to bind to organic particles in sediment and soils. Their chemical stability allows them to persist in the environment for years. PCBs accumulate in the tissue of fish and other wildlife, entering the organism through absorption or ingestion. As a result, they may be present in fish and marine mammals at levels many times higher than in the surrounding water and at levels unsuitable for human consumption.

Since pentachlorobiphenyls (penta-PCBs) were the dominant PCBs in fish tissue monitored in the estuary and ambient data indicated that throughout the estuary penta-PCBs represents approximately 25% of the total PCBs present, the penta-PCBs were selected for the development of the TMDL. TMDLs, wasteload allocations (WLAs), and load allocations (LAs) for total PCBs were extrapolated using a factor of 4 to 1 from TMDLs, and allocations were developed for penta-PCBs.

The TMDL recognizes the Hamilton Township MS4 as a point source. Approximately 24% of the PCB loads to the Delaware River in zone 2 come from the MS4s in this zone, which include Hamilton Township and 12 other municipalities in New Jersey and seven other municipalities in Pennsylvania. The calculated waste load allocation for the MS4s in zone 2 is 1.511 mg/day for penta-PCBs and 6.044 mg/day for total PCBs. While a percent reduction in PCB loading for Hamilton Township is not provided in the PCB TMDL, monitoring data

show that the existing PCB load in zone 2 is roughly two to three orders of magnitude higher than the TMDL. The target concentration is set to 7.9 pg/L, and concentrations ranged from 443 to 10,135 pg/L across the entire Delaware River zones based on sampling efforts from September 2001 to March 2003. This means concentrations and thus loadings must be reduced somewhere from 98.2%-99.9%.

Phosphorus TMDLs

Spring Lake, Miry Run, and Doctors Creek were all determined to have total phosphorus concentrations above the surface water quality standard and therefore required a TMDL to be developed. Excessive phosphorus can lead to eutrophication and can be detrimental to a waterbody. For freshwater streams, the total phosphorus water quality standard is 0.1 mg/l, and for freshwater lakes, the standard is 0.05 mg/l. Miry Run and Doctors Creek were given target loading reductions of 22.0% and 77.5%. These load reductions only apply to agricultural and urban land uses since the other land uses were removed during the analysis.

Spring Lake is a 22-acre lake located in Hamilton Township, Mercer County. The lake drains a small portion (115 acres) of the Trenton Marshes, an extensive wetland area that borders the Delaware River. The lakeshed is very small, only 5.3 times the area of the lake, and consists entirely of forest and wetland. Spring Lake was once part of a small amusement park, serving primarily an aesthetic purpose and has been used for fishing; however, more recently excessive weed growth has interfered with its use. Most of the inflow into the lake is through groundwater seepage and springs, with a lake mean depth of 1.22 meters and a total outflow of 379,000 m³. Lake volume and detention time were estimated at 107,000 m³ and 103 days, respectively. For the purposes of this TMDL analysis, 75% of the water load was assumed to be due to groundwater infiltration. Since the drainage is all wetlands and most of the flow to the lake is groundwater infiltration, the TMDL does not require a phosphorus load reduction for any land uses in the Spring Lake watershed.

Mercury TMDL

The TMDL reports for Mercury indicate that the primary source of Mercury is from air deposition with only about 1.1% of the total loading estimated from stormwater point

discharges. For this reason, it is neglected from this report as the focus of this report is on stormwater management and impact for Mercury should be focused on the air deposition.

TMDL Targets (See TMDL Reports)

Each of the TMDL reports sets targets for how to achieve that TMDL. The total phosphorus reports list them as reductions from Agricultural and Urban land sources with other reductions set at 0%. The fecal coliform report lists them simply as load reductions from nonpoint surfaces in general. The PCB load reduction was extrapolated from the concentration data in the report.

Table 5: Required Pollutant Load Reduction to Achieve TMDLs

Waterbody	Fecal Coliform	PCBs¹	Total Phosphorus
Assunpink Creek (2040105230050, 2040105240060)	99%	99.9%	-
Pond Run (2040105240040)	99%	99.9%	-
Crosswicks Creek (2040201050050, 2040201050070, 2040201070020)	86%*	99.9%	-
Pleasant Run	96%	99.9%	-
Miry Run (2040105240030)	96%	99.9%	22.0%
Doctors Creek (2040201060030)	86%	99.9%	77.5%
Back Creek (2040201070010)	-	99.9%	-
Shady Brook (2040201070030)	-	99.9%	-
Spring Lake (2040201070030)	-	-	0%

*Typo identified from Watershed Inventory Report, Fecal Coliform only applies to 2040201050050 and 2040201050070

¹ Calculated from the PCB TMDL (DRBC, 2003)

Sources of Problems

Land Use

Land use leads to increases in impervious cover as well as altered use of other lands that can contribute to nonpoint source pollution. Analyzing current land use gives a better picture as to where pollution may be coming from. Table 6 and Table 7 show the land use broken down by HUC 14 both in acres and by percentage of the total HUC 14 area for the 2020 Land Use layer (NJDEP Open Data). Figure 6 shows the percentages in a bar chart to highlight that for a majority of the subwatersheds, urban land is a dominate land use. Over a third of the municipality's land uses, approximately 35%, is comprised of residential properties (NJDEP Open Data). Of that residential land use, a large portion, 66%, is residential, single unit, medium density development (NJDEP Open Data). The New Jersey Department of Environmental Protection (NJDEP) has defined single unit, medium density development as residential urban/suburban neighborhoods greater than 1/8-acre and up to and including 1/2-acre lots (Anderson et al., 1976). In addition to residential development, urban land use also includes land used for commercial, industrial, recreational, and transportation purposes. Agriculture is predominant in a few of the subwatersheds in the southeast of the township, and there are substantial amounts of wetlands in many of the watersheds as well.

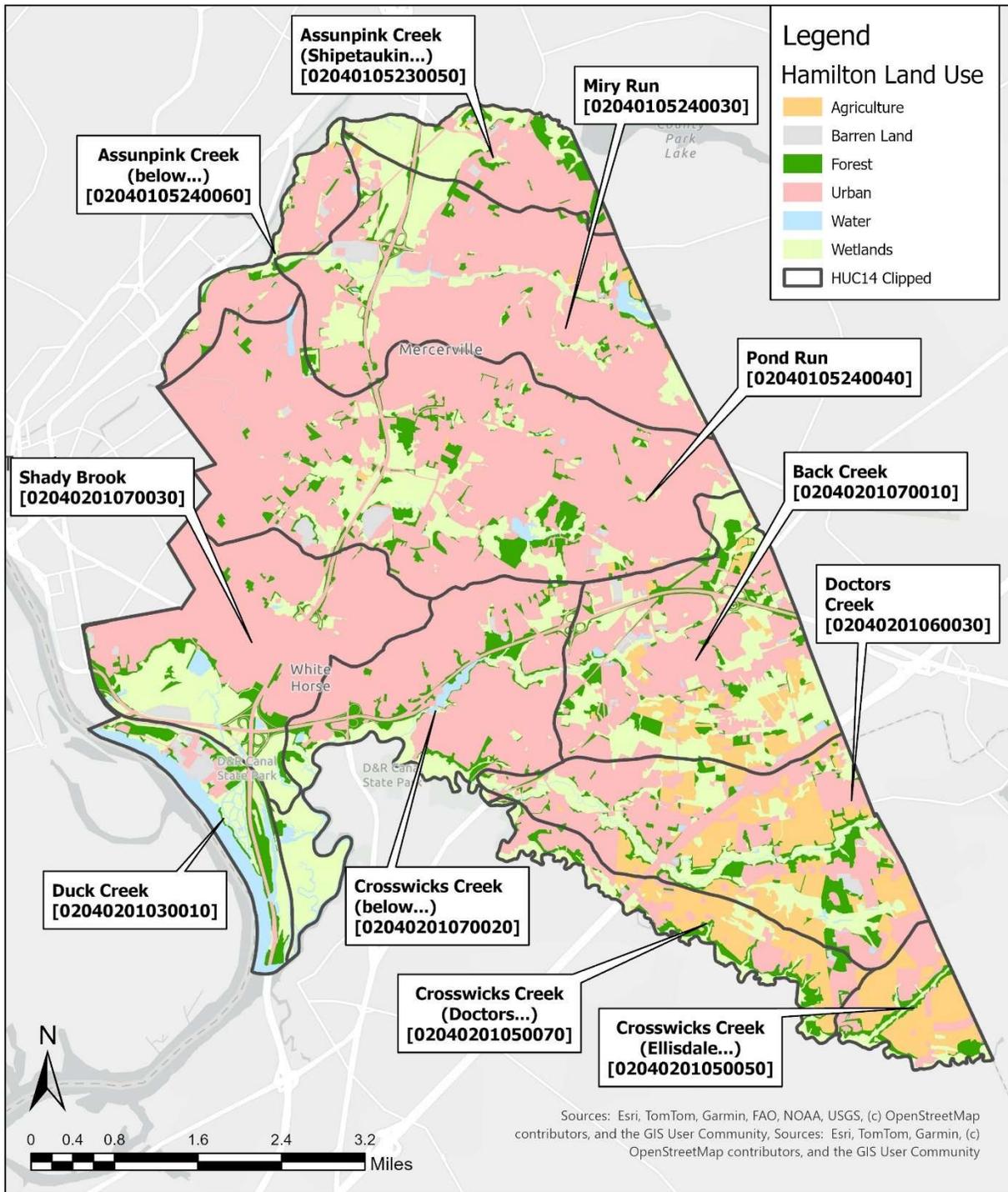


Figure 5: Land Use Map

Table 6: Land Use by HUC 14 (Area in Acres)

HUC14	Assunpink Ck 2040105230050	Miry Run 2040105240030	Pond Run 2040105240040	Assunpink Ck 2040105240060	Duck Creek 2040201030010	Crosswicks Ck 2040201050050
Agriculture	1	29	14	2	-	370
Barren Land	10	48	74	7	54	-
Forest	135	177	421	41	176	86
Urban	479	2,690	4,672	637	144	204
Water	10	66	52	18	337	9
Wetlands	382	711	721	93	192	85
HUC Total	1,017	3,721	5,954	798	902	754
HUC14	Crosswicks Ck 2040201050070	Doctors Creek 2040201060030	Back Creek 2040201070010	Crosswicks Ck 2040201070020	Shady Brook 2040201070030	Total
Agriculture	379	794	319	1	-	1,910
Barren Land	4	21	29	8	39	294
Forest	160	316	311	244	205	2,271
Urban	317	1,197	1,410	1,690	1,981	15,420
Water	25	43	27	138	53	778
Wetlands	214	643	913	576	547	5,076
HUC Total	1,099	3,012	3,009	2,657	2,824	25,749

Table 7: Land Use by HUC 14 (% of total HUC area)

HUC14	Assunpink Ck 2040105230050	Miry Run 2040105240030	Pond Run 2040105240040	Assunpink Ck 2040105240060	Duck Creek 2040201030010	Crosswicks Ck 2040201050050
Agriculture	0.1%	0.8%	0.2%	0.3%	-	49.0%
Barren Land	1.0%	1.3%	1.2%	0.9%	6.0%	-
Forest	13.3%	4.8%	7.1%	5.2%	19.5%	11.4%
Urban	47.1%	72.3%	78.5%	79.8%	16.0%	27.0%
Water	1.0%	1.8%	0.9%	2.3%	37.3%	1.2%
Wetlands	37.5%	19.1%	12.1%	11.6%	21.3%	11.3%
HUC14	Crosswicks Ck 2040201050070	Doctors Creek 2040201060030	Back Creek 2040201070010	Crosswicks Ck 2040201070020	Shady Brook 2040201070030	Total
Agriculture	34.5%	26.3%	10.6%	0.1%	-	7.4%
Barren Land	0.3%	0.7%	1.0%	0.3%	1.4%	1.1%
Forest	14.6%	10.5%	10.3%	9.2%	7.3%	8.8%
Urban	28.8%	39.7%	46.9%	63.6%	70.1%	59.9%
Water	2.3%	1.4%	0.9%	5.2%	1.9%	3.0%
Wetlands	19.5%	21.3%	30.3%	21.7%	19.4%	19.7%

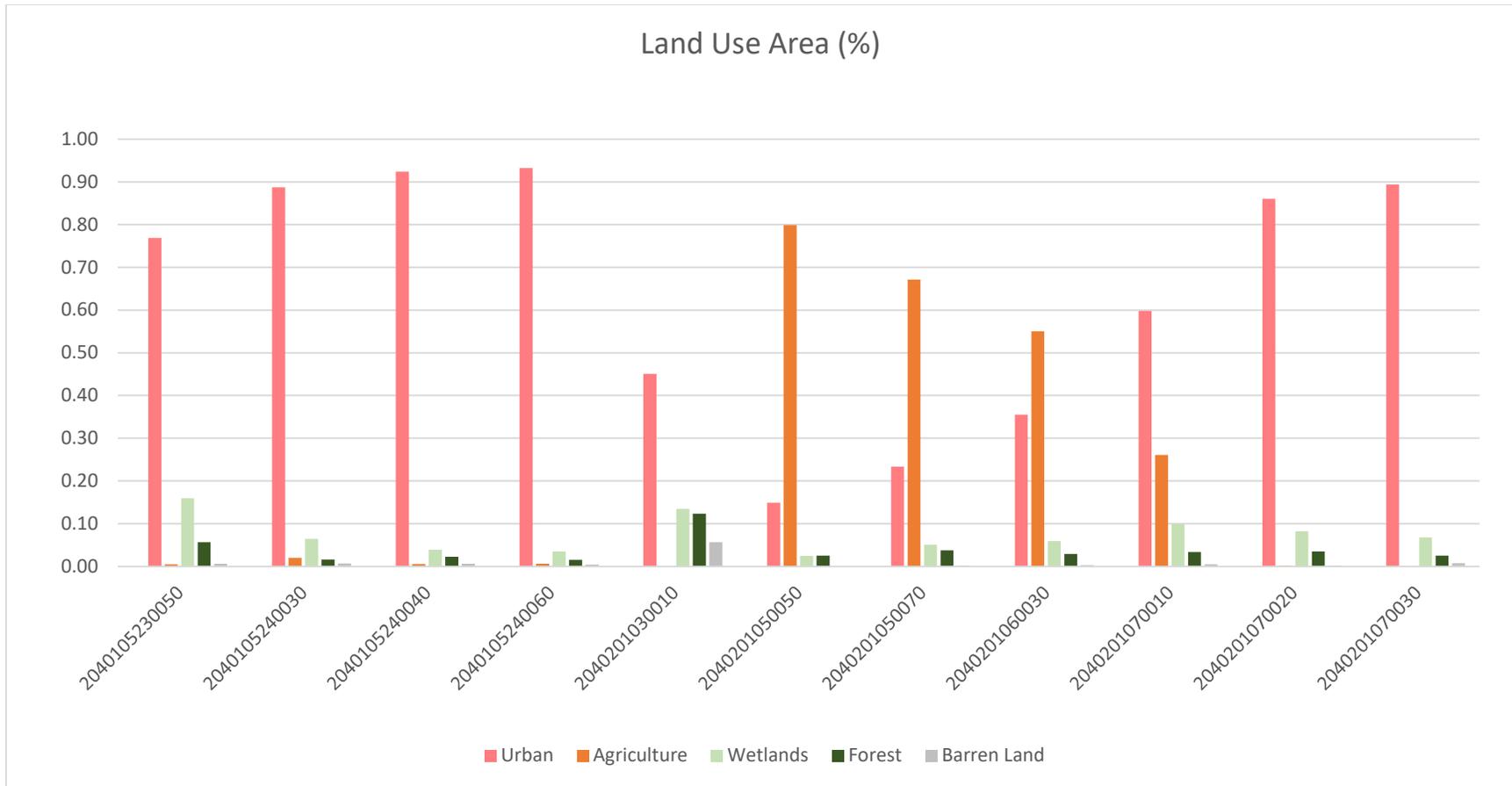


Figure 6: Land Use Area by Percentage

Impervious Cover

NJDEP's Open Data impervious surface GIS data layer depicts surfaces throughout Hamilton Township that have been covered with materials that are highly resistant to infiltration by water, rendering them impervious. These impervious cover values were used to estimate the impervious coverage for Hamilton Township (Table 8). Based upon the NJDEP impervious surface data, Hamilton Township has impervious cover totaling 30.2%.

The literature suggests a link between impervious cover and stream ecosystem impairment (Schueler, 1994; Arnold and Gibbons, 1996; May et al., 1997). Impervious cover may be linked to the quality of lakes, reservoirs, estuaries, and aquifers (Caraco et al., 1998), and the amount of impervious cover in a watershed can be used to project the current and future quality of streams. Based on the scientific literature, Caraco et al. (1998) classified urbanizing streams into the following three categories: sensitive streams, impacted streams, and non-supporting streams.

Schueler (1994, 2004) developed an impervious cover model that classified "sensitive streams" as typically having a watershed impervious surface cover from 0-10%. "Impacted streams" have a watershed impervious cover ranging from 11-25% and typically show clear signs of degradation from urbanization. "Non-supporting streams" have a watershed impervious cover of greater than 25%; at this high level of impervious cover, streams are simply conduits for stormwater flow and no longer support a diverse stream community. Schueler et al. (2009) reformulated the impervious cover model based upon new research that had been conducted.

This analysis determined that stream degradation was first detected at 2 to 15% impervious cover. The updated impervious cover model recognizes the wide variability of stream degradation at impervious cover below 10%. The updated model also moves away from having a fixed line between stream quality classifications. For example, 5 to 10% impervious cover is included for the transition from sensitive to impacted, 20 to 25% impervious cover for the transition between impacted and non-supporting, and 60 to 70% impervious cover for the transition from non-supporting to urban drainage. Based upon this information, Hamilton Township's high impervious cover percentage would suggest that its waterways are impacted at least in significant part by the high percentage of impervious cover.

Table 8: Impervious Cover by HUC14

HUC14	Subwatershed Name	Area (Acres)	Impervious %
2040105230050	Assunpink Ck (Shipetaukin to Trenton Rd)	237.3	23.3%
2040105240030	Miry Run (Assunpink Cr)	1367.3	36.7%
2040105240040	Pond Run	2354.3	39.5%
2040105240060	Assunpink Creek (below Shipetaukin Ck)	366.7	45.9%
2040201030010	Duck Creek and UDRV to Assunpink Ck	142.2	15.8%
2040201050050	Crosswicks Ck(Ellisdale trib - Walnford)	54.0	7.2%
2040201050070	Crosswicks Ck(Doctors Ck-Ellisdale trib)	117.8	10.7%
2040201060030	Doctors Creek (below Allentown)	425.4	14.1%
2040201070010	Back Creek (above Yardville-H Sq Road)	746.4	24.8%
2040201070020	Crosswicks Ck(below Doctors Creek)	844.7	31.8%
2040201070030	Shady Brook/Spring Lake/Rowan Lake	1121.6	39.7%
Total		7777.8	30.2%

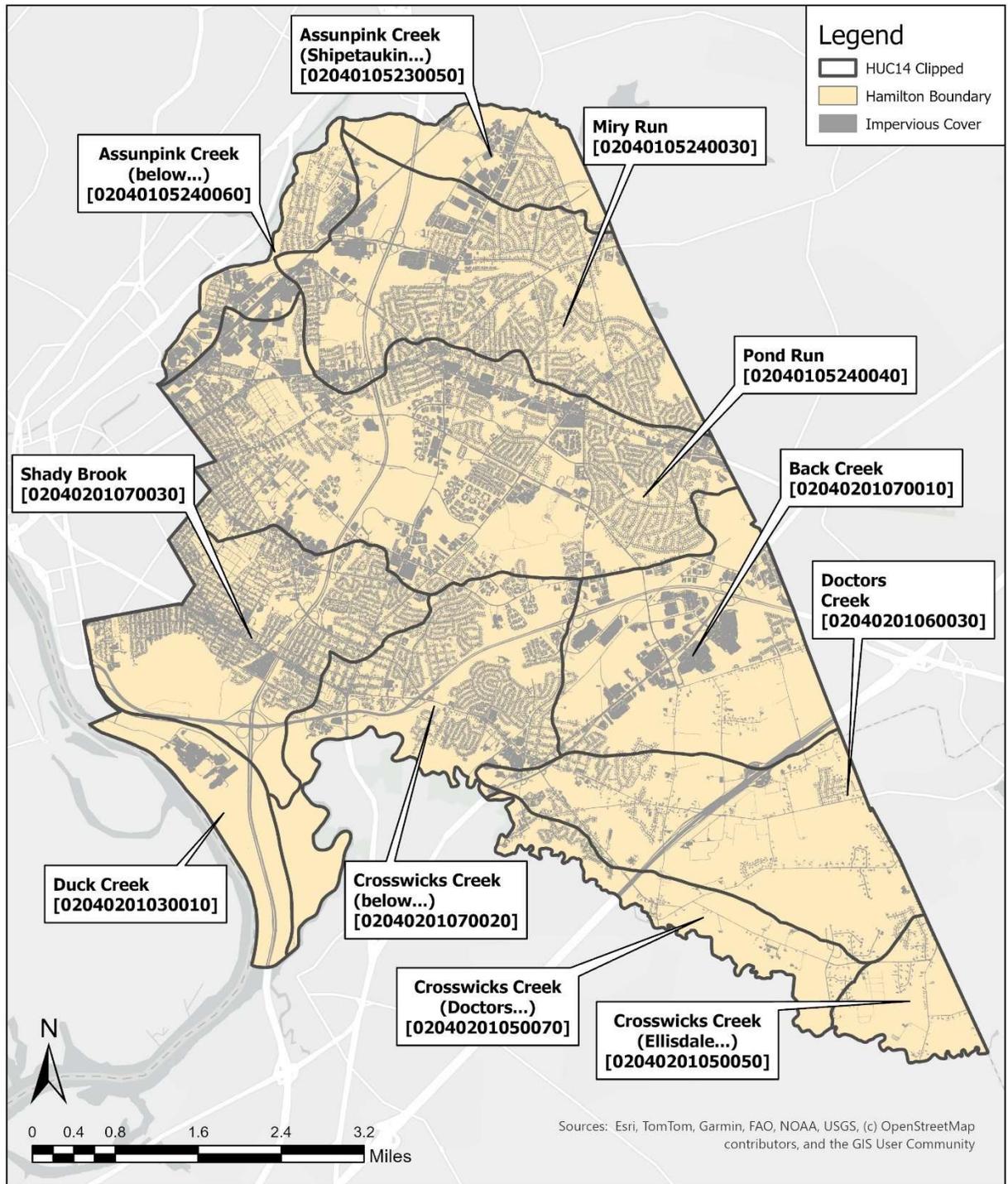


Figure 7: Impervious Cover throughout Hamilton Township

Point Sources

Point sources of runoff can typically come from things like wastewater treatment plants and industrial uses. These point sources can largely be identified through the New Jersey Pollution (NJPDES) Permits. These permits should restrict what these point sources are able to do to discharge to reasonable levels. However, if they are not conducting things properly, they may be a potential point source especially if a contaminant of concern could be traced back to the site. There may also exist point sources which do not have existing permits and may be discharging pollution unregulated. Industrial and commercial properties could be investigated in cases where unexpected levels of a contaminant are observed to see if there is a potential point source.

A full table of the current NJPDES Permits can be found in Appendix 1. The most up to date list can be found at NJDEP's Data Miner (NJDEP, 2025).

Other potential sources

Septic systems

Septic systems are another source of total phosphorus loading (and potentially other contaminants of concern) to Hamilton Township. There are circumstances where phosphorus from septic systems can contribute to the pollution of lakes or streams. Some of the factors that contribute to problem sites include (National Environmental Services Center, 2013):

- Calcareous soils (i.e., soils that contain calcium carbonate)
- Coarse-grained soils such as sandy and gravelly soils that allow rapid flow rates
- Households that generate more wastewater than their septic systems were designed to handle
- Drainfields with thin soils, shallow bedrock, or high water tables
- Systems with drainfields close to lakes or streams
- Areas where septic systems are densely sited
- Systems where the septic tank effluent is not uniformly distributed across the drainfield
- Older or substandard systems such as cesspools, which may be in direct contact with groundwater during part of the year.

Often it is a combination of these factors that causes phosphorus impacts to local waterways. According to USEPA, 10 to 20% of septic systems fail at some point (USEPA, 1992).

Septic systems are another source of total phosphorus loading to Doctors Creek and Miry Run. In calculating total phosphorus loading from septic systems, the NJDEP typically assumes that property within 200 meter (656 feet) of the waterway could contribute phosphorus to the waterway. A 200-meter buffer was placed along the waterways, and residential properties within this buffer were identified. The NJDEP GIS layer of the sewer service area was used to identify which of these residential properties have sewer service (See Figure 8) (NJ Open Data, 2025). Finally, properties that were built prior to 2000 were identified as having septic systems that could impact the local waterways.

The NJDEP uses a loading coefficient of 1.07 kg TP/capita/year (2.36 lbs TP/capita/year). Based upon census data, the average capita per dwelling in New Jersey is 2.66 persons/dwelling. Table 9 present these results.

Table 9: Estimated Residential Parcels on Septic

HUC14	Subwatershed Name	Parcels outside Service Area	Parcels within 200m before 2000	Estimated Load Phosphorus (lb/yr)
2040105230050	Assunpink Ck (Shipetaukin to Trenton Rd)	1	1	6
2040105240030	Miry Run (Assunpink Cr)	3	2	13
2040105240040	Pond Run	1	1	6
2040105240060	Assunpink Creek (below Shipetaukin Ck)	9	4	25
2040201030010	Duck Creek and UDRV to Assunpink Ck	0	0	0
2040201050050	Crosswicks Ck(Ellisdale trib - Walnford)	119	58	364
2040201050070	Crosswicks Ck(Doctors Ck-Ellisdale trib)	72	37	232
2040201060030	Doctors Creek (below Allentown)	298	143	898
2040201070010	Back Creek (above Yardville-H Sq Road)	73	67	421
2040201070020	Crosswicks Ck(below Doctors Creek)	1	0	0
2040201070030	Shady Brook/Spring Lake/Rowan Lake	0	0	0
Total Parcels/Load		577	313	1,965

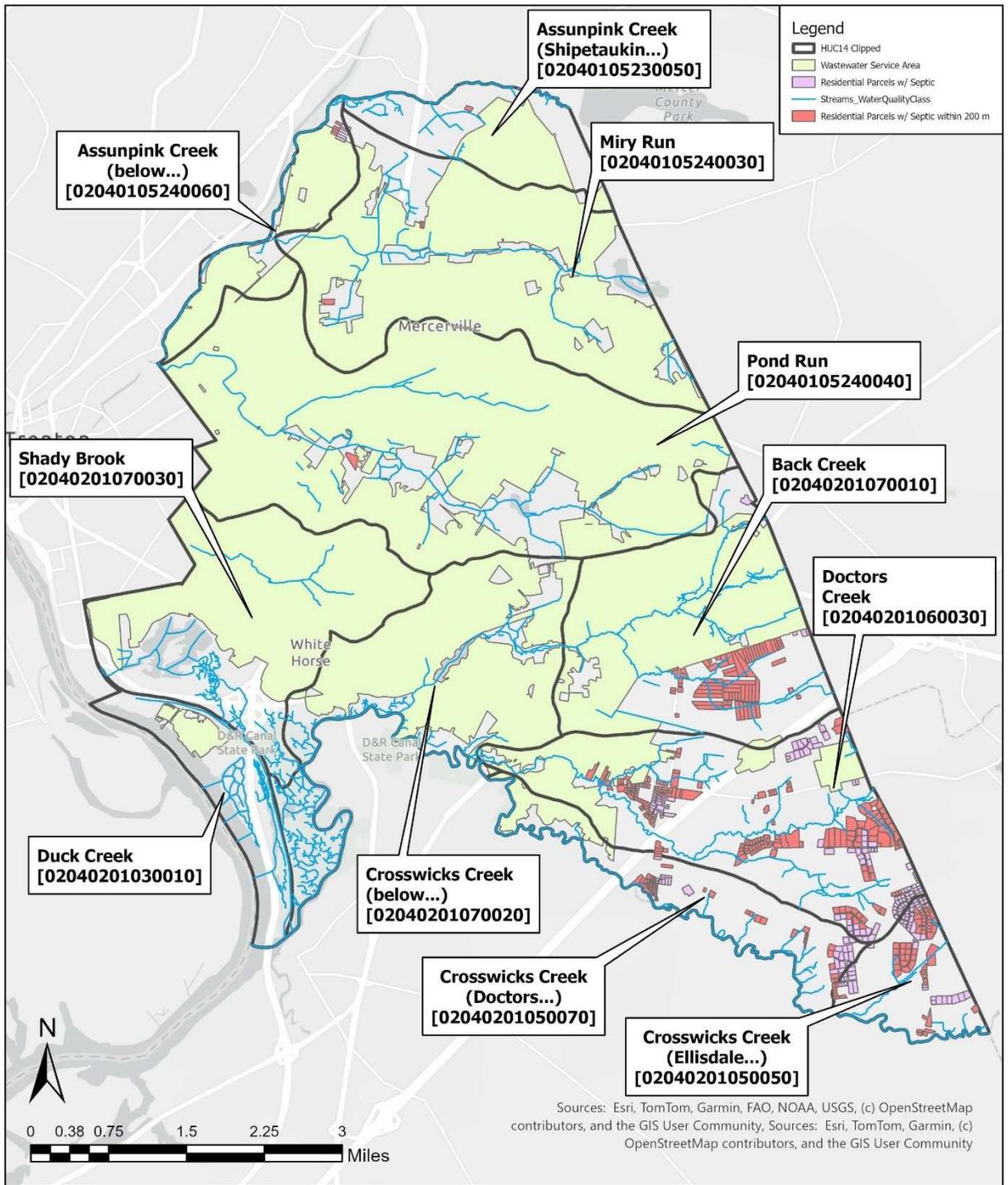


Figure 8: Sewer Service Area and Residential Septic Parcels

Leaf litter and road debris

Leaf litter and other road debris may contribute significantly to excess nutrients and contaminants reaching waterways. The Wisconsin Department of Natural Resources (WDNR) has recognized research that estimated that on average 43% of the annual phosphorus load is discharged during the fall. WDNR went on to approve a 17% total phosphorus annual load reduction from leaf collection efforts. This credit only applies to residential land use with a high level of tree canopy. To receive this credit, municipalities must collect leaves three to four times spaced throughout late September, October, and November. Also, within 24 hours of leaf collection, the roadway must be swept (Wisconsin, 2022).

Wildlife

One final source of pollution is wildlife. In the areas of the watershed that are forested and wetlands, wildlife would be expected to be plentiful. The areal loading coefficients used to calculate total loads from forest lands and wetlands should account for wildlife that is present in the forest. There are turfgrass areas in the watershed that can attract Canada geese, which can also have a significant load to the Miry Run and Doctors Creek. The Canada goose is a tundra species that typically lands in the water and feeds on the surrounding turfgrass. If the waterways have an adequate vegetated buffer, the geese tend to seek out other areas that provide more suitable habitat. The total phosphorus loading from an individual goose ranges from 0.36 to 1.41 lbs per year, Kjeldahl nitrogen from 1.15-3.11 lbs per year, and fecal coliform can contain up to 10^4 CFU per gram of feces (Swallow et al., 2010). Therefore, even a small goose population can increase instream phosphorus, nitrogen, and fecal coliform loadings significantly.

Loading Analysis

Loading analysis has been performed for total nitrogen (TN), total phosphorus (TP), and total suspended solids (TSS) as these have areal loading coefficients that make these easy to calculate based on land use. Fecal coliform loading has also been generated based on referenced data to establish a loading rate. Loading analysis for PCBs has not been performed as its sources are a mix of point and nonpoint sources making a loading much more difficult to calculate accurately. The remaining impairments are not easy to evaluate either as pH and dissolved oxygen would require complex modelling to understand. Turbidity is highly correlated with TSS, so targeting TSS should also target turbidity. The remaining impairments have been identified as low priority, so trying to estimate their loadings is deprioritized in favor of focus on the medium priority water quality impairments and TMDLs.

Total nitrogen, total phosphorus, and total suspended solids are all calculated using Table 3-1 from the New Jersey Stormwater BMP Manual which is reproduced below as Table 10. Also included in Table 10 are fecal coliform event meant concentration (EMC) which have been translated to the same land uses from Theriault, 2015. A full list of how each land use code was attributed to each category in Table 10 can be found in Appendix 2.

Table 10: Areal Loading Coefficients and Coliform EMC

Land Cover	TP [lbs/acre/yr]	TN [lbs/acre/yr]	TSS [lbs/acre/yr]	EMC [CFU/100 mL]
High, Medium Density Residential	1.4	15	140	7,750
Low Density, Rural Residential	0.6	5	100	7,750
Commercial	2.1	22	200	4,500
Industrial	1.5	16	200	2,500
Urban, Mixed Urban, Other Urban	1	10	120	4,500
Agriculture	1.3	10	300	10,000
Forest, Water, Wetlands	0.1	3	40	3,100
Barrenland/ Transitional Area	0.5	5	60	3,100

Total Phosphorus

Phosphorus is a known limiting nutrient in freshwater for plant growth and can come from areas with poor agricultural practices, urban areas, leaking septic systems, and illicit discharges. Phosphorous can also come from the breakdown of plant and leaf litter (including grass clippings), soil particles, and atmospheric deposition of phosphorus particles. Some more preventable sources of phosphorus include pet and animal waste as well as fertilizer from lawns. The contribution from runoff from lawns and roads can accounts for the largest loading in many watersheds.

Total phosphorus loads were calculated from areal loading coefficients for each land use. The results can be seen in Table 11 and Table 12 as well as Figure 9 and Figure 10.

Table 11: Annual Total Phosphorus Loading from Land Use [lb/yr]

HUC14	Assunpink Ck 2040105230050	Miry Run~ 2040105240030	Pond Run* 2040105240040	Assunpink Ck* 2040105240060	Duck Creek 2040201030010	Crosswicks Ck* 2040201050050
Agriculture	2	38	18	3	-	480
Barren Land	5	24	37	4	27	-
Forest	13	18	42	4	18	9
Urban	680	3,742	6,489	843	198	128
Water	1	7	5	2	34	1
Wetlands	38	71	72	9	19	9
HUC Total	740	3,899	6,663	864	295	627
HUC14	Crosswicks Ck* 2040201050070	Doctors Creek~ 2040201060030	Back Creek* 2040201070010	Crosswicks Ck* 2040201070020	Shady Brook 2040201070030	Total
Agriculture	493	1,032	415	2	-	2,482
Barren Land	2	10	15	4	19	147
Forest	16	32	31	24	20	227
Urban	327	1,194	1,909	2,294	2,778	20,582
Water	3	4	3	14	5	78
Wetlands	21	64	91	58	55	508
HUC Total	493	2,336	2,464	2,396	2,878	24,024

* = HUC has Water Quality Impairment

~ = HUC has TMDL

Table 12: Annual Total Phosphorus Loading from Land Use [%]

HUC14	Assunpink Ck 2040105230050	Miry Run~ 2040105240030	Pond Run* 2040105240040	Assunpink Ck* 2040105240060	Duck Creek 2040201030010	Crosswicks Ck* 2040201050050
Agriculture	0.3%	1.0%	0.3%	0.3%	0.0%	76.6%
Barren Land	0.7%	0.6%	0.6%	0.4%	9.1%	0.0%
Forest	1.8%	0.5%	0.6%	0.5%	6.0%	1.4%
Urban	91.9%	96.0%	97.4%	97.5%	67.0%	20.5%
Water	0.1%	0.2%	0.1%	0.2%	11.4%	0.1%
Wetlands	5.2%	1.8%	1.1%	1.1%	6.5%	1.4%
HUC14	Crosswicks Ck* 2040201050070	Doctors Creek~ 2040201060030	Back Creek* 2040201070010	Crosswicks Ck* 2040201070020	Shady Brook 2040201070030	Total
Agriculture	57.2%	44.2%	16.9%	0.1%	0.0%	10.3%
Barren Land	0.2%	0.4%	0.6%	0.2%	0.7%	0.6%
Forest	1.9%	1.4%	1.3%	1.0%	0.7%	0.9%
Urban	38.0%	51.1%	77.5%	95.8%	96.5%	85.7%
Water	0.3%	0.2%	0.1%	0.6%	0.2%	0.3%
Wetlands	2.5%	2.8%	3.7%	2.4%	1.9%	2.1%

* = HUC has Water Quality Impairment

~ = HUC has TMDL

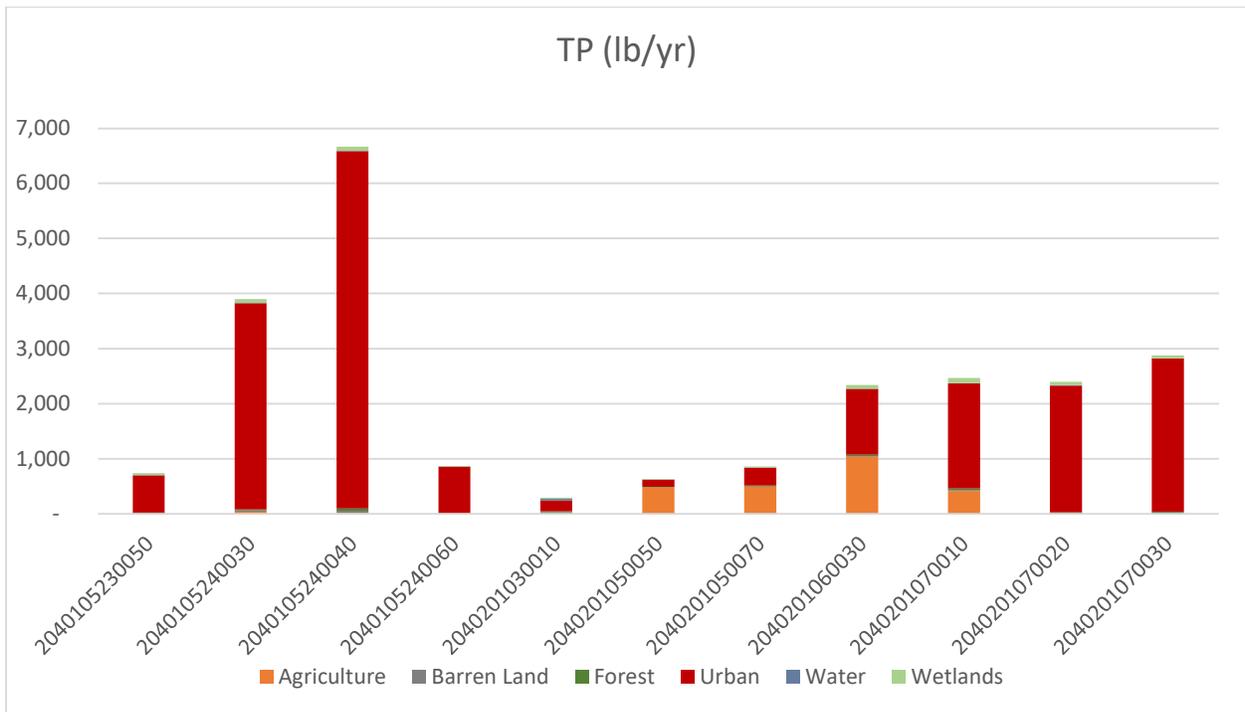


Figure 9: Annual Total Phosphorus Loading from Land Use [lb/yr]

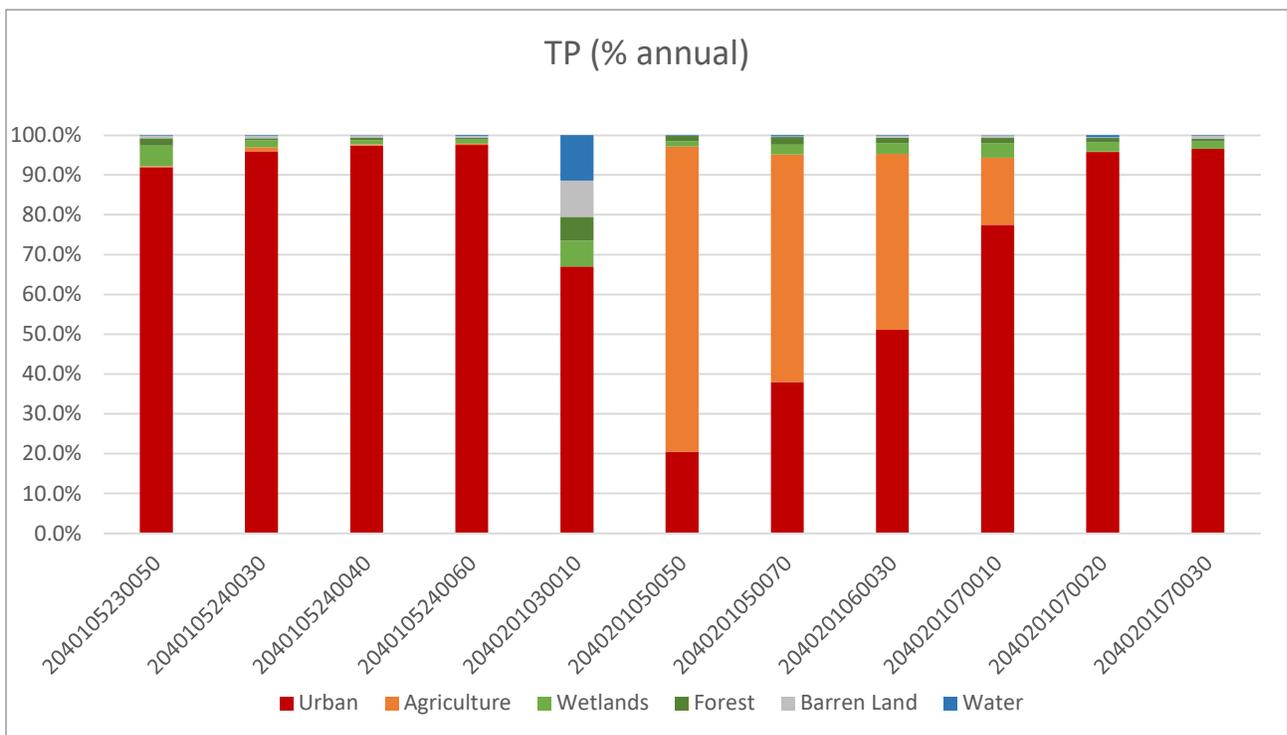


Figure 10: Annual Phosphorus Loading from Land Use [%]

Total Nitrogen

Total nitrogen is a combination of organic nitrogen, nitrate, nitrite, and ammonia. Nitrogen that ends up in streams will often be in the more of nitrate as it is the most soluble and most common form in the environment. Nitrates typically will be derived from organic sources but can also be released in smoke and industrial or automotive exhaust. Stormwater runoff will carry these nitrates with it as it passes through fertilized lawns, pet waste, illicit connection, leaking septic tanks, and emissions from vehicle exhaust. Decomposing organic matter like leaf litter can also release large amounts of nitrate.

It is acknowledged that there are no known TMDLs or water quality impairments for nitrogen, but these calculations were performed for reference since they are easily calculated with the TP and TSS with the areal loading coefficients. Total nitrogen loads were calculated from areal loading coefficients for each land use. The results can be seen in Table 13 and Table 14 as well as Figure 11 and Figure 12.

Table 13: Annual Total Nitrogen Loading from Land Use [lb/yr]

HUC14	Assunpink Ck 2040105230050	Miry Run 2040105240030	Pond Run 2040105240040	Assunpink Ck 2040105240060	Duck Creek 2040201030010	Crosswicks Ck 2040201050050
Agriculture	14	293	136	22	-	3,696
Barren Land	50	242	371	36	269	-
Forest	405	532	1,262	123	527	258
Urban	7,128	39,460	68,052	8,788	2,077	1,095
Water	31	197	157	55	1,010	27
Wetlands	1,145	2,132	2,164	278	575	256
HUC Total	8,773	42,856	72,143	9,302	4,459	5,332
HUC14	Crosswicks Ck 2040201050070	Doctors Creek 2040201060030	Back Creek 2040201070010	Crosswicks Ck 2040201070020	Shady Brook 2040201070030	Total
Agriculture	3,790	7,936	3,195	15	-	19,096
Barren Land	19	104	145	42	193	1,470
Forest	480	947	933	731	615	6,812
Urban	3,278	11,826	19,646	24,189	29,376	214,915
Water	76	128	81	413	159	2,334
Wetlands	643	1,928	2,738	1,728	1,642	15,229
HUC Total	8,286	22,869	26,737	27,117	31,983	259,856

No HUCs have TMDL or Water Quality Impairment

Table 14: Annual Total Nitrogen Loading from Land Use [%]

HUC14	Assunpink Ck 2040105230050	Miry Run 2040105240030	Pond Run 2040105240040	Assunpink Ck 2040105240060	Duck Creek 2040201030010	Crosswicks Ck 2040201050050
Urban	81.2%	92.1%	94.3%	94.5%	46.6%	20.5%
Agriculture	0.2%	0.7%	0.2%	0.2%	0.0%	69.3%
Wetlands	13.1%	5.0%	3.0%	3.0%	12.9%	4.8%
Forest	4.6%	1.2%	1.7%	1.3%	11.8%	4.8%
Barren Land	0.6%	0.6%	0.5%	0.4%	6.0%	0.0%
Water	0.4%	0.5%	0.2%	0.6%	22.7%	0.5%
HUC14	Crosswicks Ck 2040201050070	Doctors Creek 2040201060030	Back Creek 2040201070010	Crosswicks Ck 2040201070020	Shady Brook 2040201070030	Total
Urban	39.6%	51.7%	73.5%	89.2%	91.8%	82.7%
Agriculture	45.7%	34.7%	11.9%	0.1%	0.0%	7.3%
Wetlands	7.8%	8.4%	10.2%	6.4%	5.1%	5.9%
Forest	5.8%	4.1%	3.5%	2.7%	1.9%	2.6%
Barren Land	0.2%	0.5%	0.5%	0.2%	0.6%	0.6%
Water	0.9%	0.6%	0.3%	1.5%	0.5%	0.9%

No HUCs have TMDL or Water Quality Impairment

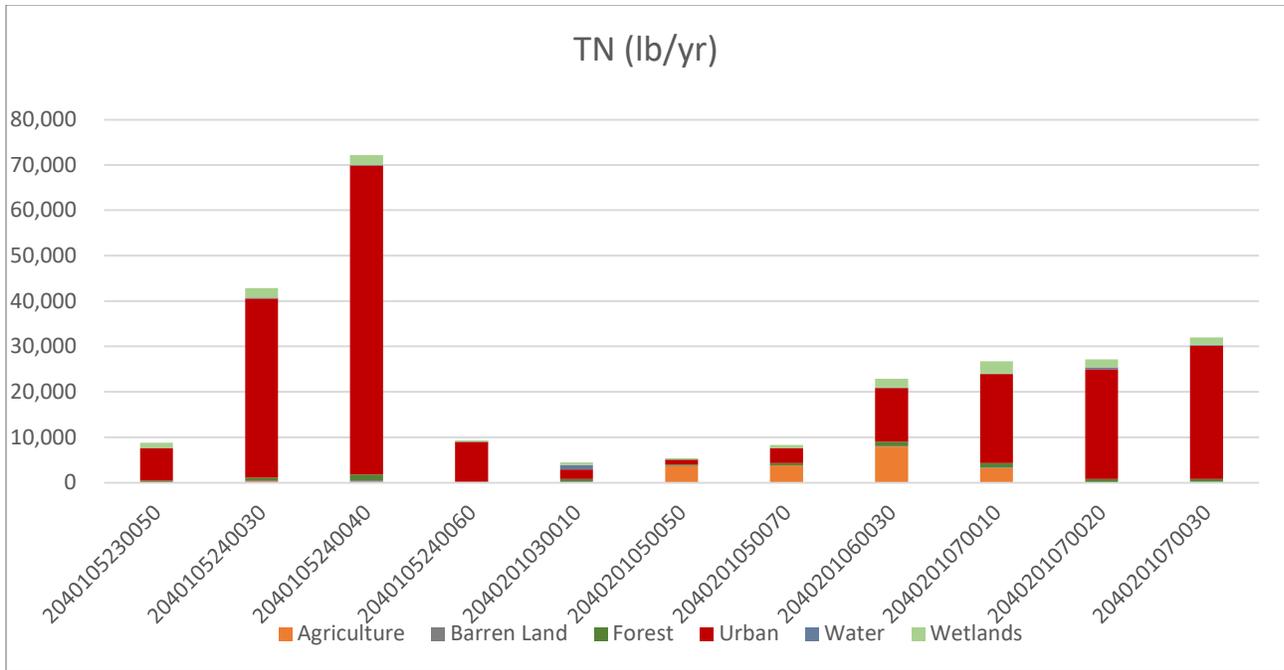


Figure 11: Annual Total Nitrogen from Land Use [lb/yr]

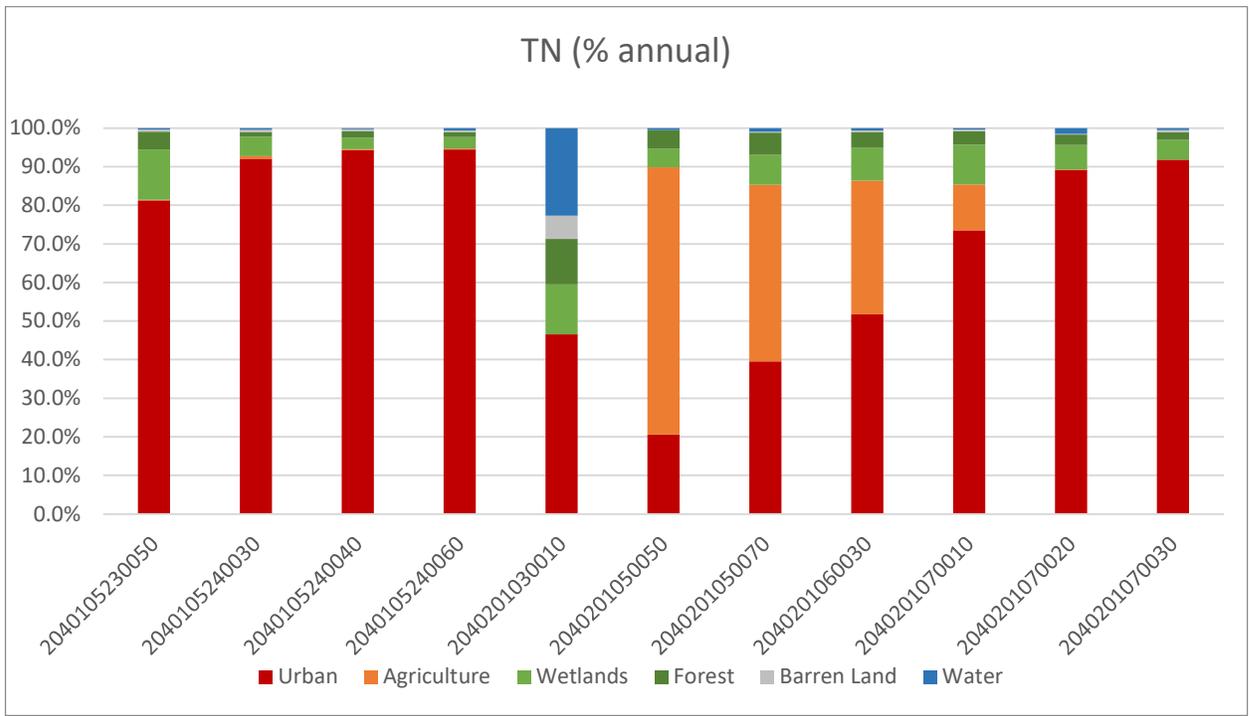


Figure 12: Annual Total Nitrogen from Land Use [%]

Total Suspended Solids

Particulate matter forms the basis on what is referred to total suspended solids (TSS) which is simply particles that are suspended in water that are captured by stormwater runoff and flow into the waterways. These particles can come from a wide variety of sources including breakdown of pavements, erosion of soils, breakdown of organic matter, and other human derived and natural sources. TSS can contain a wide variety of particle types that may be sources of other contaminants such as nutrients and heavy metals.

Total suspended solids loads were calculated from areal loading coefficients for each land use. The results can be seen in Table 15 and Table 16 as well as Figure 13 and Figure 14.

Table 15: Total Suspended Solids Loading from Land Use [lb/yr]

HUC14	Assunpink Ck 2040105230050	Miry Run 2040105240030	Pond Run* 2040105240040	Assunpink Ck 2040105240060	Duck Creek 2040201030010	Crosswicks Ck 2040201050050
Agriculture	429	8,778	4,092	666	0	110,869
Barren Land	601	2,905	4,455	430	3,231	
Forest	5,396	7,094	16,820	1,644	7,022	3,443
Urban	73,616	393,074	686,302	99,360	25,727	20,677
Water	414	2,625	2,095	733	13,470	353
Wetlands	15,270	28,423	28,859	3,701	7,671	3,416
HUC Total	95,725	442,899	742,622	106,534	57,121	138,759
HUC14	Crosswicks Ck* 2040201050070	Doctors Creek 2040201060030	Back Creek 2040201070010	Crosswicks Ck* 2040201070020	Shady Brook 2040201070030	Total
Agriculture	113,691	238,073	95,838	441	0	572,877
Barren Land	225	1,242	1,743	502	2,311	17,644
Forest	6,403	12,626	12,437	9,746	8,195	90,827
Urban	39,482	153,604	219,577	242,210	290,020	2,243,649
Water	1,019	1,708	1,078	5,511	2,116	31,121
Wetlands	8,567	25,713	36,506	23,034	21,890	203,050
HUC Total	169,386	432,965	367,181	281,443	324,532	3,159,168

* = HUC has Water Quality Impairment

Table 16: Total Suspended Solids Loading from Land Use [%]

HUC14	Assunpink Ck 2040105230050	Miry Run 2040105240030	Pond Run* 2040105240040	Assunpink Ck 2040105240060	Duck Creek 2040201030010	Crosswicks Ck 2040201050050
Urban	76.9%	88.8%	92.4%	93.3%	45.0%	14.9%
Agriculture	0.4%	2.0%	0.6%	0.6%	0.0%	79.9%
Wetlands	16.0%	6.4%	3.9%	3.5%	13.4%	2.5%
Forest	5.6%	1.6%	2.3%	1.5%	12.3%	2.5%
Barren Land	0.6%	0.7%	0.6%	0.4%	5.7%	0.0%
Water	0.4%	0.6%	0.3%	0.7%	23.6%	0.3%
HUC14	Crosswicks Ck* 2040201050070	Doctors Creek 2040201060030	Back Creek 2040201070010	Crosswicks Ck* 2040201070020	Shady Brook 2040201070030	Total
Urban	23.3%	35.5%	59.8%	86.1%	89.4%	71.0%
Agriculture	67.1%	55.0%	26.1%	0.2%	0.0%	18.1%
Wetlands	5.1%	5.9%	9.9%	8.2%	6.7%	6.4%
Forest	3.8%	2.9%	3.4%	3.5%	2.5%	2.9%
Barren Land	0.1%	0.3%	0.5%	0.2%	0.7%	0.6%
Water	0.6%	0.4%	0.3%	2.0%	0.7%	1.0%

* = HUC has Water Quality Impairment

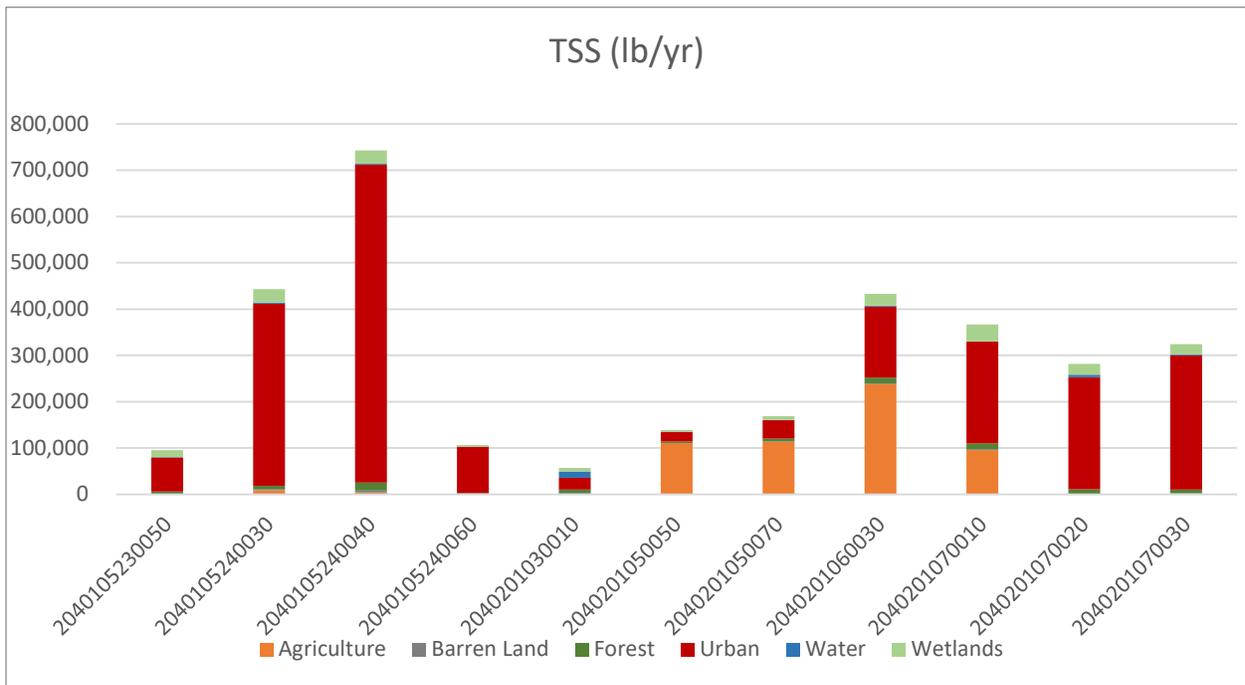


Figure 13: Total Suspended Solids Loading from Land Use [lb/yr]

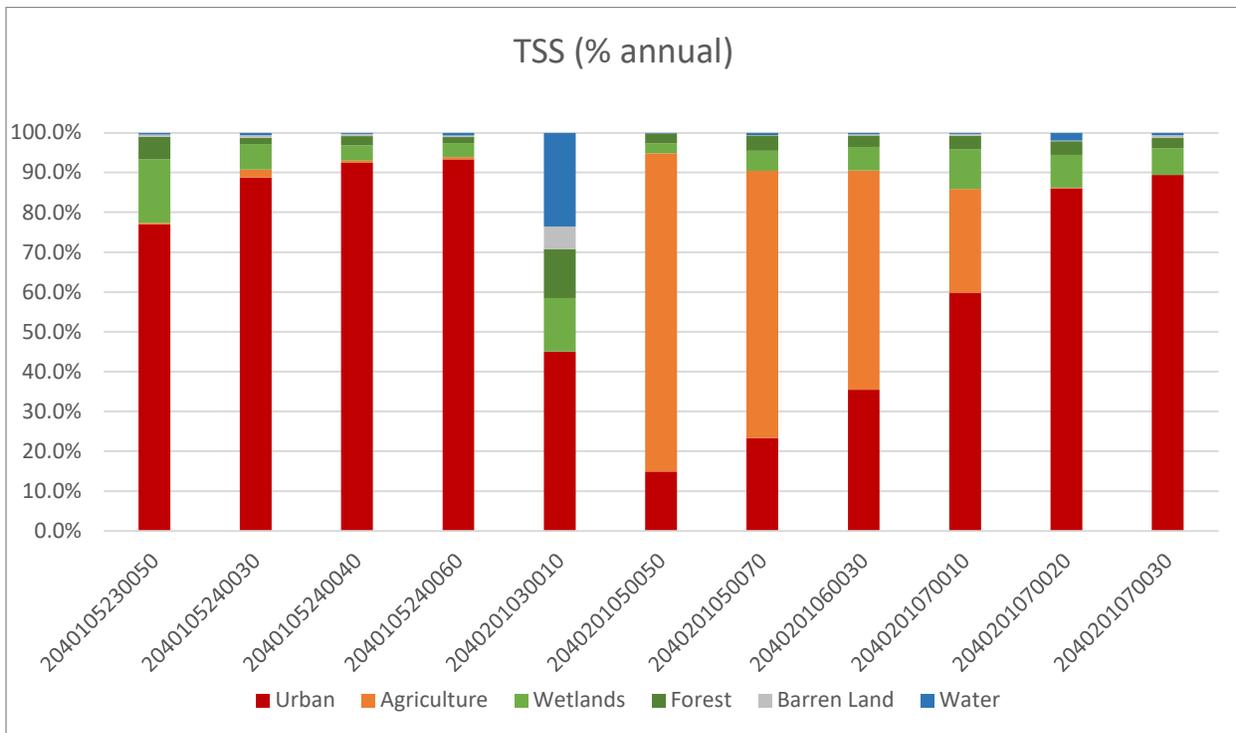


Figure 14: Total Suspended Solids Loading from Land Use [%]

Runoff Volume & Fecal Coliform

Fecal coliform loading can come from a variety of sources such as poorly managed septic systems, pet waste, animal waste from wildlife, some farming practices, and failing sanitary sewer systems.

Fecal coliform loadings require more analysis to calculate since there are no reference values for areal loading coefficients. Included in Table 10 are fecal coliform event mean concentration (EMC) which have been translated to the same land uses from Theriault, 2015.

To calculate fecal coliform loading from concentrations, some assumptions must be made to convert them by calculating a runoff volume to multiply the concentration by. To do this, standard SCS Curve Number Runoff equations were used to analyze annual rainfall. To simplify this process, daily rainfall data was collected from the NJDEP DWM&S Rainfall Data Acquisition station RA099. A ten-year period was used from 2014 to 2024 to ensure an average over a reasonable period was used to account for annual variation in rainfall. Each land use was applied its appropriate Curve Number (CN) based on the surface type and Hydrologic Soil Group (HSG) based on soils data from the NRCS. Figure 15 shows the resulting CN values. A full list of how each land use code was assigned a CN value can be seen in Appendix 3. Areas with higher CN values will generate higher runoff numbers which is the result of impervious cover, land use, or poor soils. Where HSGs were not available, they were estimated based on surrounding soil types. Additionally, all hydrologic soil group A/D, B/D, and C/D were treated as HSG D. The daily rainfall was then used to estimate runoff depth on a given day with the corresponding CN value. The daily rainfall values were combined for each year to get annual rainfall, and the annual rainfall for the ten-year period was averaged. These results were then summarized in Table 17 and Table 18 as well as Figure 16 and Figure 17. Because storm runoff will become dilute after the first flush of runoff, a “Qmax” value was taken of 1 in of runoff depth. These results are shown in Table 19 and were used to calculate fecal coliform loadings by multiplying the appropriate EMC values with the corresponding land use runoff volumes. The resulting fecal coliform loadings are seen in Table 20 and Table 21 as well as Figure 18 and Figure 19.

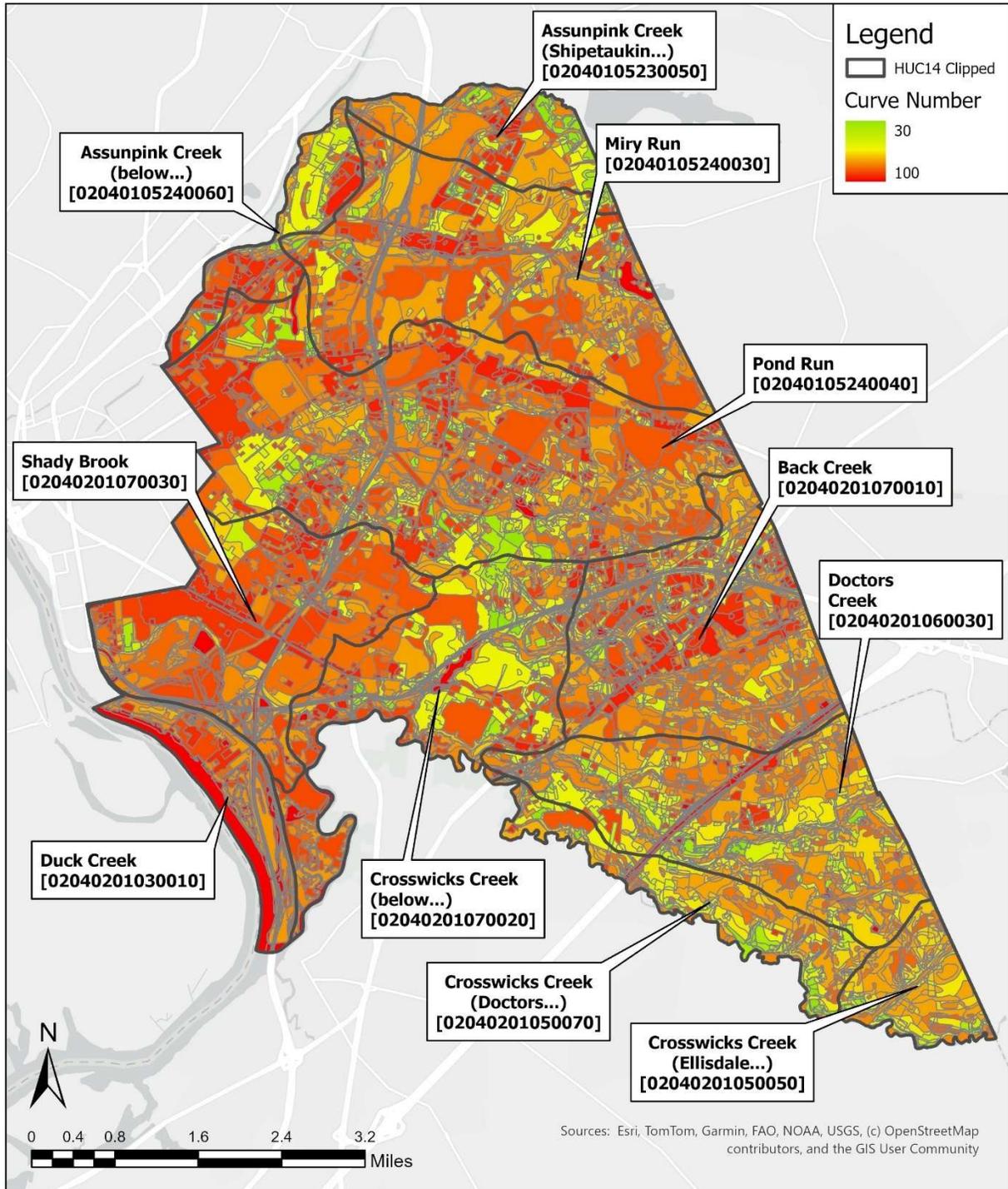


Figure 15: Curve Numbers

Table 17: Annual Runoff Volume [acre-ft/yr]

HUC14	Assunpink Ck 2040105230050	Miry Run 2040105240030	Pond Run 2040105240040	Assunpink Ck 2040105240060	Duck Creek 2040201030010	Crosswicks Ck 2040201050050
Agriculture	1.0	21.9	7.8	0.6	0.0	103.5
Barren Land	5.8	49.1	61.3	9.4	56.4	0.0
Forest	9.6	34.4	67.8	8.4	55.6	8.9
Urban	324.9	1871.2	3658.5	510.3	232.9	47.9
Water	44.2	283.7	226.3	78.5	1449.5	38.1
Wetlands	126.2	219.0	206.8	20.9	109.4	26.1
HUC Total	511.6	2479.2	4228.5	628.0	1903.8	224.6
HUC14	Crosswicks Ck 2040201050070	Doctors Creek 2040201060030	Back Creek 2040201070010	Crosswicks Ck 2040201070020	Shady Brook 2040201070030	Total
Agriculture	115.5	279.7	224.3	0.8	0.0	755.1
Barren Land	2.1	9.1	26.6	6.6	69.2	295.6
Forest	10.7	30.1	54.4	34.2	47.9	362.0
Urban	131.1	601.7	1559.6	986.2	2022.0	11946.2
Water	109.5	183.2	116.7	595.2	220.9	3345.9
Wetlands	36.5	163.4	226.4	368.7	294.5	1797.8
HUC Total	405.5	1267.2	2208.0	1991.6	2654.6	18502.6

Table 18: Annual Runoff Volume [%]

HUC14	Assunpink Ck 2040105230050	Miry Run 2040105240030	Pond Run 2040105240040	Assunpink Ck 2040105240060	Duck Creek 2040201030010	Crosswicks Ck 2040201050050
Agriculture	0.20%	0.88%	0.19%	0.10%	0.00%	46.08%
Barren Land	1.14%	1.98%	1.45%	1.49%	2.96%	0.00%
Forest	1.87%	1.39%	1.60%	1.34%	2.92%	3.97%
Urban	63.50%	75.48%	86.52%	81.25%	12.23%	21.33%
Water	8.63%	11.44%	5.35%	12.50%	76.14%	16.98%
Wetlands	24.67%	8.83%	4.89%	3.32%	5.74%	11.64%
HUC14	Crosswicks Ck 2040201050070	Doctors Creek 2040201060030	Back Creek 2040201070010	Crosswicks Ck 2040201070020	Shady Brook 2040201070030	Total
Agriculture	28.49%	22.07%	10.16%	0.04%	0.00%	4.08%
Barren Land	0.52%	0.72%	1.20%	0.33%	2.61%	1.60%
Forest	2.64%	2.38%	2.46%	1.72%	1.80%	1.96%
Urban	32.32%	47.49%	70.63%	49.52%	76.17%	64.57%
Water	27.02%	14.45%	5.29%	29.88%	8.32%	18.08%
Wetlands	9.00%	12.89%	10.25%	18.51%	11.09%	9.72%

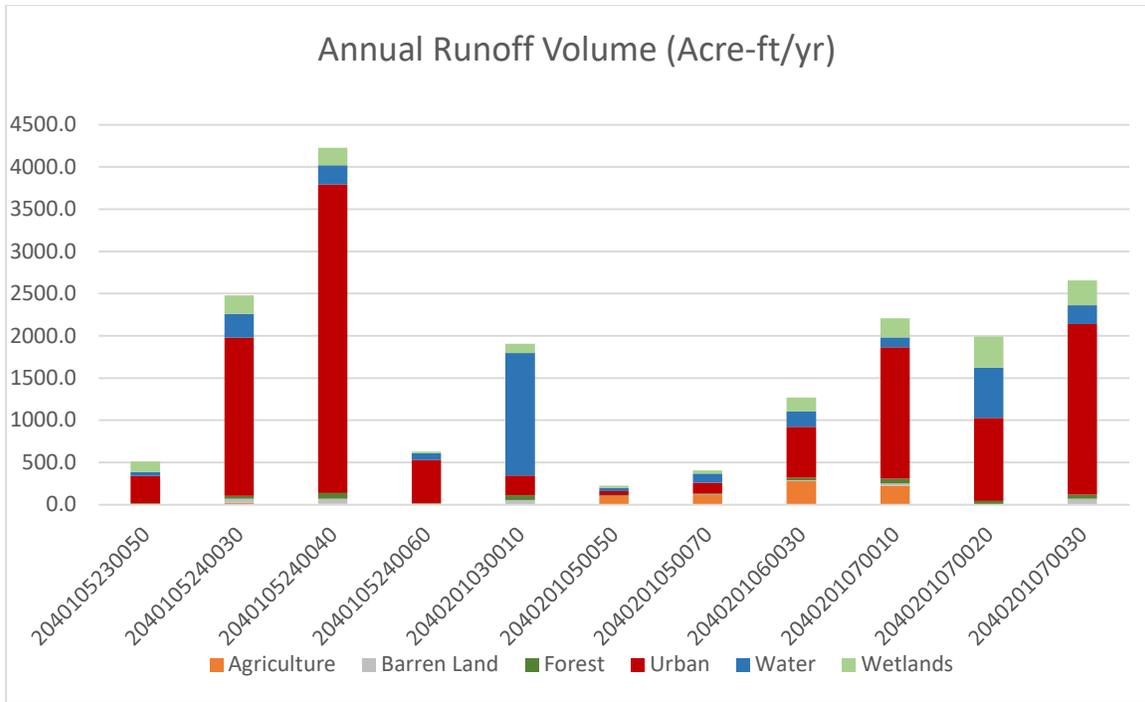


Figure 16: Annual Runoff Volume [Acre-ft/yr]

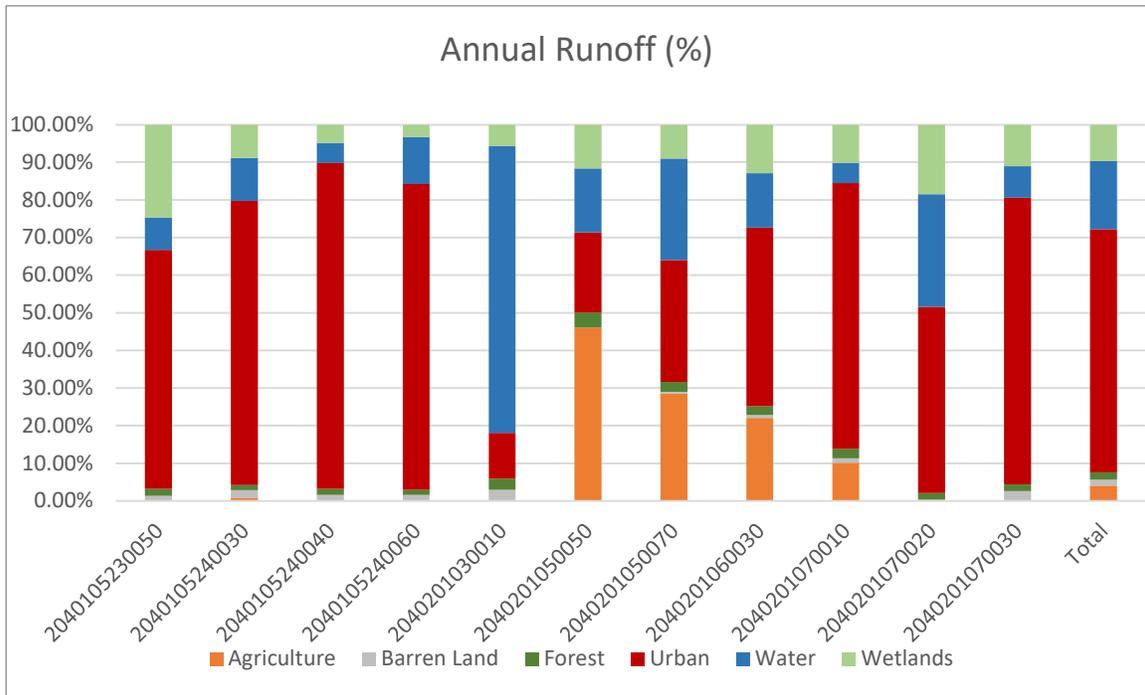


Figure 17: Annual Runoff Volume [%]

Table 19: Annual Runoff Volume [Qmax = 1in] [acre-ft/yr]

HUC14	Assunpink Ck 2040105230050	Miry Run 2040105240030	Pond Run 2040105240040	Assunpink Ck 2040105240060	Duck Creek 2040201030010	Crosswicks Ck 2040201050050
Agriculture	0.9	20.1	7.2	0.6	0.0	95.6
Barren Land	5.3	44.5	55.8	8.5	51.2	0.0
Forest	8.9	31.7	62.7	7.7	51.2	8.3
Urban	292.8	1692.7	3302.5	458.6	206.2	44.5
Water	37.9	243.3	194.1	67.3	1243.3	32.7
Wetlands	116.0	201.5	190.1	19.3	99.8	24.0
HUC Total	461.8	2233.9	3812.4	562.0	1651.7	205.1
HUC14	Crosswicks Ck 2040201050070	Doctors Creek 2040201060030	Back Creek 2040201070010	Crosswicks Ck 2040201070020	Shady Brook 2040201070030	Total
Agriculture	106.8	258.1	206.6	0.7	0.0	696.6
Barren Land	1.9	8.4	24.2	6.0	62.8	268.6
Forest	10.0	28.1	50.4	31.7	44.4	335.2
Urban	118.6	539.9	1392.8	889.7	1815.8	10754.1
Water	94.0	157.1	100.1	510.5	189.5	2869.9
Wetlands	33.7	150.4	208.4	335.8	269.2	1648.2
HUC Total	365.1	1141.9	1982.5	1774.4	2381.7	16572.5

Table 20: Annual Fecal Coliform Loading from Land Use [CFUs/yr * 10¹²]

HUC14	Assunpink Ck* 2040105230050	Miry Run~ 2040105240030	Pond Run~ 2040105240040	Assunpink Ck~ 2040105240060	Duck Creek 2040201030010	Crosswicks Ck~ 2040201050050
Agriculture	3.5	76.9	27.6	2.2	-	365.4
Barren Land	20.4	170.3	213.3	32.6	195.7	-
Forest	33.9	121.4	239.7	29.6	195.8	31.8
Urban	1,684.9	12,428.0	23,324.1	2,303.3	712.6	418.1
Water	144.8	930.5	742.3	257.4	4,754.1	125.1
Wetlands	443.7	770.3	727.0	73.6	381.7	91.9
HUC Total	2,331.3	14,497.4	25,274.0	2,698.7	6,239.9	1,032.2
HUC14	Crosswicks Ck~ 2040201050070	Doctors Creek~ 2040201060030	Back Creek* 2040201070010	Crosswicks Ck* 2040201070020	Shady Brook 2040201070030	Total
Agriculture	408.3	987.0	789.9	2.7	-	2,663.6
Barren Land	7.4	31.9	92.5	23.0	240.0	1,027.1
Forest	38.4	107.3	192.8	121.3	169.7	1,281.7
Urban	839.7	2,895.3	7,393.9	6,293.0	13,445.2	71,737.9
Water	359.3	600.7	382.9	1,952.0	724.6	10,973.8
Wetlands	128.8	575.0	796.8	1,284.0	1,029.5	6,302.5
HUC Total	1,781.9	5,197.3	9,648.9	9,676.0	15,609.0	93,986.5

* = HUC has Water Quality Impairment (E. Coli, Fecal coliform used as proxy)

~ = HUC has TMDL

Table 21: Annual Fecal Coliform Loading from Land Use [%]

HUC14	Assunpink Ck* 2040105230050	Miry Run~ 2040105240030	Pond Run~ 2040105240040	Assunpink Ck~ 2040105240060	Duck Creek 2040201030010	Crosswicks Ck~ 2040201050050
Agriculture	0.15%	0.53%	0.11%	0.08%	0.00%	35.40%
Barren Land	0.87%	1.17%	0.84%	1.21%	3.14%	0.00%
Forest	1.45%	0.84%	0.95%	1.10%	3.14%	3.08%
Urban	72.28%	85.73%	92.28%	85.35%	11.42%	40.50%
Water	6.21%	6.42%	2.94%	9.54%	76.19%	12.12%
Wetlands	19.03%	5.31%	2.88%	2.73%	6.12%	8.91%
HUC14	Crosswicks Ck~ 2040201050070	Doctors Creek~ 2040201060030	Back Creek* 2040201070010	Crosswicks Ck* 2040201070020	Shady Brook 2040201070030	Total
Agriculture	22.92%	18.99%	8.19%	0.03%	0.00%	2.83%
Barren Land	0.42%	0.61%	0.96%	0.24%	1.54%	1.09%
Forest	2.16%	2.06%	2.00%	1.25%	1.09%	1.36%
Urban	47.12%	55.71%	76.63%	65.04%	86.14%	76.33%
Water	20.16%	11.56%	3.97%	20.17%	4.64%	11.68%
Wetlands	7.23%	11.06%	8.26%	13.27%	6.60%	6.71%

* = HUC has Water Quality Impairment (E. Coli, Fecal coliform used as proxy)

~ = HUC has TMDL

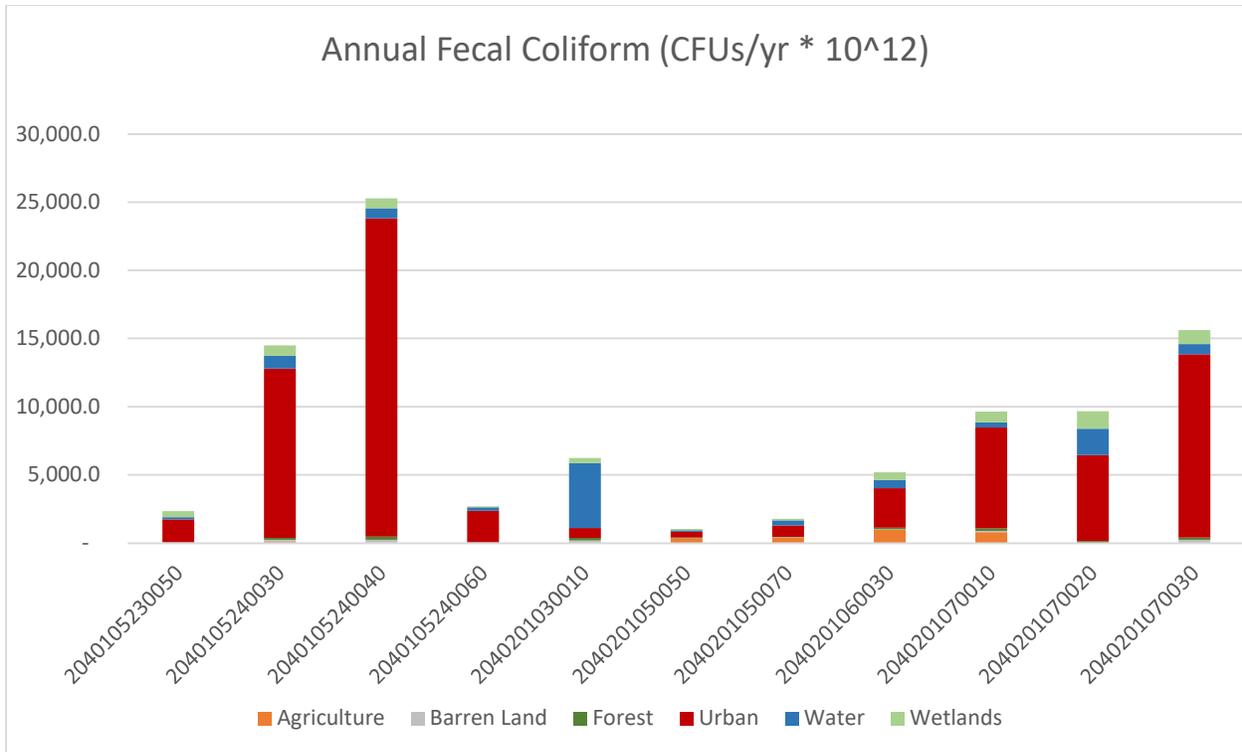


Figure 18: Annual Fecal Coliform Loading from Land Use [CFUs/yr]

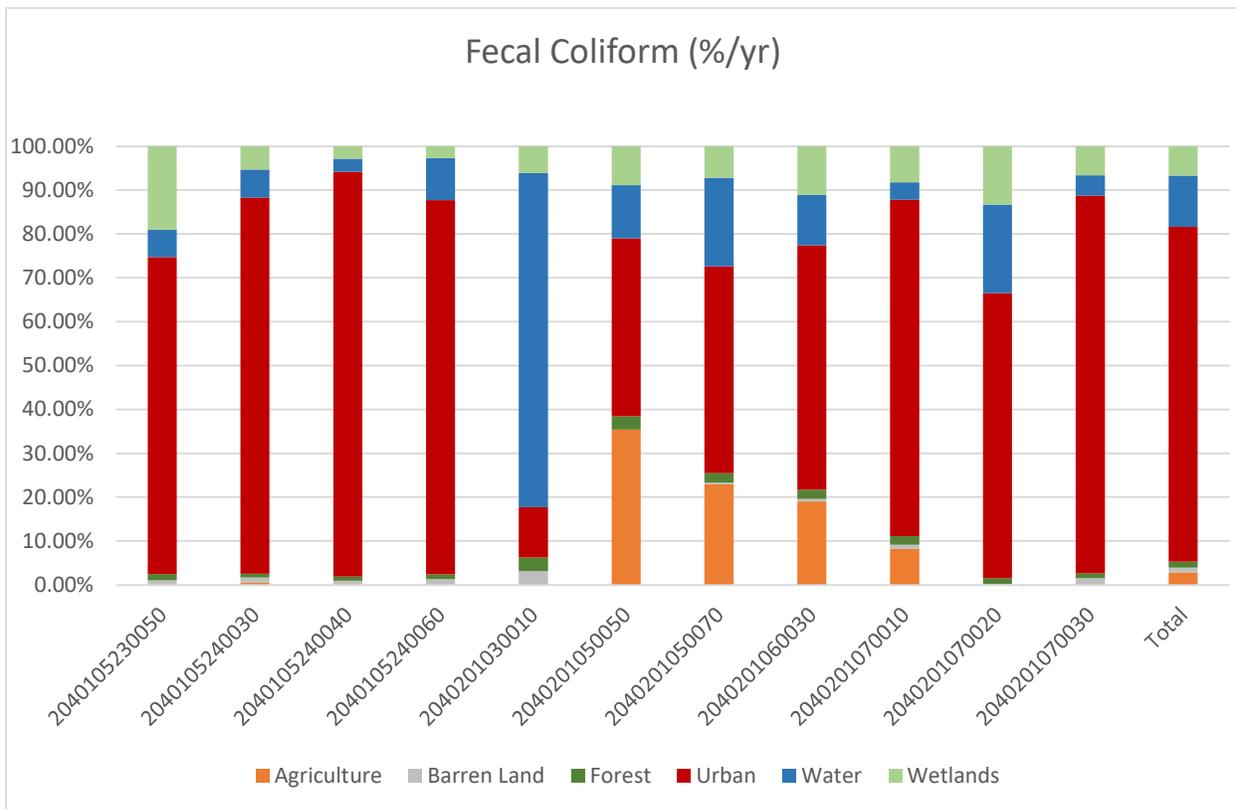


Figure 19: Annual Fecal Coliform Loading from Land Use [%/yr]

Load Reduction Targets

Load reduction targets can be set for measured parameters based on both the TMDLs and the known loadings. The remainder of this analysis will only focus on areas with known TMDLs and water quality impairments to maintain focus on key parameters. Table 2 list the target reductions for each TMDL according to their respective reports. For water quality impairments, no clear guidance is available to understand what level should be targeting for reductions. Due to this, a factor of 20% was chosen to act as a reasonable starting point that should make a measurable impact.

For areas of management, it is assumed only urban lands and agricultural lands will be targeted, so other land uses will also be omitted from the analysis moving forward, but their contribution to the total load will still be considered. The TMDL reports for phosphorus already factored this into the removal percentages, but the reports for PCBs and fecal coliform did not.

Phosphorus [TMDL/Impairment]

The TMDL reports for phosphorus provided this removal rates for Miry Run and Doctor's Creek of 22% and 78% respectively. The remaining impaired HUCs are given removal targets of 20%.

Table 22: Phosphorus Target Load Reductions [lb/yr]

HUC14	Miry Run~	Pond Run*	Assunpink Ck*	Crosswicks Ck*
	2040105240030	2040105240040	2040105240060	2040201050050
Total Loading	3,899	6,663	864	627
Ag +Urban Loading	3,780	6507	846	608
Managed %	22%	20%	20%	20%
Target Load Reductions	832	1,301	169	122
Allowable Load	3,067	5,362	695	505
HUC14	Crosswicks Ck*	Doctors Creek~	Back Creek*	Crosswicks Ck*
	2040201050070	2040201060030	2040201070010	2040201070020
Total Loading	493	2,336	2,464	2,396
Ag +Urban Loading	820	2,226	2,324	2,296
Managed %	20%	78%	20%	20%
Target Load Reductions	164	1,725	465	459
Allowable Load	329	611	1,999	1,937

Fecal Coliform [TMDL/Impairment]

The fecal coliform TMDL does not make a distinction between any type of land use, so all lands must be used when account for the target load reductions. Unfortunately, this leads to the target load reductions being greater than the combination of agriculture and urban land uses in some cases due to the above 95% reductions. This is a tricky to deal with since implementing projects in forests, wetlands, and water that effective on fecal coliform may prove quite difficult. The argument must be made that the highest contributors to the problem need to be targeted first, so the agriculture and urban land uses will be managed at the target percentages first. Then monitoring should be conducted to see if the problem has been resolved prior to proceeding with further projects to reduce fecal coliform in other land uses.

*Table 23: Fecal Coliform Load Reductions [CFU/yr *10¹²]*

HUC14	Assunpink Ck*	Miry Run~	Pond Run~	Assunpink Ck~	Crosswicks Ck~
	2040105230050	2040105240030	2040105240040	2040105240060	2040201050050
Total Load	2,331	14,497	25,274	2,699	1,032
Manage %	99%	96%	99%	99%	86%
Target Load Reductions	2308	13918	25021	2672	888
Ag +Urban Load	1,688	12,505	23,352	2,306	784
HUC14	Crosswicks Ck~	Doctors Creek~	Back Creek*	Crosswicks Ck*	
	2040201050070	2040201060030	2040201070010	2040201070020	
Total Load	1,782	5,197	9,649	9,676	
Manage %	86.0%	86%	20%	20%	
Target Load Reductions	1,532	4,470	1,930	1,935	
Ag +Urban Load	1,248	3,882	8,184	6,296	

PCBs [TMDL]

The TMDL sets a total waste load allocation for the MS4s in zone 2 at 6.044 mg/day for total PCBs. The study does not state what the total area of zone 2 is, so it is difficult to parse what percentage of the 6.044 mg/day Hamilton is allowed to emit to set a max loading target. However, based on the concentration data the reductions need to be on the order of 98.2%-99.9%, so the easiest approach is to simply remove all known sources of PCBs to essentially zero.

Total Suspended Solids (TSS) [Impairment]

Three HUCs have impairments for TSS and targets are set for 20% for loadings from agricultural and urban land uses.

Table 24: TSS Target Load Reductions [lb/yr]

HUC14	Pond Run*	Crosswicks Ck*	Crosswicks Ck*2
	2040105240040	2040201050070	2040201070020
Total	742,622	169,386	281,443
Ag +Urban	690,394	153,173	242,651
Manage %	20%	20%	20%
Target Load Reductions	138,079	30,635	48,530
Allowable Load	604,543	138,751	232,913

Other Contaminants of Concern

Direct calculations of the remaining load targets are omitted for various reasons depending on the contaminant. Most of them are difficult to calculate or otherwise are addressed by actions that will be taken to address the calculated TMDLs and water quality impairments.

Mercury [TMDL]

Mercury is neglected in this report as most of the loading is from atmospheric deposition, so the best approach to deal with that loading is targeting those sources directly.

Dissolved Oxygen [Impairment]

This only affects Doctors Creek (02040201060030) which is already being targeted heavily due to the phosphorus TMDL. Actions to reduce phosphorus should generally improve the water quality in that HUC which should help improve dissolved oxygen.

pH [Impairment]

The pH impairment only affects Pond Run (02040105240040) which is also targeted for the phosphorus TMDL. The actions taken there should help by filtering runoff through stormwater management systems.

Turbidity

The turbidity impairment only affects Crosswicks Creek (Doctors Ck-Ellisdale trib, 2040201050070) which is also impaired for TSS. All actions taken to improve TSS will also improve turbidity.

Low Priority Impairments

The remaining impairments are all classified as low priority. Every HUC is affected by at least one TMDL, so actions will be taken to address water quality in every HUC. Therefore, the remaining low priority impairments (Arsenic, Biological, Chlordane in Fish, Lead, Mercury in Fish, and PCBs in Fish) should all be at least partially addressed through stormwater management structures put in place by other targets. Calculating load reductions for these would be difficult, so they should be reevaluated at a later time once actions taken by TMDLs and medium priority water quality impairments are addressed.

Existing Management

Existing stormwater management already exists within portions of the municipality, and the effect of these existing management structures should be factored into the analysis.

Stormwater Management Structures

Stormwater management has gone through different regulatory eras over the years. Therefore, depending on when the land was developed, there are different levels of stormwater management that are implemented. While the stormwater management rules have gone through multiple iterations, there are three main era that are most important regarding water quality. Prior to 1983, no stormwater management was required. In 1983, the original Stormwater Management regulations were put into effect which required applied to any development greater than one acre. This requires management of peak runoff from the 2, 10, and 100-YR storms to avoid increases from predevelopment levels. There also was a quality piece which required prolonged detention of stormwater runoff. In 2004, the first major revision to the stormwater regulations was made which redefined major development to developing 1 acre or adding more than $\frac{1}{4}$ acre of impervious cover. The rules also created more clear definitions for reducing peak discharges and require management of the water quality storm to achieve 90% TSS removal and groundwater recharge. The rules were revised again in 2023, to require green infrastructure, but the overall requirements remained similar.

Land use data have been released for the years 1986, 2002, and 2007 (NJ Open Data). These land use data can be used to estimate urban development in their respective years which can be used as a proxy for the years of stormwater regulations. The 1986 land use data was used to represent 1983 as it's the closest data available. The 2007 data was used to represent 2004 since this pairs well with the 1986 being three years later and leads to a more conservative estimate of how much land was developed with better stormwater infrastructure and helps account for time for development to catch up with the regulations.

This allows the calculation of urban areas that contain no stormwater management, those that contain stormwater management per the 1983 regulations, and those that contain stormwater management per the 2004 regulations. Table 25, Table 26, and Figure 20 shows the results of this analysis.

Table 25: Area of New Development During Regulatory Eras [Acres]

HUC 14	Pre-1983	1983-2004	Post-2004	Total
2040105230050	380	93	5	479
2040105240030	2,384	273	41	2,698
2040105240040	3,802	757	115	4,673
2040105240060	568	32	36	637
2040201030010	52	89	3	145
2040201050050	88	110	5	204
2040201050070	149	144	26	319
2040201060030	550	402	246	1,198
2040201070010	561	693	160	1,415
2040201070020	1,394	278	21	1,692
2040201070030	1,837	148	5	1,989
Total	11,766	3,019	663	15,448

Table 26: Area of New Development During Regulatory Eras [%]

Subwatershed	HUC14	Pre-1983	1983-2004	Post-2004
Assunpink Creek	2040105230050	79.4%	19.5%	1.1%
Miry Run	2040105240030	88.4%	10.1%	1.5%
Pond Run	2040105240040	81.4%	16.2%	2.5%
Assunpink Creek	2040105240060	89.2%	5.1%	5.7%
Duck Creek	2040201030010	35.7%	61.9%	2.4%
Crosswicks Creek	2040201050050	43.3%	54.0%	2.7%
Crosswicks Creek	2040201050070	46.8%	45.1%	8.1%
Doctors Creek	2040201060030	45.9%	33.6%	20.5%
Back Creek	2040201070010	39.7%	49.0%	11.3%
Crosswicks Creek	2040201070020	82.4%	16.4%	1.2%
Shady Brook	2040201070030	92.3%	7.4%	0.2%
Total		76.2%	19.5%	4.3%

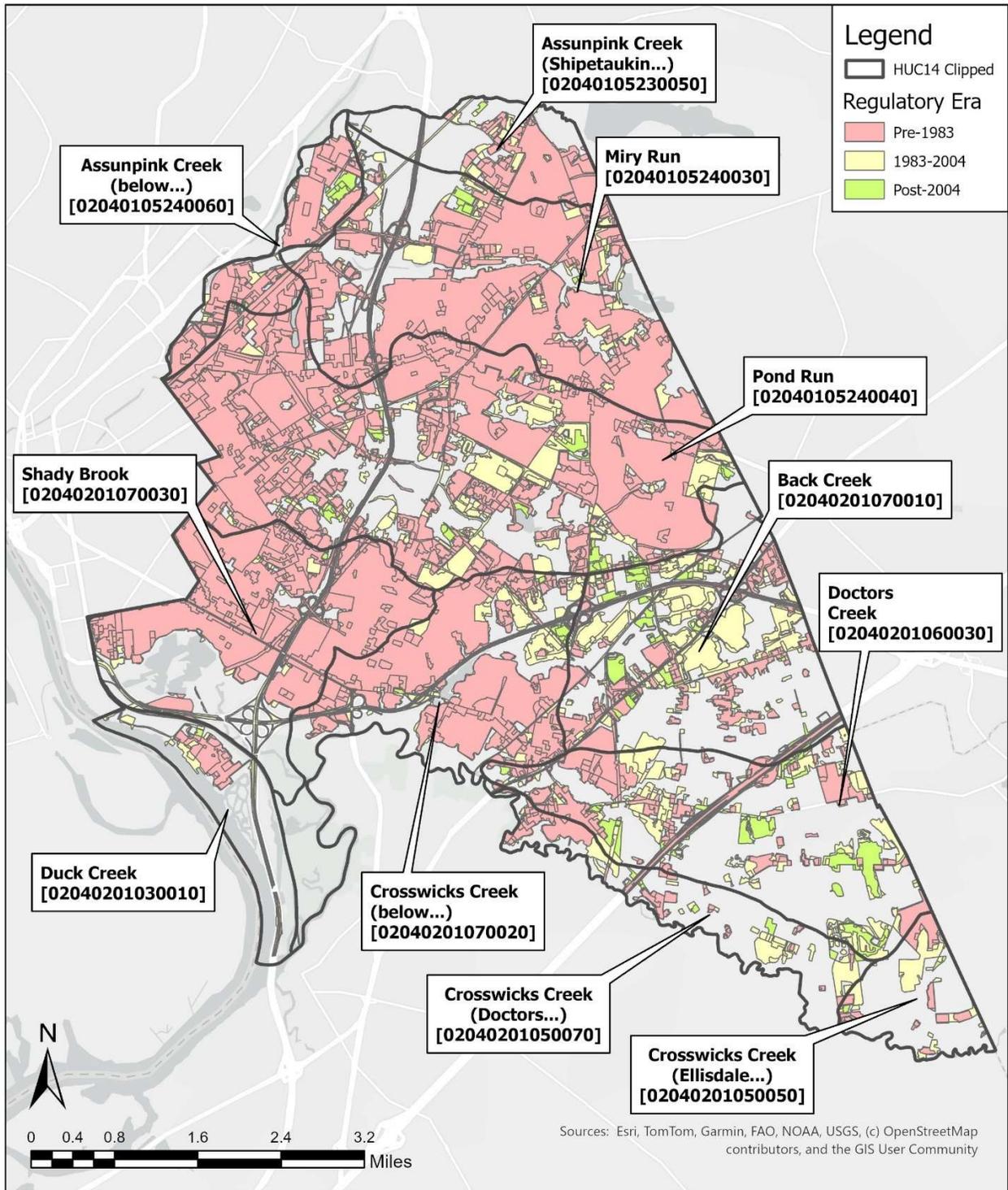


Figure 20: New Development During Regulatory Eras

What becomes abundantly clear is that a majority of development occurred prior to 2004 with large percentages occurring before 1983. Given that urban land use dominates the total area in most of the subwatersheds, it becomes clear that much of the development has no stormwater controls and is likely the source of many of the water quality impairments and TMDLs.

It is acknowledged that part of this analysis is flawed as there are some known detention basins and other stormwater infrastructure in the Pre-1983 area (Figure 21). This is likely because detention basins did start being built prior to 1983 to deal with flooding issues, and some developed areas have been redeveloped or expanded which led to stormwater management requirements. However, this appears to still be a small portion of the total area as there remain large areas devoid of any stormwater management infrastructure. Without evaluating the drainage areas accurately for every basin, it is difficult to evaluate this, so they will be neglected in the analysis. As these are identified, credit can be given for them for the drainage areas they manage.

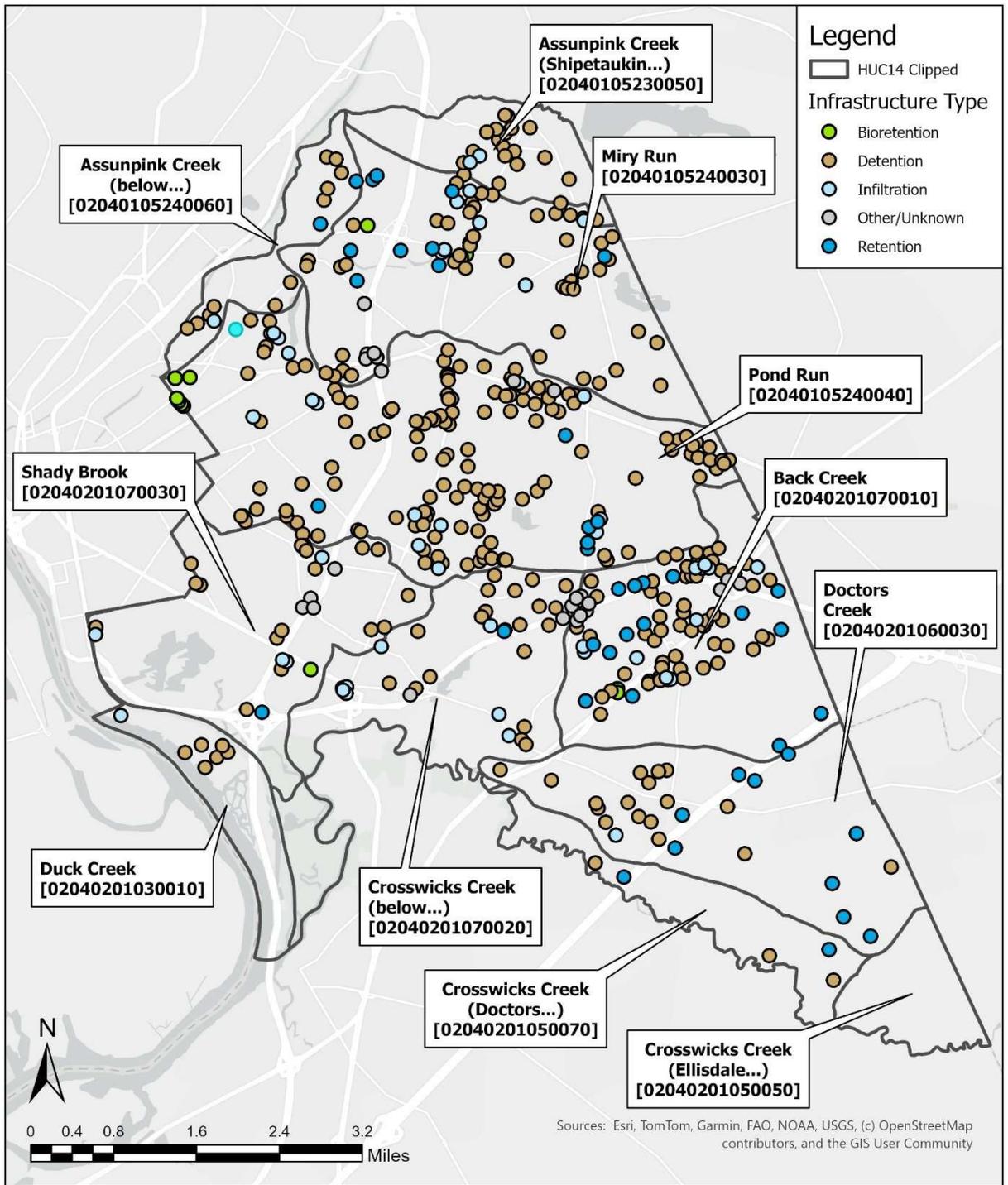


Figure 21: Existing Stormwater Management Infrastructure

Reductions from Existing Management Structures

The existing structures will help manage some portion of the loading for the urban land use category. Each era of land use will have different impacts on the stormwater runoff. To maintain simplicity in the analysis, each eras management will be assumed to be handle by one type of system. Developments before 1983 will assume to have no reductions in the pollutant of concern. Developments from 1983-2004 will be assumed to have been managed by detention basins. Developments after 2004 will be assumed to have been managed by infiltration basins.

The assumed removal rates for detention basins and infiltration basins are seen in Table 27 which are derived from NJDEP’s BMP manual Table 4-1 and Table 4-2 as well as the WIP Project Matrix for fecal coliform.

Table 27: Existing Management Reductions

Management Era	BMP	Fecal Coliform	TP	TN	TSS
Pre-1983	None	0%	0%	0%	0%
1983-2004	Detention Basin	5%	20%	20%	50%
Post-2004	Infiltration Basin	90%	60%	50%	80%

Total Phosphorus

Table 28: Phosphorus Load Reductions from Existing Management (lb/yr)

Load Category	Miry Run~ 2040105240030	Pond Run* 2040105240040	Assunpink Ck* 2040105240060	Crosswicks Ck* 2040201050050
Pre-1983	-	-	-	-
1983-2004	76	189	8	14
Post-2004	33	95	30	3
Total Reduction	108	284	38	16
Target Load Reductions	832	1,301	169	122
Remaining Load Reductions	723	1,018	131	105
Load Category	Crosswicks Ck* 2040201050070	Doctors Creek~ 2040201060030	Back Creek* 2040201070010	Crosswicks Ck* 2040201070020
Pre-1983	-	-	-	-
1983-2004	27	70	195	73
Post-2004	11	140	136	14
Total Reduction	38	210	331	87
Target Load Reductions	164	1725	465	459
Remaining Load Reductions	126	1,515	134	372

Fecal Coliform

*Table 29: Fecal Coliform Load Reductions from Existing Management (CFU/yr * 10¹²)*

HUC14	Assunpink Ck*	Miry Run~	Pond Run~	Assunpink Ck~	Crosswicks Ck~
	2040105230050	2040105240030	2040105240040	2040105240060	2040201050050
Pre-1984	-	-	-	-	-
1984-2004	19	65	164	6	12
Post-2004	9	128	624	316	7
Total	28	193	788	323	19
Target Load Reductions	2,308	13,918	25,021	2,672	888
Remaining Target Load	2,280	13,725	24,233	2,349	869

HUC14	Crosswicks Ck~	Doctors Creek~	Back Creek*	Crosswicks Ck*
	2040201050070	2040201060030	2040201070010	2040201070020
Pre-1984	-	-	-	-
1984-2004	12	44	188	62
Post-2004	53	541	685	76
Total	65	585	873	138
Target Load Reductions	1,532	1,039	1,930	1,935
Remaining Target Load	1,468	455	1,057	1,797

Total Suspended Solids

Table 30: TSS Load Reductions from Existing Management (lb/yr)

Load Category	Pond Run*	Crosswicks Ck*	Crosswicks Ck*
	2040105240040	2040201050070	2040201070020
Pre-1983	-	-	-
1983-2004	52,566	8,468	20,398
Post-2004	13,893	2,228	2,109
Grand Total	66,459	10,696	22,507
Target Load Reductions	138,078	30,634	48,530
Remaining load reductions	71,620	19,939	26,024

Stormwater Management Ordinances and Programs

Part of the MS4 permit includes the implementation of various ordinances and programs that are designed to address water quality impairments in general. Many of these practices apply to large number of the contaminants of concern. It is important to acknowledge that many of these practices aid in reducing pollutant loads, but quantifying their impact is difficult due to lack of studies evaluating them on a quantitative scale. Therefore, explicit load reductions are not calculated for most of these actions, but it is acknowledged that these existing practices should reduce pollutant loadings reaching the impaired waterways.

Table 31: MS4 Permit Actions Impact on Pollutants of Concern

MS4 Permit Actions	Dissolved Oxygen	Nitrate	Fecal Coliform	pH	Total Phosphorous
Pet Waste Ordinance	x	x	x	x	x
Wildlife Feeding Ordinance	x	x	x	x	x
Litter Control Ordinance	x	x	x	x	x
Improper Disposal of Waste Ordinance	x	x	x	x	x
Yard Waste Ordinance	x	x	x	x	x
Street Sweeping Program	x	x	x	x	x
Herbicide Application Management	x	x	x	x	x
Roadside Vegetative Waste Management	x	x	x	x	x
Roadside Erosion Control	x	x	x	x	x
Inspection and Maintenance of Stormwater Facilities	x	x	x	x	x
Stream Scouring Program	x	x	x	x	x
Illicit Discharge Detection and Elimination Program	x	x	x	x	x
BMPs at Municipal Maintenance Yards				x	
Storm Drain Inlet Retrofitting					

MS4 Permit Actions	Total Dissolved Solids (TDS)	Total Suspended Solids (TSS)	Turbidity	Polychlorinated Biphenyls (PCBs)	Lead
Pet Waste Ordinance	x	x	x		
Wildlife Feeding Ordinance	x	x	x		
Litter Control Ordinance	x	x	x		x
Improper Disposal of Waste Ordinance	x	x	x	x	x
Yard Waste Ordinance	x	x	x	x	
Street Sweeping Program	x	x	x		
Herbicide Application Management	x	x	x		
Roadside Vegetative Waste Management	x	x	x	x	
Roadside Erosion Control	x	x	x		x
Inspection and Maintenance of Stormwater Facilities	x	x	x	x	
Stream Scouring Program	x	x	x		x
Illicit Discharge Detection and Elimination Program	x	x	x	x	x
BMPs at Municipal Maintenance Yards	x			x	x
Storm Drain Inlet Retrofitting					x

New Jersey Fertilizer Law

This is a state-wide management practice that was adopted on January 5, 2011. New Jersey passed a fertilizer law that prohibits phosphorus or nitrogen from being applied from November 15th to March 1st by homeowners (December 1 to March 1 for commercial applicators) (NJDEP, 2016). Additionally, phosphorus may only be applied on lawns deficient in phosphorus and nitrogen fertilizers must contain 20 percent of slow-release nitrogen.

Quantifying this load reduction is difficult with limited data for before and after implementation, but it can be partially estimated with a few assumptions. Residential lands are assumed the land use with the largest impact by the law. On these residential lands, impervious cover area can be removed, and we can assume the remaining area is primarily lawn. Assuming $\frac{1}{4}$ of the lawns were fertilized with one pound of phosphate per 1,000 square feet (0.33 lb of TP [phosphate]), the loading of phosphate and TP can be estimated that would have been applied annually to residential properties before the fertilizer law went into effect (Minnesota DoA, 2018).

If the proper procedures are used in applying the fertilizer, little of the TP would wash off the turf areas. However, during application the fertilizer may end up on the road, driveway, sidewalks, or other impervious surfaces which would be highly susceptible to washing off into waterways with stormwater runoff. Studies indicate that fertilizer application losses range from <1% to 18 % of phosphorus fertilizer applied with higher fertilizing rates and higher loss rates if the fertilizer is not watered in before rainfall (Soldat, 2008). A value of 2.5% was selected as an application loss rate assuming that fertilizers were primarily watered in and low application rates were used in residential settings. This results in an estimated amount of TP prevented from being runoff by the fertilizer law since phosphorus fertilizers are not permitted unless phosphorus deficiency is observed (see Table 32).

Table 32: Reduction in TP Loading due to NJ Fertilizer Law (lb/yr)

Subwatershed	HUC14	Residential Lawn Area (acre)	TP Fertilizer Applied (lbs/yr)	TP Fertilizer Runoff Avoided (lbs/yr)
Miry Run~	2040105240030	1,068	3,838	96
Pond Run*	2040105240040	1,248	4,486	112
Assunpink Ck*	2040105240060	148	533	13
Crosswicks Ck*	2040201050050	148	534	13
Crosswicks Ck*	2040201050070	150	539	13
Doctors Creek~	2040201060030	555	1,996	50
Back Creek*	2040201070010	247	886	22
Crosswicks Ck*	2040201070020	604	2,170	54

Municipal separate storm sewer system (MS4) permit requirements

Community-wide Ordinances

The MS4 permit requires all municipalities to adopt Community-wide Ordinances including **pet waste ordinance, wildlife feeding ordinance, yard waste ordinance, and tree removal/replacement ordinance**. These ordinances are intended to reduce pollution sources. These four ordinances are the most significant to helping reduce TP, TSS, and fecal coliform loading to the waterways in the study area. The goal of these ordinances is to promote behavior change among the municipal residents.

Community-wide Measures

The MS4 permit also requires all municipalities to implement Community-wide Measures such as **roadside vegetative waste management, roadside erosion control, and street sweeping**. Municipalities must also conduct **inspection and maintenance of stormwater facilities** owned and operated by the municipality.

The **roadside vegetation waste management** program requires the municipality to ensure the proper pickup, handling, storage and disposal of wood waste and yard trimmings generated by the municipality. Wood waste and yard trimmings shall be managed to minimize the impact of vegetative maintenance activities on stormwater discharge quality and shall be prohibited

from being blown or deposited into storm drain inlets and stormwater facilities. Keeping these materials out of the local waterways will help reduce impacts from the nutrients that are in these materials.

The **roadside erosion control** MS4 permit requirement makes the municipality develop a program to detect and repair erosion along the roads owned or operated by the permittee and to inspect and maintain the stability of shoulders, embankments, ditches, and soils along these roads to ensure that they are not eroding and contributing to the sedimentation of receiving waters or stormwater infrastructure. Inspections of municipal roads shall occur at least once per year, and any repairs shall be completed as soon as practicable, but no later than 90 days from discovery. This is a great opportunity for the municipality to identify roadside ditches that can be transformed into bioretention bioswales. The bioswale will remove 90% of the TSS load, 60% of the TP load, and 30% of the TN load (NJDEP, 2004). Also, bioretention systems have been shown to reduce fecal coliform concentrations by 95% (Rusciano and Obropta, 2007).

The MS4 **street sweeping** requirement forces municipalities to sweep streets with storm drain inlets that discharge to surface water, at least three times per year. For municipal roadways without storm drain inlets that discharge to surface water, these streets must be swept at least once per year.

The MS4 permit also requires municipalities to conduct **inspections and maintenance of stormwater facilities** owned or operated by the municipality. The permit requires that the municipality shall develop, update, and implement a program to ensure adequate long-term cleaning, operation, and maintenance of all municipally owned or operated stormwater facilities, which includes storm drain inlets, catch basins, stormwater outfalls, conveyance systems (stormwater pipes and ditches), and stormwater management facilities such as detention basins. Once again, all these activities can help reduce pollutant loading in Hamilton Township.

As discussed earlier, the inspection of conveyance systems such as drainage ditches provide an opportunity to identify locations where bioretention bioswales can be installed, and other opportunities for retrofitting structures with BMPs that do a better job removing pollutants can also be considered. The inspection of outfall pipes can provide the municipality an opportunity

to identify stream bank erosion and downcutting conditions that will release phosphorus laden sediment to the waterway as well as identify illicit discharges. Stream bank restoration techniques can be used to stabilize these areas to reduce sediment loads and phosphorus loads into the waterway.

Quantifying Removals from MS4 Activities

Several studies have been completed to define removal rates for street sweeping, storm drain cleaning, and leaf removal. The Chesapeake Bay Program Partnership assembled an expert panel to review removal rates for street sweeping and storm drain cleaning (Donner, et. al., 2016). Much of these practices are done to some degree already, but to achieve specific credits, the existing management practices may need to be reviewed and enhanced. Therefore, they will not be weighted against the current reduction goals, but potential reductions will be listed for consideration.

Street Sweeping

Tetra Tech prepared a memorandum to the Minnesota Pollution Control Agency that summarized a survey of crediting approaches to street sweeping that serves as a useful reference for various crediting options (Molley, et. al., 2019). One option is to consider how much load is applied to roadways and establish removal rates from there. The previously mentioned Chesapeake Bay report uses 2.0 lbs/impervious acres/year TP, 15.4 lbs/impervious acres/year TN, and 0.65 tons/acre/year TSS. Another option is to consider measuring the collected sediments and estimating that way. The Florida Department of Environmental Protection assumed sediment from street sweeping contains 563 mg/kg TN and 361 mg/kg TP.

The United State Geological Survey (USGS) released a study the contained efficiencies of street sweeping for removing suspended solids, fecal coliform bacteria, and total phosphorus (Zarriello et. al, 2002). These efficiencies were a function of the type of equipment: mechanical sweepers (low-end efficiencies), wet assisted-vacuum sweepers and regenerative-air sweepers (mid-range efficiencies), and dry assisted-acuum sweepers (high-end efficiencies). These removal efficiencies are presented in Table 33. The best available technology efficiencies are based on highest reported literature values.

Table 33: Removal Efficiencies of Street Sweepers (Zarriello, et. al, 2002)

Type	Total Phosphorus	Suspended Solids	Fecal Coliform
Mechanical	5%	25%	5%
Wet vacuum and regenerative air	20%	45%	20%
Dry vacuum	50%	80%	50%
Best available Technology	90%	95%	90%

Based upon these studies, TSS, TP, and TN removal by street sweeping is a function of the type of street sweeper and the number of times a street is swept per year. Also, credit is generally only given for curb and gutter roadways. The Chesapeake Bay Program provides removal rates for 11 different combinations of both sweeping schedules and two different types of sweepers. The two sweeper types are Advanced Sweeping Technology and Mechanical Broom Technology, and the sweeping frequency ranges from two passes per week to one pass per 12 weeks. The maximum removal rates for TSS, TN, and TP are 21%, 4%, and 10%, respectively for streets that are swept twice a week with Advanced Sweeping Technology. The Chesapeake Bay Program does not give any nutrient removal credit for TN or TP for Mechanical Broom Technology and only gives a max removal of 1.0% TSS for sweeping twice a week.

Table 34 through Table 36 show the nutrient loading from roadways as well as potential reductions based on the Chesapeake and USGS studies. The roadway loads were calculated using values taken from the Chesapeake Bay Program (2.0 lbs/impervious acres/year TP, 15.4 lbs/impervious acres/year TN, 0.65 tons/impervious acres/year TSS). For fecal coliform, no loading rate is available, so for simplicity, it was extrapolated by taking the urban load of each HUC14 and dividing by an area. This rate was then multiplied for each HUC14. It's important to note that the USGS studies removal rates are more based on the actual removal potential of the technology while the Chesapeake report is more so factoring in the effect of the sweeping schedule.

Table 34: Total Phosphorus Loading and Reductions from Roadways

Subwatershed	HUC	Road Area (acres)	TP (lb/yr)		
			Loading	Max Reduction Credit (Chesapeake)	Dry Vacuum Reduction (Zarriello)
Miry Run~	2040105240030	390	780	78	390
Pond Run*	2040105240040	658	1,316	132	658
Assunpink Ck*	2040105240060	62	124	12	62
Crosswicks Ck*	2040201050050	20	41	4	20
Crosswicks Ck*	2040201050070	48	97	10	48
Doctors Creek~	2040201060030	187	373	37	187
Back Creek*	2040201070010	217	433	43	217
Crosswicks Ck*	2040201070020	300	601	60	300

Table 35: Total Suspended Solids Loading and Reductions from Roadways

Subwatershed	HUC	Road Area (acres)	TSS (lb/yr)		
			Loading	Max Reduction Credit (Chesapeake)	Dry Vacuum Reduction (Zarriello)
Pond Run*	2040105240040	658	855,631	179,682	684,505
Crosswicks Ck*	2040201050070	48	62,914	13,212	50,331
Crosswicks Ck*	2040201070020	300	390,597	82,025	312,477

Table 36: Total Fecal Coliform Loading and Reductions from Roadways

Subwatershed	HUC	Road Area (acres)	Fecal Coliform (CFU * 10 ¹² /yr)		
			Loading	Max Reduction Credit (Chesapeake)	Dry Vacuum Reduction (Zarriello)
Assunpink Ck*	2040105230050	50	171	n/a	86
Miry Run~	2040105240030	390	1,787	n/a	894
Pond Run~	2040105240040	658	3,261	n/a	1,630
Assunpink Ck~	2040105240060	62	223	n/a	112
Crosswicks Ck~	2040201050050	20	42	n/a	21
Crosswicks Ck~	2040201050070	48	124	n/a	62
Doctors Creek~	2040201060030	187	444	n/a	222
Back Creek*	2040201070010	217	1,121	n/a	560

Storm Drain Cleaning

The Chesapeake Bay report states a credit can be applied for the sediment dry weight removed as 0.06% TP and 0.27% TN for sediments removed from BMPs and catch basins. Organic Matter and leaf litter can be considered to have 0.12% TP and 1.11% TN. The Florida Department of Environmental Protection assumes that sediment cleaned from catch basin contains 679 mg/kg TN and 417 mg/kg TP, and sediment removed from BMPs contains 899 mg/kg TN and 364 mg/kg TP (Bateman, 2012). USEPA Region 1 also has a credit program that is like the Chesapeake Bay Program. USEPA Region 1 has a catch basin cleaning credit that is based on multiplying the impervious drainage area times the same nutrient load export rates for impervious land uses used for street sweeping times the catch basin cleaning reduction factors of 0.02 for phosphorus and 0.06 for nitrogen, which yields a reduction in pounds per year. If sediment mass is tracked correctly based on the criteria of sediments in these reports, the removal rates could be utilized to track reductions.

Leaf Collection

The Wisconsin Department of Natural Resources (WDNR) has recognized research that estimated that on average 43% of the annual phosphorus load is discharged during the fall. WDNR went on to approve a 17% total phosphorus annual load reduction from leaf collection efforts. This credit only applies to medium density (0.15 – 0.50 acre lots) residential land use with a high level of tree canopy. To receive this credit, municipalities must collect leaves three to four times spaced throughout late September, October, and November. Also, within 24 hours of leaf collection, the roadway must be swept. Only a reduction for phosphorus loading is discussed in the credit, so only those reduction are considered. Table 37 shows the potential reduction for the leaf collection combined with street sweeping for Hamilton Township. Since the 17% reduction only applies for roadways that have curb and gutters, it is assumed that 50% of the residential area has curb and gutter and sufficient canopy cover, therefore, the total reduction will be considered half the potential value.

Table 37: Total Phosphorus Load Reduction Due to Leaf Collection from Late September through November

Subwatershed	HUC14	Medium Density Residential Area (acres)	TP (lb/yr)		
			Loading	Potential Reduction	Reduction (50% managed)
Miry Run~	2040105240030	1721	2410	410	205
Pond Run*	2040105240040	1749	2448	416	208
Assunpink Ck*	2040105240060	161	225	38	19
Crosswicks Ck*	2040201050050	0	0	0	0
Crosswicks Ck*	2040201050070	101	141	24	12
Doctors Creek~	2040201060030	240	336	57	29
Back Creek*	2040201070010	115	161	27	14
Crosswicks Ck*	2040201070020	948	1327	226	113

Proposed Management

General Approaches

To achieve the established load reduction targets, a proposed management plan is needed. The options for achieving them can be generalized since many of the practices that will target one contaminant of concern will also improve others. The primary set of targets established in this report are for Total Phosphorus, Fecal Coliform, Total Suspended Solids, and PCBs. The first three have been identified as occurring primarily from nonpoint source pollution while PCBs have been identified as primarily occurring from point sources. Therefore, the approach for dealing with TP, Fecal Coliform, and TSS can be combined, and the approach for dealing with PCBs can be handled separately. The remaining impairments have been discussed in the Load Reduction Targets section and should be similarly targeted by efforts to address TP, Fecal Coliform, and TSS.

Total Phosphorus, Fecal Coliform, Total Suspended Solids

To create a general strategy for the three contaminants, first emphasis should be placed on the established TMDLs for total phosphorus and fecal coliform. Between the phosphorus TMDL, fecal coliform TMDL, and their impairments, every HUC besides Duck Creek (02040201030010) and Shady Brook (02040201070030) are covered, and they only have water quality impairments for low priority indicators of mercury and PCBs in fish tissue which are discussed separately. This means if the phosphorus and fecal coliform TMDLs and impairments are targeted, all HUCs that are impaired for TSS (and other parameters) will also be addressed as well assuming practices are designed to improve water quality overall. Priorities should generally be given to the HUCs with TMDLs since the target load reductions are clear, and problems are well established.

While some HUC14s have agriculture as the predominate land uses, the United State Farm Bill provides the Natural Resources Conservation Service (NRCS) to help farmer implement agricultural management practices that will reduce the environmental impact of farming operations. This plan will focus on non-agricultural sources of pollution. Potential projects can be boiled down into two main strategies: improve existing management structures and installing new management practices. For improving existing management, all development

from 1983-2004 will be treated as though the assumed detention basins have been converted to a bioretention system. All potential loads reductions will be calculated as a net improvements by removing the existing loads removed by detention basins. For creating new management structures, all urban land developed prior to 1983 will also be considered managed by bioretention system, but alternative systems would also be possible. The results of this analysis were compared to the loading targets to see if those potential reductions would achieve the target goals. The reductions for bioretention basins are summarized in Table 38.

Table 38: Proposed Best Management Practices (BMPs) Reductions

BMP Type	Fecal Coliform	TP	TN	TSS
Bioretention System	90%	60%	30%	90%

Total Phosphorus

There is adequate potential in all the HUCs except for Doctors Creek which has the highest target removal percentage (Table 39). Part of the problem is that the 77.5% while the bioretention only achieve 60% reductions. Additional measures are going to need to be taken and accounted for to achieve this goal. One example may be ensuring proper function of septic systems which may allow for reduction to be accounted for or more fully accounting for leaf collection and street sweeping activities. A watershed restoration plan is being prepared for Doctors Creek and Miry Run to address the phosphorus TMDL. This document should be referred to for further details when completed to address the TMDL by taking advantage of other management strategies.

Table 39: Total Phosphorus Proposed Project Reduction Potential [lb/yr]

Subwatershed	HUC	Pre-1983 New Projects	1983- 2004 Retrofits	Total Load Red. Potential	Loads Reductions Needed
Miry Run~	2040105240030	1986	151	2,137	723
Pond Run*	2040105240040	3232	378	3,610	1018
Assunpink Ck*	2040105240060	451	16	467	131
Crosswicks Ck*	2040201050050	34	27	61	105
Crosswicks Ck*	2040201050070	105	53	159	126
Doctors Creek~	2040201060030	368	139	507	1515
Back Creek*	2040201070010	424	391	815	134
Crosswicks Ck*	2040201070020	1142	147	1,289	372

Fecal Coliform

A majority of the HUCs are not hitting their load reduction targets with these actions alone. This was expected as discussed previously when establishing the load reduction targets. The target load reductions are quite high, and it will be difficult to achieve those levels of removals in reality. Actions should be taken to reduce fecal coliform to the maximum extent feasible in the most cost-effective manner. A continued monitoring plan should be established, so actions taken can be observed to see if they are having the intended impacts. This will allow reevaluation of the TMDL over time to understand if fecal coliform levels can be reduced to suitable levels without achieving the high levels of removal expected by the TMDL report.

*Table 40: Fecal Coliform Proposed Project Reduction Potential [CFU/yr *10¹²]*

Subwatershed	HUC	Pre-1983 New Projects	1983- 2004 Retrofits	Total Load Red. Potential	Loads Reductions Needed
Assunpink Ck*	2040105230050	1,138	321	1,459	2,280
Miry Run~	2040105240030	9,827	1,101	10,928	13,725
Pond Run~	2040105240040	17,262	2,786	20,048	24,233
Assunpink Ck~	2040105240060	1,634	105	1,739	2,349
Crosswicks Ck~	2040201050050	148	209	357	869
Crosswicks Ck~	2040201050070	472	201	672	1,468
Doctors Creek~	2040201060030	1238	743	1,981	3,885
Back Creek*	2040201070010	2,526	3189	5,716	1,057
Crosswicks Ck*	2040201070020	4,467	1,049	5,515	1,797

Total Suspended Solids

There is an overabundance of potential to achieve the TSS goal, so it should be achieved automatically by targeting for fecal coliform and total phosphorus.

Table 41: Total Suspended Solids Proposed Project Reduction Potential [lb/yr]

Subwatershed	HUC	Pre-1983 New Projects	1983- 2004 Retrofits	Total Load Red. Potential	Loads Reductions Needed
Pond Run*	2040105240040	507,469	42,053	549,522	71,620
Crosswicks Ck*	2040201050070	17,864	6,774	24,639	19,939
Crosswicks Ck*	2040201070020	178,968	16,318	195,286	26,024

Additional Strategies

There are several other strategies that can be considered. One example is or implementing educational and outreach programs that will provide source reduction of pollutants. Another is enhancing the street sweeping and leaf collection programs to provide higher credits to reduce the needed load reductions as discussed in the Existing Management section. These programs can all help reduce the number of management infrastructure projects that need to be put in place but need to be quantified appropriately based on chosen practices. Existing septic systems can also be reviewed as potential sources and efforts made reduce loadings particularly of phosphorus. According to USEPA, 10 to 20% of septic systems fail at some point (USEPA, 1992). Therefore, existing loads could potentially be reduced by about 20% by fixing/replacing failing systems, improving technologies, or by providing sewer service to these areas.

PCBs

The data from the TMDL report makes it difficult to calculate what reduction target Hamilton Township should target itself, but the overall reduction target is 99.9%. Therefore, PCBs need to be reduced to the maximum extent possible.

While implementing a PCB pollutant minimization program applies more to wastewater treatment plants and industrial discharges, Hamilton Township could take measures to ensure that their public works operations are also minimizing sources of PCB pollution. There are several known potential sources of PCBs including transformers and switches, contaminated soils, hydraulic fluids, lubricants, gasket sealers, paints, plasticizers, and adhesives. The municipality should work to ensure proper standard operating procedures are in place to minimize the release of PCBs from these potential sources. The list of NJDPES permit holders can also be reviewed for potential sources of PCBs and action taken to audit them to make sure they have adequate standard operating procedures.

Management Area Goals

While understanding the loads is important, it is helpful to backtrack them into a management area target for each HUC that can be used to simplify the accounting further and allow easier ways of estimating cost for practices. To simplify the process, the loading for each era and

HUC14 was divided by its area to get an average loading area for the HUC14 and era. This makes it easier to translate each type of loading reduction back into a drainage area that needs to be managed to achieve that load reduction. Areas were then calculated for each pollutant of concern (TP, TSS, and fecal coliform). The values for TSS are left out since there is no TMDL, and the targeting for fecal coliform and phosphorus will easily hit with those targets. These areas are either the total area for urban land use in the HUC or the minimum area required to satisfy the TMDL with retrofit and new implementations on pre-1983 developments. For some HUCs, there is not enough urban area to manage the targets, especially in areas with higher agricultural land uses, so collaboration with agricultural management is needed to achieve the required management areas. These estimates are also before any reductions from other sources are considered except for existing management practices. Table 42 and Table 43 highlight the total phosphorus and fecal coliform management areas needed. The tables are broken down as 3 cases: only pre-1983 development projects, 1983-2004 development retrofit projects, and pre-1983 development projects required if all retrofit projects are done first. Due to the high fecal coliform reductions needed, it leads to the full area being proposed to be managed in most cases. Therefore, the phosphorus loading estimates could be viewed as a logical starting point since their management is more achievable, especially if reductions can be found in other areas.

Table 42: Total Phosphorus Estimated Management Areas (acres)

Subwatershed	HUC14	Pre-1983 Projects (acres)	1983-2004 Retrofits (acres)	Pre-1983 Projects, all Retrofit done (acres)
Miry Run~	2040105240030	868	273^	515
Pond Run*	2040105240040	1198	757^	565
Assunpink Ck*	2040105240060	165	32^	109
Crosswicks Ck*	2040201050050	88^	110^	88^
Crosswicks Ck*	2040201050070	149^	144^	78
Doctors Creek~	2040201060030	550^	402^	550^
Back Creek*	2040201070010	177	238	0
Crosswicks Ck*	2040201070020	454	278^	206
Total		3,649	2,234	2,110

^ = all urban area for HUC managed

* = HUC has Water Quality Impairment (E. Coli, Fecal coliform used as proxy)

~ = HUC has TMDL

Table 43: Fecal Coliform Estimated Management Areas (acres)

Subwatershed	HUC14	Pre-1983 Projects (acres)	1983-2004 Retrofits (acres)	Pre-1983 Projects, all Retrofit done (acres)
Assunpink Ck*	2040105230050	380^	93^	380^
Miry Run~	2040105240030	2,384^	273^	2,384^
Pond Run~	2040105240040	3,802^	757^	3,802^
Assunpink Ck~	2040105240060	568^	32^	568^
Crosswicks Ck~	2040201050050	88^	110^	88^
Crosswicks Ck~	2040201050070	149^	144^	149^
Doctors Creek~	2040201060030	550^	402^	550^
Back Creek*	2040201070010	235	230	0
Crosswicks Ck*	2040201070020	561	278^	263
Total		8,717	2,319	8,184

^ = all urban area for HUC managed

* = HUC has Water Quality Impairment (E. Coli, Fecal coliform used as proxy)

~ = HUC has TMDL

Project Implementation

With the potential to address the TMDLs and impairments through the established methods, a more focused plan is needed to identify potential locations for this project. As a starting point, a Stormwater Mitigation Plan was developed by the Rutgers Cooperative Extension Water Resources Program in 2018. This report contains 78 potential project sites for green infrastructure stormwater retrofits and can be viewed as Appendix 4. The summary of management potential by generalized subwatershed from the plan can be seen in Table 44.

Table 44: Stormwater Mitigation Plan Project Management

Subwatershed	Potential Management Area (ac)	Recharge Potential (Mgal/yr)	TSS Removal (lbs/yr)	TP Removal (lbs/yr)	Total Cost (\$)
Assunpink Creek	3.1	3.521	589	6.5	\$814,625
Back Creek	12.7	14.450	2,420	26.7	\$2,891,250
Crosswicks Creek	8.0	8.995	1,514	16.8	\$1,790,875
Doctors Creek	0.4	0.461	84	0.8	\$62,550
Miry Run	10.6	11.905	2,001	22.3	\$2,190,250
Pond Run	13.3	14.922	2,521	27.9	\$3,582,500
Shady Brook	6.7	7.562	1,275	14.1	\$1,526,306
Total	54.8	61.816	10,405	115.1	\$12,858,356

Identifying additional projects

Additional project can be identified through a variety of means and will be primary goal of the Watershed Improvement Plan Report.

The parcel data was used to identify parcels that were classified as property class 15 which are tax exempt parcels. Of these, public schools, public properties, and church property were isolated. The property class 15 parcels for Hamilton Township are shown in Figure 22 and presented in Appendix 5. When the final phase of the Watershed Improvement Plan is created, these are the first sites that can be assessed for opportunities to install watershed improvement projects in addition to those sites already identified in the Stormwater Mitigation Plan. These properties offer opportunities to be retrofitted with green infrastructure to help reduce pollutant loads and are entities that would be most amenable to projects being done on their property.

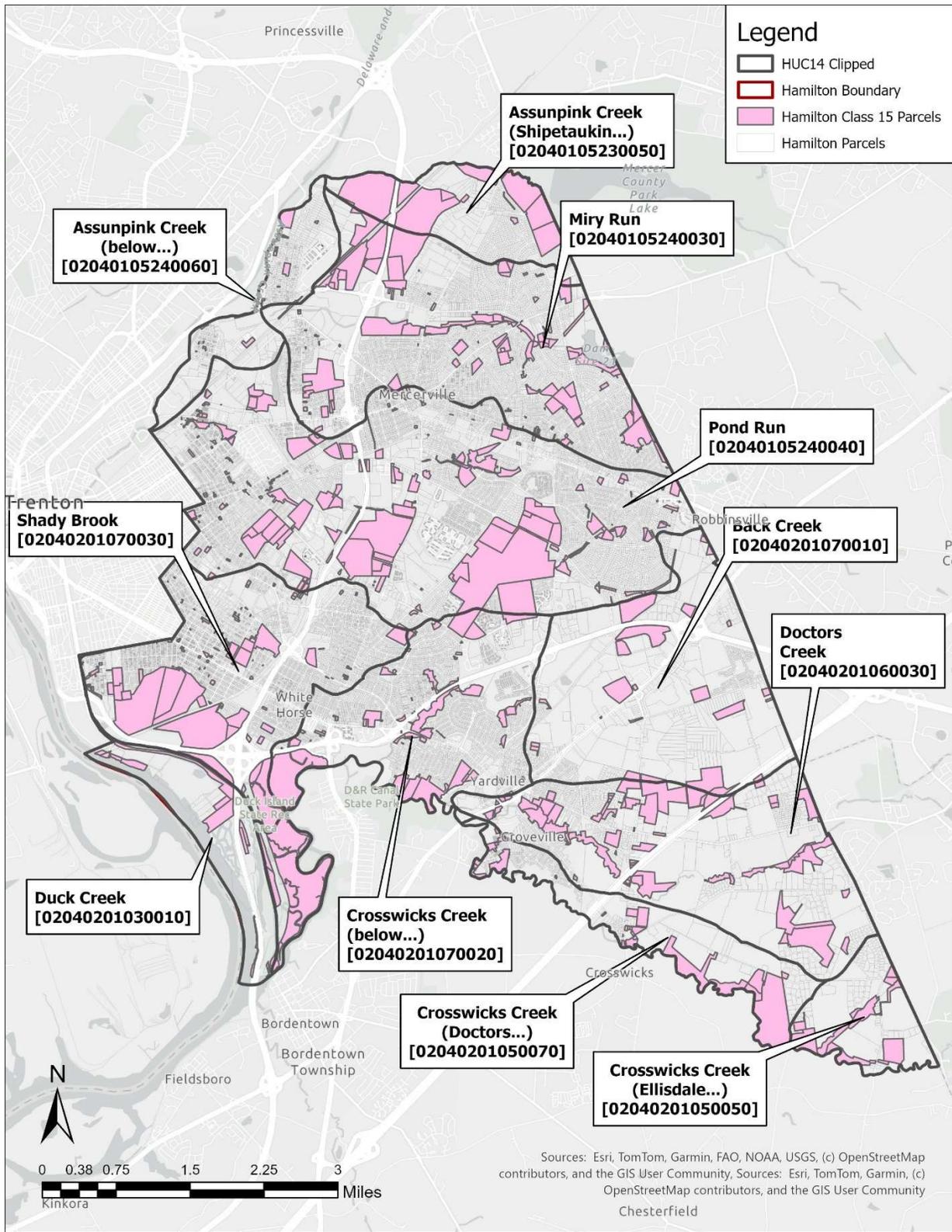


Figure 22: Hamilton Property Class 15 Parcels

Potential Management Summary

A final summary of existing and potential management strategies is presented here for the TMDL watersheds since these will be the priority (Table 45 and Table 46). The total load reduction estimates come short of the needed reductions according to the TMDL reports in most cases. As previously stated, this report is only focusing on urban land uses. For some HUC14s, like Doctors Creek, there is a large agricultural component, so separate efforts are needed there to achieve the total loading reduction. For fecal coliform, the proposed load reductions are outside of realistic removal efficiencies of cost-efficient practices. Fecal coliform is especially difficult to understand how actions may ultimately impact stream concentration, so a sampling plan should be included to evaluate the impact of these action and load reduction efforts can be reevaluated at that time.

Table 45: Total Phosphorus Potential Management Strategies for TMDLs (lb/yr)

Potential Management Strategy	Potential TP Load Reduction (lb/yr)	
	02040105240030 - Miry Run	02040201060030 - Doctors Creek
Leaf collection	205	29
Street Sweeping (Chesapeake Reduction)	78	37
Green infrastructure for proposed retrofit sites	22.3	0.8
1983-2004 development retrofits	378	139
Pre-1983 development bioretention projects	3,232	368
Septic system replacement (20% reduction of total load assumed)	3	180
TOTAL =	3,713	754
Total reduction needed (existing management already removed)	<u>723</u>	<u>1515</u>

*Table 46: Fecal Coliform Potential Management Strategies for TMDLs (CFU *10¹²/yr)*

Subwatershed	HUC	Street Sweeping	Pre-1983 New Projects	1983-2004 Retrofits	Total Load Red. Potential	Loads Reductions Needed
Miry Run~	2040105240030	894	9,827	1,101	11,822	<u>13,725</u>
Pond Run~	2040105240040	1630	17,262	2,786	21,679	<u>24,233</u>
Assunpink Ck~	2040105240060	112	1634	105	1,851	<u>2,349</u>
Crosswicks Ck~	2040201050050	21	148	209	378	<u>869</u>
Crosswicks Ck~	2040201050070	62	472	201	734	<u>1,468</u>
Doctors Creek~	2040201060030	222	1238	743	2,204	<u>3,885</u>

Costs and Funding Sources

Cost Breakdown

Costs are estimated for several management options that could assist in reducing pollutant loads. These costs are proposed only for the HUC14s they have the evaluated TMDLs currently. Note that costs for phosphorus are included in the fecal coliform costs since the TMDLs overlap, but both are presented to show cost to resolve both separately since phosphorus could be prioritized first as more feasible to achieve. The cost per column can be used to understand which actions are most cost effective and are likely the actions that should be taken first. All costs should be considered rough estimates and further detail of methods is needed to refine further.

Street sweeping costs are estimated from data in the Minnesota Stormwater Manual (MPCA, 2022). The current sweeping procedure required is three times annually for roads with storm drains and once a year for roadways without storm drains. The reported median street sweeping cost was \$94/curb mile based on towns using similar sweeping schedules. If sweeping was increased to twice a week, that would result in sweeping about 104 times per year (~35x increase). Sweeping costs will not scale exactly linearly and are highly variable, so the expected increases reflected in cost is reduced by 50% (17.5x). That adjusts the estimated cost to \$1,645/curb mile, and cost can be estimated using with the estimated 663 curb miles Hamilton Township is responsible to sweep. Sweeping schedules could be optimized by key locations to help reduce costs or frequency could be reduced with reduced removal efficiencies. For example, a schedule of 25 passes per year (about once every other week) removes TP by 5% (half as much, per Chesapeake Bay Report) but would cost significantly less (~\$392/curb mile).

Bioretention system cost is estimated as a range by extrapolating from a value of typical range of \$15-20 per square foot for small to mid-scale bioretention projects which results in a value of about \$750,000/acre. Converting existing detention basins to bioretention basins is estimated at about \$40,000 each based on other projects. Repair and replacement of septic systems is estimated at \$9,000 each.

Table 47: Costs for Proposed Management Strategies for Phosphorus

Action	Management Strategy	Cost	Cost per lb/yr
1	Leaf collection and street sweeping (Leaf collection procedure to be reviewed to comply and street sweeping to follow. Street sweeping to be increased to twice a week [once every other week] with appropriate technology). This is an annual cost.	\$1,090,635 [\$259,896]	\$3,125 [\$891]
3	Bioretention systems for unmanaged areas (~111 acres of BMPs managing water quality storm with one foot of storage) [~\$750,000/acre]	\$83,250,000	\$88,563
4	Converting existing detention basins to bioretention basins (66 basins need to be transformed) [~\$40,000 each]	\$2,640,000	\$5,106
5	Repair and/or replacement of 29 septic systems [~\$9,000 each]	\$261,000	\$1,426
Total construction cost estimate =		\$86,151,000	
Total annual maintenance cost estimate =		\$1,090,635 [\$259,896]	

Table 48: Costs for Proposed Management Strategies for Fecal Coliform

Action	Management Strategy	Cost	Cost per CFU *10 ¹² /yr
1	Street sweeping (Street sweeping to be increased to twice a week [once every other week] with appropriate technology). This is an annual cost.	\$1,090,635 [\$259,896]	\$371 [\$177]
2	Bioretention systems for unmanaged areas (~786 acres of BMPs managing water quality storm with one foot of storage) [~\$750,000/acre]	\$589,500,000	\$19,277
3	Converting existing detention basins to bioretention basins (212 basins need to be transformed) [~\$40,000 each]	\$8,480,000	\$1,648
Total construction cost estimate =		\$597,980,000	
Total annual maintenance cost estimate =		\$1,090,635 [\$259,896]	

Funding Sources

Stormwater Utility

New Jersey passed the Stormwater Utility Law in March 2019 which allows local and county governments to form stormwater utilities. Stormwater utilities allow municipalities to apply a fee to landowners for their responsibility in contributing to stormwater runoff. These fees can be assessed at a wide range of values, but the goal is to provide a consistent dedicated funding source to address stormwater flooding and pollution issues for the municipality.

Most often, these fees are applied based on the amount of impervious cover on a property since they generate the most stormwater runoff, but alternative schemes are possible. If a property owner is managing their stormwater correctly (for example, it was built after 2004), they can have the fee waived for all or a portion of the property. Property owners can also have the option to install stormwater management practices on their property to reduce or eliminate their fees. This creates a great opportunity where either people pay fees to help fund stormwater management projects, or they build the projects themselves to eliminate the fee. Either way, the municipality can take credit for the practices that are implemented.

It is important to acknowledge that stormwater utilities may not be politically favorable especially in some areas, but it does provide a reliable funding source and promotes self-implementation of projects. Instead of implementing an explicit stormwater utility, the fee could be imbedded into property taxes or other utility fees. Implementing a stormwater utility should be accompanied by educational programs that explain the importance of creating this funding source to resolve water quality and flooding issues throughout Hamilton Township.

Grants

There are many state and federal grants that can be sought after for stormwater management funding. Some primary examples are Section 319 grant programs, FEMA BRIC grants, State Revolving Funds, and National Fish and Wildlife Foundation (NFWF) grants. Grants are a great opportunity to fund projects, but they can be competitive and should be targeted appropriately. For example, NFWF grants are going to cater to implementing projects like bioretention systems that create habitat. One of the best ways to obtain grants is to first prepare

shovel-ready designs for projects that have been identified in this plan which are more attractive to grantors.

Loans

Where grant funding or stormwater utilities are not sufficient to fund projects, loan programs such as the New Jersey Water Bank should be considered. This program is a partnership between NJDEP and the New Jersey Infrastructure Bank (I-Bank) to provide affordable financing for design, construction, and implementation of stormwater projects that improve water quality and ensure safe drinking water.

Schedule

A schedule for implementing the management strategies will be highly dependent on when funding can be obtained a rough schedule is laid out here, but it is highly subject to change. The schedule should be reviewed on a regular basis, and a more detailed schedule should be developed once consistent funding sources are established and an annual budget can be applied each year toward establishing the goals established in this report.

Table 49: Schedule

Step	Management Strategy	Time Frame
1	Review leaf collection and street sweeping program. The township should begin soliciting grant funding for advanced street sweepers as needed.	0 to 6 months
2	Develop and deliver the educational programming, particularly focusing on encouraging residents to adopt pollution reduction strategies, build rain gardens, and install rainwater harvesting systems to help reduce stormwater flows to the waterways; seek funding to support rain garden installation by private property owners.	6 to 18 months
3	Develop detention basin retrofit designs that can be submitted for grant funding to implement.	6 to 18 months
4	Prepare designs for green infrastructure projects and submit these designs for funding.	6 to 24 months
5	Adopt a septic system registration program where homeowners must inspect and pump their systems on a regular basis (once every three years).	12 to 24 months
6	Continue developing retrofit designs and green infrastructure projects on a regular basis trying to achieve a certain amount each year to reach target reductions in a reasonable timeframe.	24 months+
7	Implement a sampling plan to establish effectiveness of implementation efforts	24 months+

Recommendations

It is recommended that the TMDL issues be targeted first since the amount of reduction needed in these areas is better understood. The options are to either put all efforts into one subwatershed first to see if impacts are addressed or spread out the efforts evenly to reduce impacts from the highest levels overall. Both strategies are valid approaches. In practice, a more focused approach may be more effective in reducing the scope of the problem to something manageable at first, and this would allow the subwatershed to become a case study for how to handle the remaining ones. As for the subwatershed to target, Doctor's Creek, Miry Run, or Pond Run become the obvious choice for a few reasons. All three have TMDLs, and Miry Run and Doctors Creek both have multiple. Pond Run has the additional benefit of being an isolated watershed since no other HUCs flow into it which makes it useful as a case study. Doctors Creek becomes the most priority choice overall however since it needs the largest reductions among all the TMDLs.

Conclusion

This Watershed Assessment Report shall serve as a plan to resolve the TMDLs and water quality impairments in Hamilton Township. Actions should be made to align with the targeted timeline to achieve the goals set forth in the report and secure funding to implement the proposed projects. Only through these actions will the states waterways be restored to a state that allows safe waters for both people and wildlife. This report will be followed by a Watershed Improvement Plan Report, which will provide a more detailed plan for locations of water quality improvement projects as well as more detailed costs and schedule breakdowns of how the goals set forth in this plan will be achieved.

References

Data Sources

2020 Census of Population and Housing. Retrieved on January 31, 2024 from U.S. Department of Commerce, U.S. Census Bureau website: <https://data.census.gov/>.

New Jersey 2020 Impaired Waters List. Retrieved on January 31, 2024 from U.S. Department of Interior, United States Environmental Protection Agency website: <https://www.epa.gov/tmdl/new-jersey-impaired-waters-list>.

NJDEP Open Data. Retrieved on February 28, 2025 from Division of Information Technology, NJDEP Bureau of GIS website: <https://gisdata-njdep.opendata.arcgis.com/>.

NJDEP Data Miner. Retrieved in January 2025 from New Jersey Department of Environmental Protection website: <https://njems.nj.gov/DataMiner/Search/SearchByCategory?isExternal=y&getCategory=y&catName=NJPDES+Permitting+Program>

NJDEP DWM&S Rainfall Data Acquisition. Retrieved in January 2025 from NJDEP website: <https://njdep.rutgers.edu/rainfall/>

NRCS Web Soil Survey. Retrieved in January 2025 from United States Department of Agriculture website: <https://websoilsurvey.nrcs.usda.gov/app/>

Total Maximum Daily Load (TMDL) Look-Up Tool. Retrieved on January 31, 2024 from New Jersey Department of Environmental Protection, Bureau of NJPDES Stormwater Permitting and Water Quality Management website: <https://dep.nj.gov/njpdess-stormwater/municipal-stormwater-regulation-program/tmdl/>.

Additional References

Anderson, J.R., E. E. Hardy, J. T. Roach, and R. E. Witmer. 1976. A Land Use and Land Cover Classification System for Use with Remote Sensor Data. Geological Survey Professional Paper 964, A revision of the land use classification system as presented in U.S. Geological Survey Circular 671.

Arnold, Jr., C.L. and C.J. Gibbons. 1996. Impervious Surface Coverage The Emergence of a Key Environmental Indicator. *Journal of the American Planning Association* 62(2): 243-258.

Bateman, Michael. 2012. "Methodology for Calculating Nutrient Load Reductions using the FSA Assessment Tool." Florida Stormwater Association and Florida Department of Environmental Protection.

- Caraco, D., R. Claytor, P. Hinkle, H. Kwon, T. Schueler, C. Swann, S. Vysotsky, and J. Zielinski. 1998. Rapid Watershed Planning Handbook. A Comprehensive Guide for Managing Urbanizing Watersheds. Prepared by Center For Watershed Protection, Ellicott City, MD. Prepared for U.S. Environmental Protection Agency, Office of Wetlands, Oceans and Watersheds and Region V. October 1998.
- Donner, Sebastian et. al. 2016. "Recommendations of the Expert Panel to Define Removal Rates for Street and Storm Drain Cleaning Practices." Final Report. Chesapeake Bay Program Partnership.
- Douglas-Mankin, K. R., Okren, C. G. 2011. Field assessment of bacteria and nutrient removal by vegetative filters strips. International Journal of Agricultural and Biological Engineering 4(2): 43-49.
- National Environmental Services Center, 2013. "Phosphorus and Onsite Wastewater Systems," Pipeline: Small Community Wastewater Issues Explained to the Public, West Virginia University Research Corporation, Vol 24, No 1.
- Stormwater Management, NJAC 7:8, 1983 & 2004 & 2023.
- May, C.W., R.R. Horner, J.R. Karr, B.W. Mar, and E.G. Welch. 1997. Effects of Urbanization on Small Streams in the Puget Sound Lowland Ecoregion. Watershed Protection Techniques 2(4): 483-493.
- Minnesota Department of Agriculture (Minnesota DoA), 2018. Best Management Practices for Nitrogen and Phosphorus Fertilizer Use on Turfgrass in Minnesota. Retrieved from https://www.mda.state.mn.us/sites/default/files/inline-files/RevisedTurfFertBMPs_0.pdf
- Minnesota Pollution Control Agency (MPCA), 2022. Cost considerations for establishing and maintaining a street sweeping program. Minnesota Stormwater Manual. https://stormwater.pca.state.mn.us/index.php?title=Cost_considerations_for_establishing_and_maintaining_a_street_sweeping_program
- Molloy, Aileen and Jennifer Olson, 2019. Final Street Sweeping: Survey of Crediting Approaches. Memorandum to Minnesota Pollution Control Agency. Tetra Tech.
- NJDEP. 2024. Pollutants of Concern. Bureau of NJPDES Stormwater Permitting.
- NJDEP. 2024. WIP Project Matrix. Bureau of NJPDES Stormwater Permitting.
- NJDEP. 2016. Healthy Lawns Healthy Water. New Jersey Department of Environmental Protection. <https://www.nj.gov/dep/healthylawnshealthywater/>
- Schueler, T.R. 1994. The Importance of Imperviousness. Watershed Protection Techniques 1(3): 100-111.

- Schueler, T.R. 2004. An integrated framework to restore small urban watersheds. Center for Watershed Protection, Ellicott City, MD.
- Schuler, T.R., L. Fraley-McNeal, and K. Cappiella. 2009. Is Impervious Cover Still Important? Review of Recent Research. *Journal of Hydrologic Engineering* 14 (4): 309-315.
- Soldat, Douglas J., A. Martin Petrovic. 2008. The Fate and Transport of Phosphorus in Turfgrass Ecosystems. *Crop Science* 48(6): 2051-2065.
<https://access.onlinelibrary.wiley.com/doi/10.2135/cropsci2008.03.0134>
- Swallow, Matthew, J. Huffman, K. Van Why, and G. D'Angelo, 2010. "The Effect of Goose Management on Water Quality." *Proc. 24th Vertebr. Pest Conf.* (R. M. Timm and K. A. Fagerstone, Eds.), Published at Univ. of Calif., Davis. 2010. Pp. 244-249.
- Therriault, Amelie and S. Duchesne. 2005. Quantifying the Fecal Coliform Loads in Urban Watersheds by Hydrologic/Hydraulic Modeling: Case Study of the Beauport River Watershed in Quebec. *Water* 7(2): 615-633. <https://doi.org/10.3389/frwa.2022.882560>
- United States Environmental Protection Agency (USEPA), 1992. "Water Treatment/Disposal for Small Communities." EPA/625/R-92/005 U.S. Environmental Protection Agency, Office of Research and Development, Center for Environmental Research Information, Cincinnati, OH.
- Wisconsin Department of Natural Resources, 2022. "Municipal Phosphorus Reduction Credit for Leaf Management Programs". Watershed Management Team, Madison, WI
- Zarriello, Phillip J., R. Breault, and P. Weiskel, 2002. "Potential Effects of Structural Controls and Street Sweeping on Stormwater Loads to the Lower Charles River, Massachusetts." USGS Water- Resources Investigation Report, Northborough, Massachusetts

Appendix 1: NJPDES Permits

NJPDES PERMIT NUMBER	PROGRAM INTEREST NUMBER	Name	Street Address	Municipality	County	NJSP Site X Coord.	NJSP Site Y Coord.	Regional Enforcement Office	NJDEP Case Manager	Permit Expiration Date	Discharge Category Description	Document Status	Type_General
NJG0032832	46992	THE TRANE COMPANY	2231 E STATE ST Hamilton, NJ 086190000	Hamilton Twp	Mercer	430370.63	512732.22	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0106488	47622	STARR TRANSIT CO INC	2531 E STATE ST EXT Trenton, NJ 086193388	Trenton City	Mercer	432035	514386	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0117889	48438	WASTE MANAGEMENT OF NJ INC	208 PATTERSON AVE Trenton, NJ 08610	Trenton City	Mercer	432744	502241	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0117951	46816	MERCER GENERATING STATION	1365 AND 2512 LAMBERTON RD Trenton, NJ 08611	Trenton City	Mercer	426737.89	490152.78	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0118290	48471	UNITED PARCEL SERVIE INC NJTRN	4 FAIRGROUNDS RD Hamilton, NJ 08619	Hamilton Twp	Mercer	431395	512229	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0118371	48479	US POSTAL SERVICE VEHICLE	680 RT 130 Trenton, NJ 086509721	Trenton City	Mercer	450594.73	495417.6	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0118923	48527	FIRST TRANSIT INC #55493	175 KLOCKNER RD Trenton, NJ 08619	Trenton City	Mercer	433000	514721	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0118974	48532	PGT TRUCKING INC	110 PATTERSON AVE Hamilton, NJ 08610	Hamilton Twp	Mercer	431482	501899	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0129135	49345	BUOY 98 MARINE DBA ROSS MARINE	2445 LAMBERTON RD Hamilton, NJ 999999999	Hamilton Twp	Mercer	425722	490785	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0142590	187743	HAMILTON BUS GARAGE	600 SLOAN AVE Hamilton, NJ 08619	Hamilton Twp	Mercer	435333	517811	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0143332	194843	GAUM INC	1080 RT 130 Hamilton, NJ 08691	Hamilton Twp	Mercer	455875	500713	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0157490	245602	XPO LOGISTICS FREIGHT INC.	107 YOUNGS RD Mercerville, NJ 08619	Hamilton Twp	Mercer	442254	521282	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0158259	46419	HAMILTON TWP WPCF	300 HOBSON AVE Hamilton, NJ 08610	Hamilton Twp	Mercer	433260	491667	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0159701	253560	NEW PENN MOTOR MOTOR EXPRESS INC	15 THOMAS J RHODES INDUSTRIAL BLVD Mercerville, NJ 08619	Hamilton Twp	Mercer	441811	520155	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0162230	280402	WHITE EAGLE PRINTING CO	2550 KUSER RD Hamilton, NJ 08691	Hamilton Twp	Mercer	448905	499813	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0162965	282665	SHEPPARD BUS SERVICE INC	300 M ST Millville, NJ 08332	Millville City	Cumberland	432055	501354	Southern	Lisa Hoare	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0163716	285047	H. LIEDTKA CO INC	340-B PATTERSON AVE Hamilton, NJ 08610	Hamilton Twp	Mercer	431949	503007	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0164259	286536	HAMILTON TRANSIT CORPORATE CENTER	572 WHITEHEAD RD Trenton, NJ 08619	Trenton City	Mercer	429656	514588	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0164321	286729	NEYRA INDUSTRIES INC	27 INDUSTRIAL DR Trenton, NJ 08619	Trenton City	Mercer	430220	513785	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater

NJPDES PERMIT NUMBER	PROGRAM INTEREST NUMBER	Name	Street Address	Municipality	County	NJSP Site X Coord.	NJSP Site Y Coord.	Regional Enforcement Office	NJDEP Case Manager	Permit Expiration Date	Discharge Category Description	Document Status	Type_General
NJG0165492	290934	KNF NEUBERGER INC	2 BLACK FRST RD Hamilton, NJ 08691	Hamilton Twp	Mercer	453206	499920	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0165557	291152	PITT OHIO EXPRESS LLC	209 WHITEHEAD RD Hamilton, NJ 08619	Hamilton Twp	Mercer	427713	511813	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0174068	491838	YRC FREIGHT 112	49 THOMAS J RHODES INDUSTRIAL DR Hamilton, NJ 08619	Hamilton Twp	Mercer	440010	518676	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0210447	592737	OSI 265 WHITEHEAD ROAD LLC	265 WHITEHEAD RD Trenton, NJ 08619	Trenton City	Mercer	428323	512458	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0251232	717742	FAIRWAY BLDG PRODUCTS LLC	2075 E STATE ST EXT Hamilton, NJ 08619	Hamilton Twp	Mercer	429588	511778	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0275280	767080	FEDERAL EXPRESS-ZROB	584 US RT 130 Trenton, NJ 08691	Trenton City	Mercer	448592	493696	Southern	Stephen Kelly	1/31/2028	Basic Industrial Stormwater (GP) (5G2)	Approved	Stormwater
NJG0119105	48545	CLAYTON BLOCK CO INC/YARDVILLE	111 MARTINS LN Yardville, NJ 086200000	Hamilton Twp	Mercer	442270	489934	Southern	Stephen Kelly	10/31/2013	Concrete Products Manufacturing Stormwater (GP) (CPM)	Expired	Stormwater
NJG0169714	453972	JERSEY PRECAST CORP	853NOTTINGHAM WAY Hamilton, NJ 086384447	Hamilton Twp	Mercer	425899	509655	Southern	Stephen Kelly	10/31/2013	Concrete Products Manufacturing Stormwater (GP) (CPM)	Expired	Stormwater
NJG0189251	552187	Walgreens - Hamilton	2021 Nottingham Way Hamilton, NJ 08619	Hamilton Twp	Mercer	433865	509582	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0213349	600225	Amtrak Substation 34A - Hamilton Substation	Amtrak ROW, off Industrial Avenue Hamilton, NJ 08619	Hamilton Twp	Mercer	430877	514514	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0215503	605576	The Homestead at Hamilton	Kuser Road Hamilton, NJ 08691	Hamilton Twp	Mercer	449072	500238	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0220001	617063	Troil Warehouse & Recycling Center	2485 E. State Street Extension Hamilton, NJ 08619	Hamilton Twp	Mercer	431785	514145	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0227706	638864	Chambers Street / Hamilton Square	Chambers Street/Cedar Lane Hamilton, NJ 08610	Hamilton Twp	Mercer	427054	498887	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0228567	646727	Briad Residence Inn Hotel	559 Rt 130 Hamilton, NJ 08961	Hamilton Twp	Mercer	449267	493371	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0234133	663216	NJDOT I-295 MEDIAN CROSSOVER #2205855	I-295 Hamilton, NJ 08690	Hamilton Twp	Mercer	431372	495198	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0241202	684804	BOSSI RESIDENCE	55 Tattletown Road Hamilton, NJ 07610	Hamilton Twp	Mercer	456232.59	486635.58	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0249921	713833	PSEG MERCER COAL PILE STORMWATER CONVEYANCE	2512 Lambertson Road Hamilton, NJ 08611	Hamilton Twp	Mercer	426737.89	490152.78	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0253618	722790	POLARIS EXECUTIVE CENTER LLC	Cabot Drive Hamilton, NJ 08690	Hamilton Twp	Mercer	449504	497938	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0266671	751329	HIGHGLEN CLOVER SQUARE	3100 Mercerville-Quakerbridge Road, & 101 Sloan Trenton, NJ 08619	Hamilton Twp	Mercer	439682.29	515824.59	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater

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NJG0269484	756397	PSE&G HAMILTON SUBSTATION - OUTSIDE PLANT	1855 East State Street Hamilton, NJ 08619	Hamilton Twp	Mercer	428470	510892	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0269557	756415	2622 KUSER ROAD SUBDIVISION	2622 Kuser Road Subdivision Hamilton, NJ 08690	Hamilton Twp	Mercer	450706	500392	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0272485	761881	WINGATE APARTMENTS CLUBHOUSE & REC. FAC.	210 Wert Ave. Hamilton, NJ 08610	Hamilton Twp	Mercer	430588.535	500009.323	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0272728	763228	CONGOLEUM FACILITY DEMO	861 Sloan Ave Hamilton, NJ 08619	Hamilton Twp	Mercer	435198	516293	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0275107	766855	2551 SOUTH BROAD, LLC	2549-2555 South Broad St Hamilton, NJ 08610	Hamilton Twp	Mercer	432404	494659	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0283002	782908	HAMILTON TRANS LLC	1732 S Olden Avenue Hamilton, NJ 08610	Hamilton Twp	Mercer	433634.829	500363.341	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0291943	799339	PROPOSED RESIDENTIAL DEVELOPMENT	Kuser Road Hamilton, NJ 08650	Hamilton Twp	Mercer	442478	496964	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0297437	811059	MANCHESTER 270 DEVELOPMENT PHASE 1	861 Sloan Avenue Trenton, NJ 08619	Hamilton Twp	Mercer	435198	516293	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0310131	879694	LEHIGH AVE., VETTERLIEN AVE., & BUCKNELL AVE.	Lehigh Ave., Vetterlien Ave. Hamilton, NJ 08619	Hamilton Twp	Mercer	432921	519505	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0317853	929675	HAMILTON MARKETPLACE RETAIL BLDG.	130 Marketplace Boulevard Robbinsville, NJ 08690	Hamilton Twp	Mercer	452374	494811	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0318205	930421	CHAPEL BRIDGE AT HAMILTON	381 Ward Avenue Hamilton, NJ 08619	Hamilton Twp	Mercer	430066	507181	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0319431	933155	HORIZON CENTER DRIVE	Horizon Drive Hamilton, NJ 08691	Hamilton Twp	Mercer	451906	498003	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0319783	934331	PSE&G HAMILTON SUBSTATION - LAYDOWN SITE	Rosalia Avenue Hamilton, NJ 08619	Hamilton Twp	Mercer	428554.42	510653.48	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0320561	936452	RETAIL DEVELOPMENT	1170 Route 130 Hamilton, NJ 08690	Hamilton Twp	Mercer	446153	508673	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0320668	936739	BERGEY'S TRUCK CENTER	5 Commerce Way Hamilton, NJ 08691	Hamilton Twp	Mercer	447523	498409	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0321010	937514	DUCK ISLAND TERMINAL SITE	2470 Lambertson Road Hamilton, NJ 08611	Hamilton Twp	Mercer	428978.243	489583.097	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0322636	942344	AMC PARKING LOT EXPANSION & SITE IMPROVEMENT	240 Princeton Avenue Hamilton, NJ 08619	Hamilton Twp	Mercer	434102.739 4	517522.020 9	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0328651	973202	MDL HEADQUARTERS	Adjacent to Exit 3B exit ramp RT195 Hamilton, NJ 08690	Hamilton Twp	Mercer	445503.927	497554.011	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0330787	978757	HAMILTON DISTRIBUTION CENTER	646 Highway 130 Hamilton, NJ 08691	Hamilton Twp	Mercer	449453.623 6	495005.821 1	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater

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NJG0334880	991402	KLOCKNER ROAD APARTMENTS	1651 Klockner Road Hamilton, NJ 08620	Hamilton Twp	Mercer	437839	506904	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0335053	991789	HAMILTON DISTRIBUTION CENTER (PH2)	646 US Hwy 130 Hamilton, NJ 08691	Hamilton Twp	Mercer	449453.6236	495005.8211	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0336246	995439	CHICK-FIL-A HAMILTON, NJ	500 Market Blvd., Hamilton, NJ 08691	Hamilton Twp	Mercer	453559	496379	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0337544	998729	SWITLIK PARACHUTE CO., INC.	1325 East State Street Hamilton, NJ 08609	Hamilton Twp	Mercer	426185	508392	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0341142	1009194	ISLES, INC.	57 North Johnston Avenue Hamilton, NJ 08618	Hamilton Twp	Mercer	426352.6942	509379.16	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0341452	1009980	HAMILTON WEST TURF FIELD	2720 South Clinton Ave. Hamilton, NJ 08690	Hamilton Twp	Mercer	430050	497200	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0343455	1015226	STEINERT HIGH SCHOOL TRACK & FIELD RENOVATION	900 Klockner Rd. Hamilton, NJ 08690	Hamilton Twp	Mercer	445800	504400	Southern	Daniel Kuti	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0352136	1039939	1384 YARDVILLE	1384 Yardville Hamilton Square Rd Hamilton, NJ 08691	Hamilton Twp	Mercer	447023.5265	498496.8464	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0355437	1050259	PRINCETEL, INC.	2560 East State St. Ext. Hamilton, NJ 08619	Hamilton Twp	Mercer	428987.198	511868.118	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0356158	1052351	PSE&G MERCER COUNTY GSMP SUB 1 - 2024	Various Hamilton, NJ 08610	Hamilton Twp	Mercer	429181.666	494852.1728	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0356336	1053160	HEWITT STREET SELF STORAGE	Henry Street Hamilton, NJ 08611	Hamilton Twp	Mercer	421918	496526	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0356701	1053999	2023-515 HAMILTON STORAGE LLC	1514 Kuser Rd Hamilton, NJ 08260	Hamilton Twp	Mercer	437045.1079	501125.6034	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0358380	1060092	PSE&G MERCER COUNTY GSMP SUB 2 - 2024	ROW Hamilton, NJ 08690	Hamilton Twp	Mercer	451476.09	507560.37	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0358622	1060570	WAREHOUSE FACILITY	825 Sloan Avenue Hamilton, NJ 08619	Hamilton Twp	Mercer	435034.5199	516844.6657	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0360295	1066152	PROPOSED WAREHOUSE	600 Horizon Dr. Hamilton, NJ 08691	Hamilton Twp	Mercer	451311	497869	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0360635	1067327	MERCER COUNTY SPECIAL SERVICES SCHOOL	1020 Old Trenton Road Hamilton, NJ 08690	Hamilton Twp	Mercer	447669	516503	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0360759	1067647	ASSUNPINK CREEK WTRSHD DAM NO 8 REHABILITATION	2200-2210 Klockner Road Hamilton, NJ 08690	Hamilton Twp	Mercer	443675.2	502065.68	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0361372	1070519	SPARK CAR WASH, LLC - HAMILTON	1030 Route 33 Hamilton, NJ 08690	Hamilton Twp	Mercer	444889	508553	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0362484	1073023	TRANE SOILS REMEDIAL ACTION - 2ND RAW ADDENDU	2231 East State Street Extension Hamilton, NJ 08619	Hamilton Twp	Mercer	430370.63	512732.22	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater

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NJG0362531	1073697	HAMILTON TOWNSHIP MUNICIPAL BUILDINGS PHASE1	1750 Whitehorse Merceville Road Hamilton, NJ 08619	Hamilton Twp	Mercer	439461	506364	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0362565	1073702	WATERVIEW CENTER PHASE 3	3000 Water View Drive Hamilton, NJ 08691	Hamilton Twp	Mercer	449000	496500	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0363693	1077837	PSE&G TRANS. INSULATOR REPLACE A-2201 CIRCUIT	ROW Hamilton, NJ 08611	Hamilton Twp	Mercer	436480	521492	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0364690	1080986	WEATHERSFIELD ESTATES	Meetinghouse Road, Dartmouth Court Hamilton, NJ 08620	Hamilton Twp	Mercer	460372	483896	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0365068	1081776	CROSSWICKS MEWS AT HAMILTON	3332 South Broad Street Hamilton, NJ 08610	Hamilton Twp	Mercer	436257.52	493592.4	Southern	<Null>	2/28/2027	Construction Activity Stormwater (GP) (5G3)	Approved	Stormwater
NJG0172979	480885	RS FAMILY DENTAL	1760 KUSER RD Hamilton, NJ 08690	Hamilton Twp	Mercer	438763	500355	Southern	Joshua Stocker	10/31/2023	Dental Facilities Onsite WW Treatment Systems (GP) (K2)	Expired	Wastewater
NJG0339580	46969	BUCKEYE TRENTON TERMINAL	1463 LAMBERTON RD Trenton, NJ 08611	Trenton City	Mercer	428033	489569	Southern	Michele Christopher	10/31/2028	Hydrostatic Test Water (GP) (BG)	Approved	Wastewater (backwash)
NJ0031291	46239	CONSUMERS OIL CORPORATION	1473 LAMBERTON RD Trenton, NJ 08611	Trenton City	Mercer	428047	488864	Southern	Louisa Lubiak	8/31/2019	Individual Stormwater (IP) (RF)	Expired	Stormwater
NJ0031895	46054	CONGOLEUM CORP PLANT 2	1945 E STATE ST Hamilton, NJ 08619	Hamilton Twp	Mercer	428837	511380	Southern	Lisa Hoare	1/31/2023	Individual Stormwater (IP) (RF)	Expired	Stormwater
NJ0066753	46969	BUCKEYE TRENTON TERMINAL	1463 LAMBERTON RD Trenton, NJ 08611	Trenton City	Mercer	428033	489569	Southern	Lisa Hoare	10/31/2019	Individual Stormwater (IP) (RF)	Expired	Stormwater
NJG0150258	198044	HAMILTON TWP	2090 GREENWOOD AVE Hamilton, NJ 086500150	Hamilton Twp	Mercer	429524	509100	Southern	Louisa Lubiak	12/31/2027	MS4 - Tier A Municipal Stormwater (GP) (R9)	Approved	Stormwater
NJG0159140	251939	USPS TRENTON PROCESS AND DISTRIBUTION CENTER	680 RT 130 Hamilton, NJ 08650	Hamilton Twp	Mercer	450594.73	495417.6	Southern	Kevin Johnson	6/30/2029	Non-Contact Cooling Water (GP) (CG)	Approved	Cooling Water
NJG0307050	845063	TIGRIS AQUATIC SERVICES	56 US 130 S Bordentown City, NJ 08620	Bordentown City	Burlington	455553	492077	Southern	<Null>	2/28/2025	Pesticide Application Discharges (GP) (PGP)	Approved	Pesticide Application
NJG0001198	46376	ROBERT FROST WTF	ROBERT FROST & SURREY DR Hamilton, NJ 08690	Hamilton Twp	Mercer	448802	504473	Southern	Leon Moss	6/30/2028	Potable Water Treatment Plant (GP) (BPW)	Approved	Wastewater (backwash)
NJG0101923	46138	BORDENTOWN CITY WFP	120 RT 206 N Hamilton, NJ 08610	Hamilton Twp	Mercer	435848	492453	Southern	Joshua Stocker	7/31/2024	Potable WTP Basins & Drying Beds (GP) (I2)	Expired	Wastewater (backwash)
NJG0136646	46376	ROBERT FROST WTF	ROBERT FROST & SURREY DR Hamilton, NJ 08690	Hamilton Twp	Mercer	448802	504473	Southern	Joshua Stocker	7/31/2024	Potable WTP Basins & Drying Beds (GP) (I2)	Expired	Wastewater (backwash)
NJ0026301	46419	HAMILTON TWP WPCF	300 HOBSON AVE Hamilton, NJ 08610	Hamilton Twp	Mercer	433260	491667	Southern	Katherine Rossi	6/30/2028	Sanitary Wastewater (IP) (A)	Approved	Wastewater
NJG0220604	619120	ACRES AUTO RECYCLING	74 YOUNGS RD Hamilton, NJ 08619	Hamilton Twp	Mercer	441791	521822	Southern	Shashi Nayak	9/30/2018	Scrap Metal Processing Stormwater (GP) (SM2)	Expired	Stormwater
NJG0224537	46138	BORDENTOWN CITY WFP	120 RT 206 N Hamilton, NJ 08610	Hamilton Twp	Mercer	435848	492453	Southern	Michael Hubal	12/31/2029	Sludge Quality Categories 10 - 13 (GP) (WTRG)	Approved	Solid residuals

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NJG0224707	46376	ROBERT FROST WTF	ROBERT FROST & SURREY DR Hamilton, NJ 08690	Hamilton Twp	Mercer	448802	504473	Southern	Michael Hubal	12/31/2029	Sludge Quality Categories 10 - 13 (GP) (WTRG)	Approved	Solid residuals
NJG0198293	46419	HAMILTON TWP WPCF	300 HOBSON AVE Hamilton, NJ 08610	Hamilton Twp	Mercer	433260	491667	Southern	Karley Mcilhatton	12/31/2026	Sludge Quality Category 4 (GP) (S4G)	Approved	Solid residuals
NJG0118877	53711	FIRST CLASS AUTO SALVAGE	105 PATTERSON AVE Trenton, NJ 08610	Trenton City	Mercer	431430	501929	Southern	Shashi Nayak	9/30/2017	Vehicle Recycling Stormwater (GP) (RVR)	Expired	Stormwater

**Appendix 2: Land Use Code to Areal
Loading Coefficients**

Land Use Codes	Land Use Label	Simplified Land Cover Label	Land Use Type	TP	TN	TSS	EMC (CFU/100 mL)
1110	Residential, High Density or Multiple Dwelling	High, Medium Density Residential	Urban	1.4	15	140	7,750
1120	Residential, Single Unit, Medium Density	High, Medium Density Residential	Urban	1.4	15	140	7,750
1130	Residential, Single Unit, Low Density	Low Density, Rural Residential	Urban	0.6	5	100	7,750
1140	Residential, Rural, Single Unit	Low Density, Rural Residential	Urban	0.6	5	100	7,750
1150	Mixed Residential	High, Medium Density Residential	Urban	1.4	15	140	7,750
1200	Commercial/Services	Commercial	Urban	2.1	22	200	4,500
1211	Military Installations	Commercial	Urban	2.1	22	200	4,500
1214	NO LONGER MILITARY	Urban, Mixed Urban, Other Urban	Urban	1	10	120	4,500
1300	Industrial	Industrial	Urban	1.5	16	200	2,500
1400	Transportation/Communication/Utilities	Industrial	Urban	1.5	16	200	2,500
1410	Major Roadway	Industrial	Urban	1.5	16	200	2,500
1411	Mixed Transportation Corridor Overlap Area	Industrial	Urban	1.5	16	200	2,500
1419	Bridge Over Water	Forest, Water, Wetlands	Water	0.1	3	40	3,100
1420	Railroads	Industrial	Urban	1.5	16	200	2,500
1440	Airport Facilities	Industrial	Urban	1.5	16	200	2,500
1461	Wetland Rights-Of-Way	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
1462	Upland Rights-Of-Way Developed	Urban, Mixed Urban, Other Urban	Urban	1	10	120	4,500
1463	Upland Rights-Of-Way Undeveloped	Urban, Mixed Urban, Other Urban	Urban	1	10	120	4,500
1499	Stormwater Basin	Low Density, Rural Residential	Urban	0.6	5	100	7,750
1500	Industrial And Commercial Complexes	Commercial	Urban	2.1	22	200	4,500
1600	Mixed Urban Or Built-Up Land	Urban, Mixed Urban, Other Urban	Urban	1	10	120	4,500
1700	Other Urban Or Built-Up Land	Urban, Mixed Urban, Other Urban	Urban	1	10	120	4,500
1710	Cemetery	Urban, Mixed Urban, Other Urban	Urban	1	10	120	4,500
1711	Cemetery On Wetlands	Urban, Mixed Urban, Other Urban	Urban	1	10	120	4,500
1741	Phragmites Dominate Urban Area	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
1750	Managed Wetland In Maintained Lawn Greenspace	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
1800	Recreational Land	Urban, Mixed Urban, Other Urban	Urban	1	10	120	4,500
1804	Athletic Fields (Schools)	Urban, Mixed Urban, Other Urban	Urban	1	10	120	4,500
1810	STADIUM, THEATERS, CULTURAL CENTERS AND ZOOS	Urban, Mixed Urban, Other Urban	Urban	1	10	120	4,500

Land Use Codes	Land Use Label	Simplified Land Cover Label	Land Use Type	TP	TN	TSS	EMC (CFU/100 mL)
1850	Managed Wetland In Built-Up Maintained Rec Area	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
2100	Cropland And Pastureland	Agriculture	Agriculture	1.3	10	300	3,100
2140	Agricultural Wetlands (Modified)	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
2150	Former Agricultural Wetland (Becoming Shrubby, Not Built-Up)	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
2200	Orchards/Vineyards/Nurseries/Horticultural Areas	Agriculture	Agriculture	1.3	10	300	3,100
2300	Confined Feeding Operations	Agriculture	Agriculture	1.3	10	300	3,100
2400	Other Agriculture	Agriculture	Agriculture	1.3	10	300	3,100
4110	Deciduous Forest (10-50% Crown Closure)	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
4120	Deciduous Forest (>50% Crown Closure)	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
4210	Coniferous Forest (10-50% Crown Closure)	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
4220	Coniferous Forest (>50% Crown Closure)	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
4230	Plantation	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
4311	Mixed Forest (>50% Coniferous With 10-50% Crown Closure)	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
4312	Mixed Forest (>50% Coniferous With >50% Crown Closure)	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
4321	Mixed Forest (>50% Deciduous With 10-50% Crown Closure)	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
4322	Mixed Forest (>50% Deciduous With >50% Crown Closure)	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
4410	Old Field (< 25% Brush Covered)	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
4411	Phragmites Dominate Old Field	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
4420	Deciduous Brush/Shrubland	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
4430	Coniferous Brush/Shrubland	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
4440	Mixed Deciduous/Coniferous Brush/Shrubland	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
4500	SEVERE BURNED UPLAND VEGETATION	Forest, Water, Wetlands	Forest	0.1	3	40	3,100
5100	Streams And Canals	Forest, Water, Wetlands	Water	0.1	3	40	3,100
5190	Exposed Flats	Forest, Water, Wetlands	Water	0.1	3	40	3,100
5200	Natural Lakes	Forest, Water, Wetlands	Water	0.1	3	40	3,100
5300	Artificial Lakes	Forest, Water, Wetlands	Water	0.1	3	40	3,100
5410	Tidal Rivers, Inland Bays, And Other Tidal Waters	Forest, Water, Wetlands	Water	0.1	3	40	3,100
5411	OPEN TIDAL BAYS	Forest, Water, Wetlands	Water	0.1	3	40	3,100

Land Use Codes	Land Use Label	Simplified Land Cover Label	Land Use Type	TP	TN	TSS	EMC (CFU/100 mL)
5412	Tidal Mud Flat	Forest, Water, Wetlands	Water	0.1	3	40	3,100
5420	DREDGED LAGOON	Forest, Water, Wetlands	Water	0.1	3	40	3,100
5430	ATLANTIC OCEAN	Forest, Water, Wetlands	Water	0.1	3	40	3,100
6111	SALINE MARSH (LOW MARSH)	Forest, Water, Wetlands	Water	0.1	3	40	3,100
6112	SALINE MARSH (HIGH MARSH)	Forest, Water, Wetlands	Water	0.1	3	40	3,100
6120	Freshwater Tidal Marshes	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6130	VEGETATED DUNE COMMUNITIES	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6141	Phragmites Dominate Coastal Wetlands	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6210	Deciduous Wooded Wetlands	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6220	Coniferous Wooded Wetlands	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6221	ATLANTIC WHITE CEDAR WETLANDS	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6231	Deciduous Scrub/Shrub Wetlands	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6232	Coniferous Wooded Wetlands	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6233	Mixed Scrub/Shrub Wetlands (Deciduous Dom.)	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6234	Mixed Scrub/Shrub Wetlands (Coniferous Dom.)	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6240	Herbaceous Wetlands	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6241	Phragmites Dominate Interior Wetlands	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6251	Mixed Wooded Wetlands (Deciduous Dom.)	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6252	Mixed Wooded Wetlands (Coniferous Dom.)	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6290	UNVEGETATED FLATS	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
6500	SEVERE BURNED WETLAND VEGETATION	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
7100	Beaches	Barrenland/ Transitional Area	Barren Land	0.5	5	60	3,100
7200	BARE EXPOSED ROCK, ROCK SLIDES, ETC	Barrenland/ Transitional Area	Barren Land	0.5	5	60	3,100
7300	Extractive Mining	Barrenland/ Transitional Area	Barren Land	0.5	5	60	3,100
7400	Altered Lands	Barrenland/ Transitional Area	Barren Land	0.5	5	60	3,100
7430	Disturbed Wetlands (Modified)	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
7440	Disturbed Tidal Wetlands	Forest, Water, Wetlands	Wetlands	0.1	3	40	3,100
7500	Transitional Areas	Barrenland/ Transitional Area	Barren Land	0.5	5	60	3,100

Land Use Codes	Land Use Label	Simplified Land Cover Label	Land Use Type	TP	TN	TSS	EMC (CFU/100 mL)
7600	UNDIFFERENTIATED BARREN LANDS	Barrenland/ Transitional Area	Barren Land	0.5	5	60	3,100

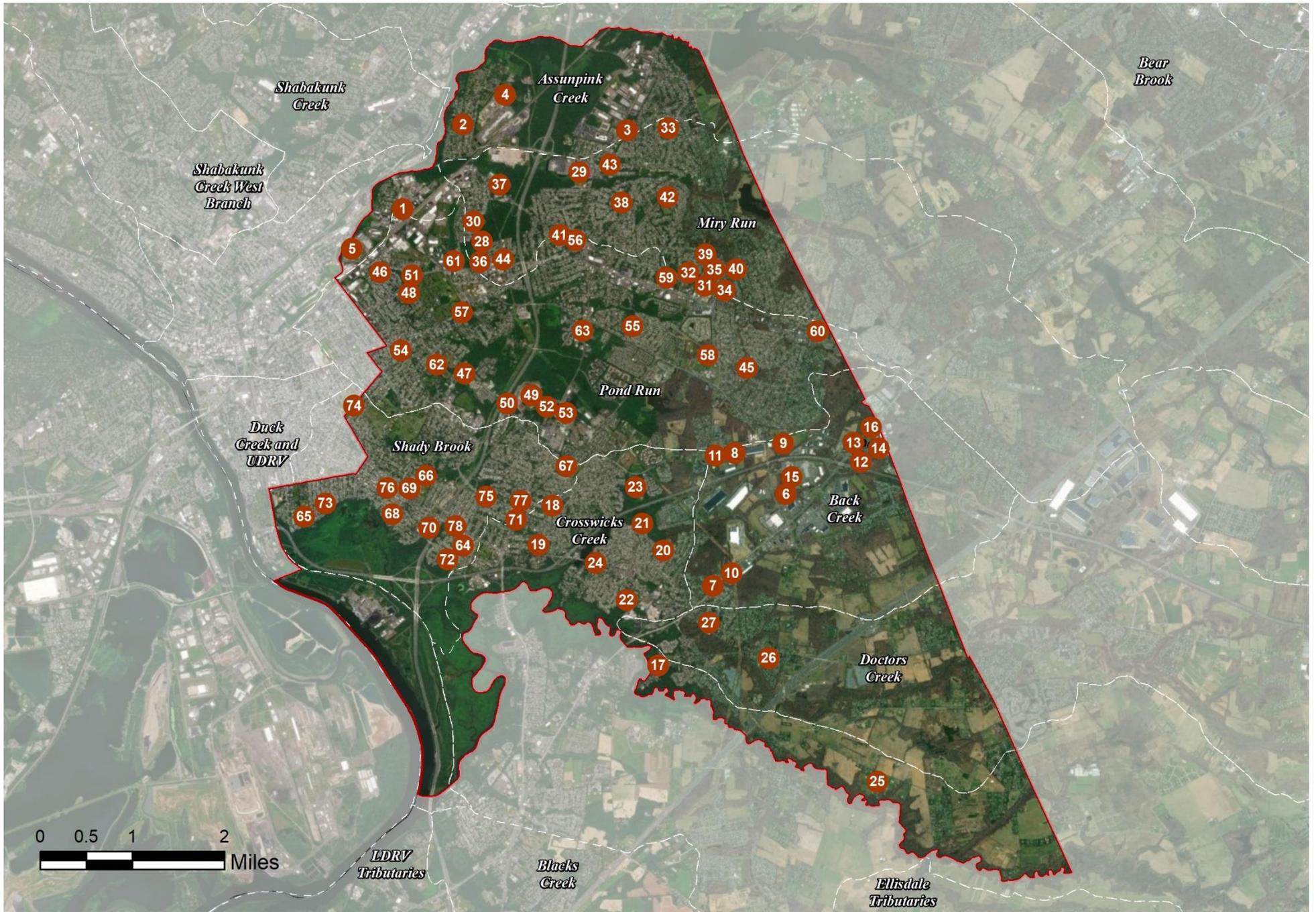
Appendix 3: Land Use Code to CN Value

TYPE20	LU20	LABEL20	TR55_LU	A	B	C	D	Individual Review
URBAN	1110	RESIDENTIAL, HIGH DENSITY OR MULTIPLE DWELLING	Residential 1/8 acre or less	77	85	90	92	N
URBAN	1120	RESIDENTIAL, SINGLE UNIT, MEDIUM DENSITY	Residential 1/4 acre	61	75	83	87	N
URBAN	1130	RESIDENTIAL, SINGLE UNIT, LOW DENSITY	Residential 1/2 acre	54	70	80	85	N
URBAN	1140	RESIDENTIAL, RURAL, SINGLE UNIT	Residential 1 acre	51	68	79	84	N
URBAN	1120	MIXED RESIDENTIAL	Residential 1/4 acre	61	75	83	87	Y
URBAN	1200	COMMERCIAL/SERVICES	Commercial	89	92	94	95	N
URBAN	1211	MILITARY INSTALLATIONS	Open Space (poor)	68	79	86	89	Y
URBAN	1214	NO LONGER MILITARY	Commercial	89	92	94	95	Y
URBAN	1300	INDUSTRIAL	Industrial	81	88	91	93	N
URBAN	1400	TRANSPORTATION/COMMUNICATION/UTILITIES	Commercial	89	92	94	95	Y
URBAN	1410	MAJOR ROADWAY	Paved Areas (no RoW)	98	98	98	98	N
URBAN	1411	MIXED TRANSPORTATION CORRIDOR OVERLAP AREA	Paved Areas (no RoW)	98	98	98	98	Y
WATER	1419	BRIDGE OVER WATER	Paved Areas (no RoW)	98	98	98	98	N
URBAN	1420	RAILROADS	Streets and Roads: Dirt	72	82	87	89	N
URBAN	1440	AIRPORT FACILITIES	Open Space (fair)	49	69	79	84	N
URBAN	1461	WETLAND RIGHTS-OF-WAY	Open Space (poor)	68	79	86	89	N
URBAN	1462	UPLAND RIGHTS-OF-WAY DEVELOPED	Open Space (fair)	49	69	79	84	N
URBAN	1463	UPLAND RIGHTS-OF-WAY UNDEVELOPED	Open Space (good)	39	61	74	80	N
URBAN	1499	STORMWATER BASIN	Open Space (good)	39	61	74	80	N
URBAN	1500	INDUSTRIAL AND COMMERCIAL COMPLEXES	Commercial	89	92	94	95	N
URBAN	1600	MIXED URBAN OR BUILT-UP LAND	Commercial	89	92	94	95	Y
URBAN	1700	OTHER URBAN OR BUILT-UP LAND	Open Space (fair)	49	69	79	84	Y
URBAN	1710	CEMETERY	Open Space (fair)	49	69	79	84	N
URBAN	1711	CEMETERY ON WETLAND	Open Space (poor)	68	79	86	89	N
URBAN	1741	PHRAGMITES DOMINATE URBAN AREA	Open Space (fair)	49	69	79	84	N
URBAN	1750	MANAGED WETLAND IN MAINTAINED LAWN GREENSPACE	Open Space (fair)	49	69	79	84	N
URBAN	1800	RECREATIONAL LAND	Open Space (good)	39	61	74	80	N
URBAN	1804	ATHLETIC FIELDS (SCHOOLS)	Open Space (fair)	49	69	79	84	N
URBAN	1810	STADIUM, THEATERS, CULTURAL CENTERS AND ZOOS	Commercial	89	92	94	95	Y
URBAN	1850	MANAGED WETLAND IN BUILT-UP MAINTAINED REC AREA	Open Space (fair)	49	69	79	84	N
AGRICULTURE	2100	CROPLAND AND PASTURELAND	Cropland (Poor, averaged)	65	75	82	85	N
AGRICULTURE	2140	AGRICULTURAL WETLANDS (MODIFIED)	Pasture, grassland, or range (fair)	49	69	79	84	N
AGRICULTURE	2150	FORMER AGRICULTURAL WETLAND (BECOMING SHRUBBY, NOT BUILT-UP)	Brush (fair)	35	56	70	77	N
AGRICULTURE	2200	ORCHARDS/VINEYARDS/NURSERIES/HORTICULTURAL AREAS	Cropland (Poor, averaged)	65	75	82	85	Y
AGRICULTURE	2300	CONFINED FEEDING OPERATIONS	Open Space (poor)	68	79	86	89	Y
AGRICULTURE	2400	OTHER AGRICULTURE	Cropland (Poor, averaged)	65	75	82	85	Y
FOREST	4110	DECIDUOUS FOREST (10-50% CROWN CLOSURE)	Woods-Grass combination (good)	32	58	72	79	N
FOREST	4120	DECIDUOUS FOREST (>50% CROWN CLOSURE)	Woods (good)	30	55	70	77	N
FOREST	4210	CONIFEROUS FOREST (10-50% CROWN CLOSURE)	Woods-Grass combination (good)	32	58	72	79	N
FOREST	4220	CONIFEROUS FOREST (>50% CROWN CLOSURE)	Woods (good)	30	55	70	77	N
FOREST	4230	PLANTATION	Woods (good)	30	55	70	77	N
FOREST	4311	MIXED FOREST (>50% CONIFEROUS WITH 10-50% CROWN CLOSURE)	Woods-Grass combination (good)	32	58	72	79	N
FOREST	4312	MIXED FOREST (>50% CONIFEROUS WITH >50% CROWN CLOSURE)	Woods (good)	30	55	70	77	N
FOREST	4321	MIXED FOREST (>50% DECIDUOUS WITH 10-50% CROWN CLOSURE)	Woods-Grass combination (good)	32	58	72	79	N
FOREST	4322	MIXED FOREST (>50% DECIDUOUS WITH >50% CROWN CLOSURE)	Woods (good)	30	55	70	77	N
FOREST	4410	OLD FIELD (< 25% BRUSH COVERED)	Pasture, grassland, or range (good)	39	61	74	80	N
FOREST	4411	PHRAGMITES DOMINATE OLD FIELD	Meadow	30	58	71	78	N
FOREST	4420	DECIDUOUS BRUSH/SHRUBLAND	Brush (good)	30	48	65	73	N
FOREST	4430	CONIFEROUS BRUSH/SHRUBLAND	Brush (good)	30	48	65	73	N
FOREST	4440	MIXED DECIDUOUS/CONIFEROUS BRUSH/SHRUBLAND	Brush (good)	30	48	65	73	N
FOREST	4500	SEVERE BURNED UPLAND VEGETATION	Brush (poor)	48	67	77	83	N
WATER	5100	STREAMS AND CANALS	Water	100	100	100	100	N
WATER	5190	EXPOSED FLATS	Pasture, grassland, or range (poor)	68	79	86	89	N
WATER	5200	NATURAL LAKES	Water	100	100	100	100	N
WATER	5300	ARTIFICIAL LAKES	Water	100	100	100	100	N
WATER	5410	TIDAL RIVERS, INLAND BAYS, AND OTHER TIDAL WATERS	Water	100	100	100	100	N
WATER	5411	OPEN TIDAL BAYS	Water	100	100	100	100	N
WATER	5412	TIDAL MUD FLAT	Water	100	100	100	100	N
WATER	5420	DREDGED LAGOON	Water	100	100	100	100	N
WATER	5430	ATLANTIC OCEAN	Water	100	100	100	100	N
WETLANDS	6111	SALINE MARSH (LOW MARSH)	Pasture, grassland, or range (poor)	68	79	86	89	N
WETLANDS	6112	SALINE MARSH (HIGH MARSH)	Pasture, grassland, or range (poor)	68	79	86	89	N
WETLANDS	6120	FRESHWATER TIDAL MARSHES	Pasture, grassland, or range (poor)	68	79	86	89	N
WETLANDS	6130	VEGETATED DUNE COMMUNITIES	Pasture, grassland, or range (poor)	68	79	86	89	N
WETLANDS	6141	PHRAGMITES DOMINATE COASTAL WETLANDS	Meadow	30	58	71	78	N
WETLANDS	6210	DECIDUOUS WOODED WETLANDS	Woods (fair)	36	60	73	79	N
WETLANDS	6220	CONIFEROUS WOODED WETLANDS	Woods (fair)	36	60	73	79	N
WETLANDS	6221	ATLANTIC WHITE CEDAR WETLANDS	Woods (fair)	36	60	73	79	N
WETLANDS	6231	DECIDUOUS SCRUB/SHRUB WETLANDS	Brush (fair)	35	56	70	77	N
WETLANDS	6232	CONIFEROUS SCRUB/SHRUB WETLANDS	Brush (fair)	35	56	70	77	N
WETLANDS	6233	MIXED SCRUB/SHRUB WETLANDS (DECIDUOUS DOM.)	Brush (fair)	35	56	70	77	N
WETLANDS	6234	MIXED SCRUB/SHRUB WETLANDS (CONIFEROUS DOM.)	Brush (fair)	35	56	70	77	N

TYPE20	LU20	LABEL20	TR55_LU	A	B	C	D	Individual Review
WETLANDS	6240	HERBACEOUS WETLANDS	Pasture, grassland, or range (fair)	49	69	79	84	N
WETLANDS	6241	PHRAGMITES DOMINATE INTERIOR WETLANDS	Pasture, grassland, or range (fair)	49	69	79	84	N
WETLANDS	6251	MIXED WOODED WETLANDS (DECIDUOUS DOM.)	Woods (fair)	36	60	73	79	N
WETLANDS	6252	MIXED WOODED WETLANDS (CONIFEROUS DOM.)	Woods (fair)	36	60	73	79	N
WETLANDS	6290	UNVEGETATED FLATS	Pasture, grassland, or range (poor)	68	79	86	89	N
WETLANDS	6500	SEVERE BURNED WETLAND VEGETATION	Pasture, grassland, or range (poor)	68	79	86	89	N
BARREN LAND	7100	BEACHES	Natural desert landscaping	63	77	85	88	N
BARREN LAND	7200	BARE EXPOSED ROCK, ROCK SLIDES, ETC	Open Space (poor)	68	79	86	89	N
BARREN LAND	7300	EXTRACTIVE MINING	Open Space (poor)	68	79	86	89	N
BARREN LAND	7400	ALTERED LANDS	Open Space (poor)	68	79	86	89	Y
BARREN LAND	7430	DISTURBED WETLANDS (MODIFIED)	Pasture, grassland, or range (poor)	68	79	86	89	N
BARREN LAND	7440	DISTURBED TIDAL WETLANDS	Pasture, grassland, or range (poor)	68	79	86	89	N
BARREN LAND	7500	TRANSITIONAL AREAS	Open Space (poor)	68	79	86	89	Y
BARREN LAND	7600	UNDIFFERENTIATED BARREN LANDS	Open Space (poor)	68	79	86	89	Y

**Appendix 4: Hamilton Stormwater
Mitigation Plan Concepts**

HAMILTON TOWNSHIP: GREEN INFRASTRUCTURE SITES



SITES WITHIN THE ASSUNPINK CREEK SUBWATERSHED

1. BLV Holding Company Inc.
2. Cornell Heights Field
3. Ibis Plaza Office Suites
4. Medallion Care
5. Siemens Industry & Delaval Turbomachinery

SITES WITHIN THE BACK CREEK SUBWATERSHED

6. AAA Mid Atlantic
7. Abandoned Restaurant
8. Caola Company
9. Crockett Middle School
10. Custom Calibrations Solutions, LLC
11. Hamilton Medical Arts
12. Kleinfelder
13. S. T. Peterson & Co. Inc. Office Space
14. Skylink Technologies
15. Verizon
16. York Risk Services

SITES WITHIN THE CROSSWICKS CREEK SUBWATERSHED

17. Grow-Ville Community Day School
18. Robinson Elementary School
19. St. Raphael-Holy Angels Parish
20. Sunnybrae Elementary School
21. Sunnybrae League Park
22. Switlik Park
23. The Stone Terrace
24. Yardville Heights Elementary School
25. YMCA

SITES WITHIN THE DOCTORS CREEK SUBWATERSHED

26. St. George Ukrainian Orthodox Church
27. Yardville Elementary School

SITES WITHIN THE MIRY RUN SUBWATERSHED

28. Christ Presbyterian Church
29. Clover Square
30. Enterprise Volunteer Fire Co.
31. First Pentecostal Prayer of Faith Church
32. First Presbyterian Church/YMCA Young Wonders
33. H.D. Morrison Elementary School
34. Hamilton Square Baptist Church
35. Hamilton Township School District
36. Klockner Elementary School
37. Merlin Industries Inc.
38. Morgan Elementary School
39. Nottingham Little League
40. Nottingham Volunteer Fire Company Station 17
41. Our Lady of Sorrows School
42. Saint Mark United Methodist Church

43. University Plaza

44. VFW Hamilton Township Post

SITES WITHIN THE POND RUN SUBWATERSHED

45. Alexander Elementary School
46. Bromley Park
47. Colonial Volunteer Fire Company
48. Greenwood Elementary School
49. Hamilton Golf Center
50. Hamilton Lanes

51. Hamilton Township Building
52. Hamilton Township Library
53. Hamilton Township Police Division
54. Kuser Elementary School
55. Langtree Elementary School
56. Mercerville Elementary School
57. Pace Charter School
58. Reynolds Middle School
59. Sayen Elementary School
60. St. Gregory the Great Catholic Church
61. Suburban Plaza (Walmart)
62. Trenton Catholic Academy
63. Whitehorse Plaza Shopping Center

SITES WITHIN THE SHADY BROOK SUBWATERSHED

64. Aldi
65. Duetzville Park
66. George E. Wilson Elementary School
67. Grice Middle School
68. Hamilton Educational Program
69. Hamilton High School West
70. Independence Mall
71. K McCoy Inc. Insurance Agency
72. Kisthardt Elementary School
73. Lalor Elementary School
74. Life St. Francis
75. McGalliard Elementary School
76. Rusling Hose Fire Company
77. St. Mark Lutheran Church
78. True Servant Preschool Academy

BLV HOLDING COMPANY INC.



Subwatershed: Assunpink Creek

Site Area: 128,109 sq. ft.

Address: 3 Industrial Drive
Hamilton, NJ 08619

Block and Lot: Block 1581, Lot 13,14

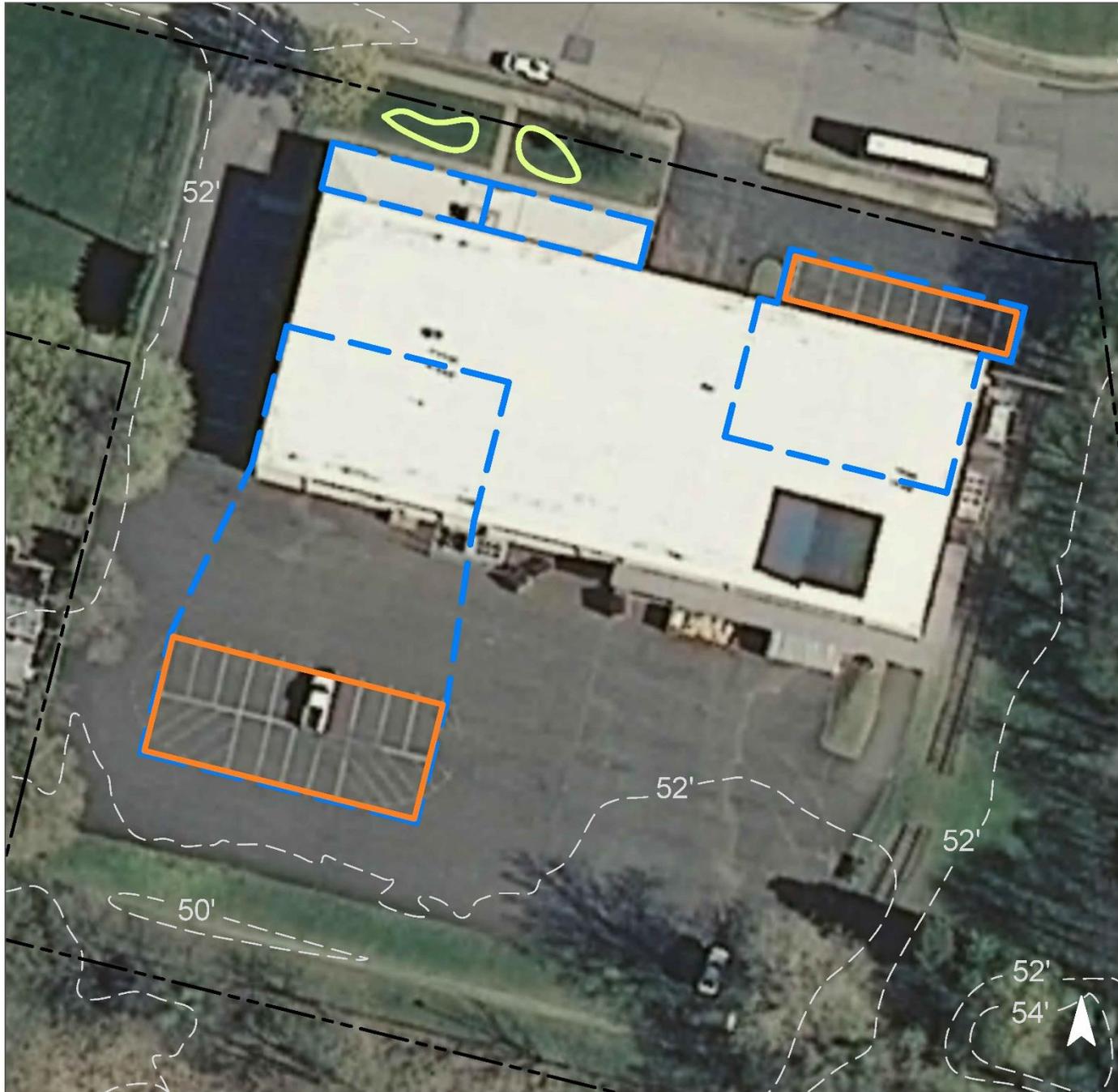


Bioretention systems can be installed to capture, treat, and infiltrate roof runoff in front of the building. Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
60	76,494	3.7	38.6	351.2	0.060	2.10

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.042	7	3,060	0.11	400	\$2,000
Pervious pavement	0.437	73	32,090	1.21	5,080	\$127,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



BLV Holding Company Inc.

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



CORNELL HEIGHTS FIELD



Subwatershed: Assunpink Creek

Site Area: 207,769 sq. ft.

Address: 301 Amherst Avenue
Hamilton, NJ 08619

Block and Lot: Block 1535, Lot 19

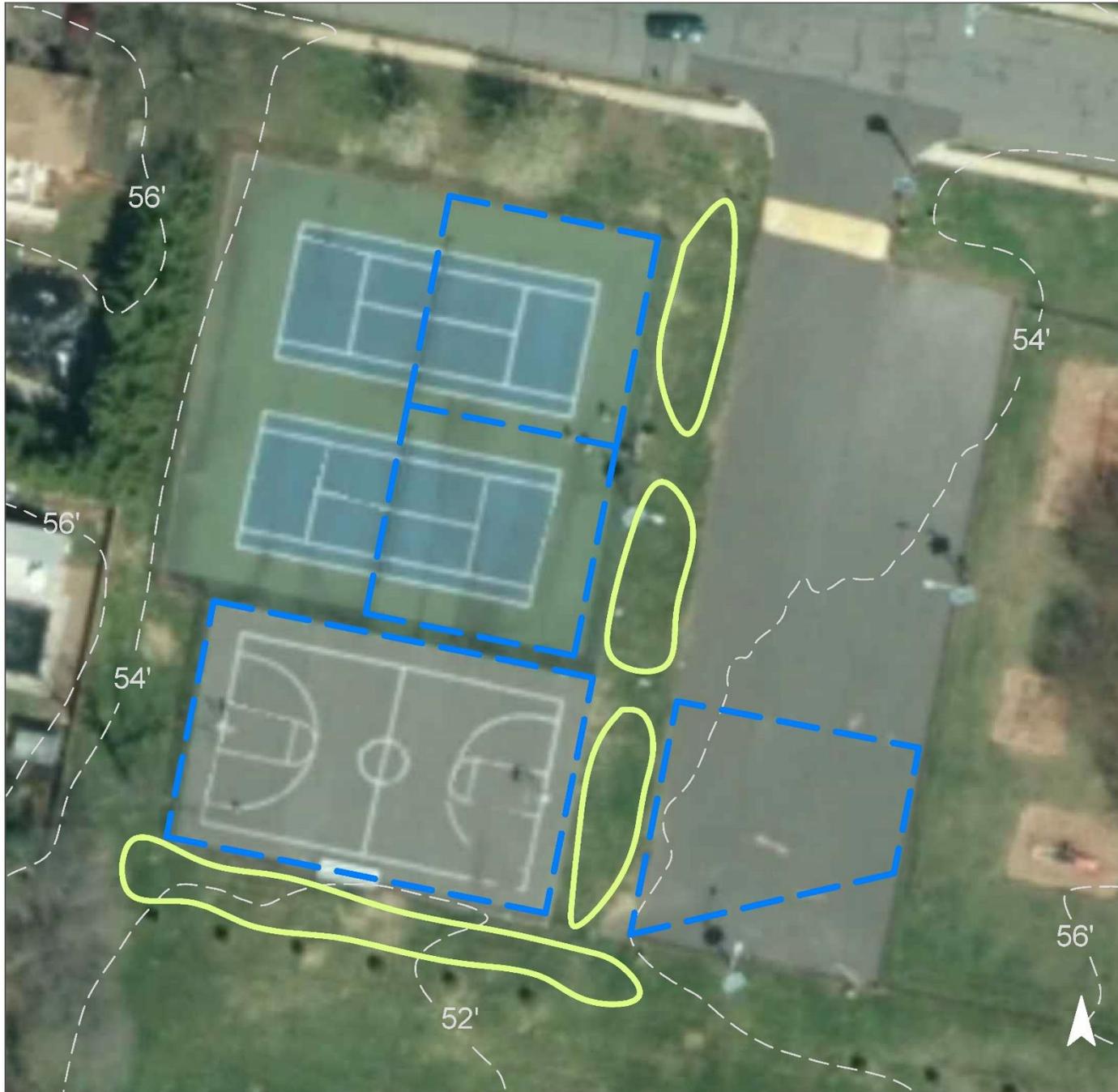


Bioretention systems can be installed to capture, treat, and infiltrate parking lot runoff. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
24	49,319	2.4	24.9	226.4	0.038	1.35

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.396	66	29,060	1.09	3,850	\$19,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Cornell Heights Field

-  bioretention system
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



IBIS PLAZA OFFICE SUITES



Subwatershed: Assunpink Creek

Site Area: 363,367 sq. ft.

Address: 3525 Quakerbridge Road
Hamilton, NJ 08619

Block and Lot: Block 1521, Lot 111,113,114



Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
86	313,593	15.1	158.4	1,439.8	0.244	8.60

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	1.200	201	88,070	3.31	11,380	\$284,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



Ibis Plaza Office Suites

-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



MEDALLION CARE



Subwatershed: Assunpink Creek

Site Area: 728,833 sq. ft.

Address: 1 Electronics Drive
Hamilton, NJ 08619

Block and Lot: Block 1505, Lot 9



Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
45	325,970	15.7	164.6	1,496.6	0.254	8.94

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.724	121	53,140	2.00	8,250	\$206,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Medallion Care

-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



SIEMENS INDUSTRY & DELAVAL TURBOMACHINERY



Subwatershed: Assunpink Creek

Site Area: 1,643,180 sq. ft.

Address: 840 Nottingham Way
Trenton, NJ 08638

Block and Lot: Block 1517, Lot 1



A bioretention system can be installed to capture, treat, and infiltrate runoff draining from the driveway. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
68	1,109,814	53.5	560.5	5,095.6	0.865	30.44

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.175	29	12,810	0.48	1,675	\$8,375
Pervious pavement	0.547	92	40,150	1.51	6,690	\$167,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Siemens Industry & Delaval Turbomachinery

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



AAA MID ATLANTIC



Subwatershed: Back Creek

Site Area: 924,624 sq. ft.

Address: 700 Horizon Drive
Hamilton, NJ 08691

Block and Lot: Block 2612, Lot 5.02



Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Bioretention systems can be installed to capture, treat, and infiltrate parking lot runoff via existing curb cuts. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
30	276,011	13.3	139.4	1,267.3	0.215	7.57

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.154	26	11,280	0.42	1,475	\$7,375
Pervious pavement	2.758	462	202,370	7.60	26,850	\$671,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



AAA Mid Atlantic

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



ABANDONED RESTAURANT



Subwatershed: Back Creek

Site Area: 79,478 sq. ft.

Address: 429 NJ-156
Hamilton, NJ 08620

Block and Lot: Block 2686, Lot 1,2



Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
82	65,161	3.1	32.9	299.2	0.051	1.79

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.429	72	31,450	1.18	3,720	\$93,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Abandoned Restaurant

-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



CAOLA COMPANY



Subwatershed: Back Creek

Site Area: 94,850 sq. ft.

Address: 2 Crossroads Drive
Hamilton, NJ 08691

Block and Lot: Block 2591, Lot 14

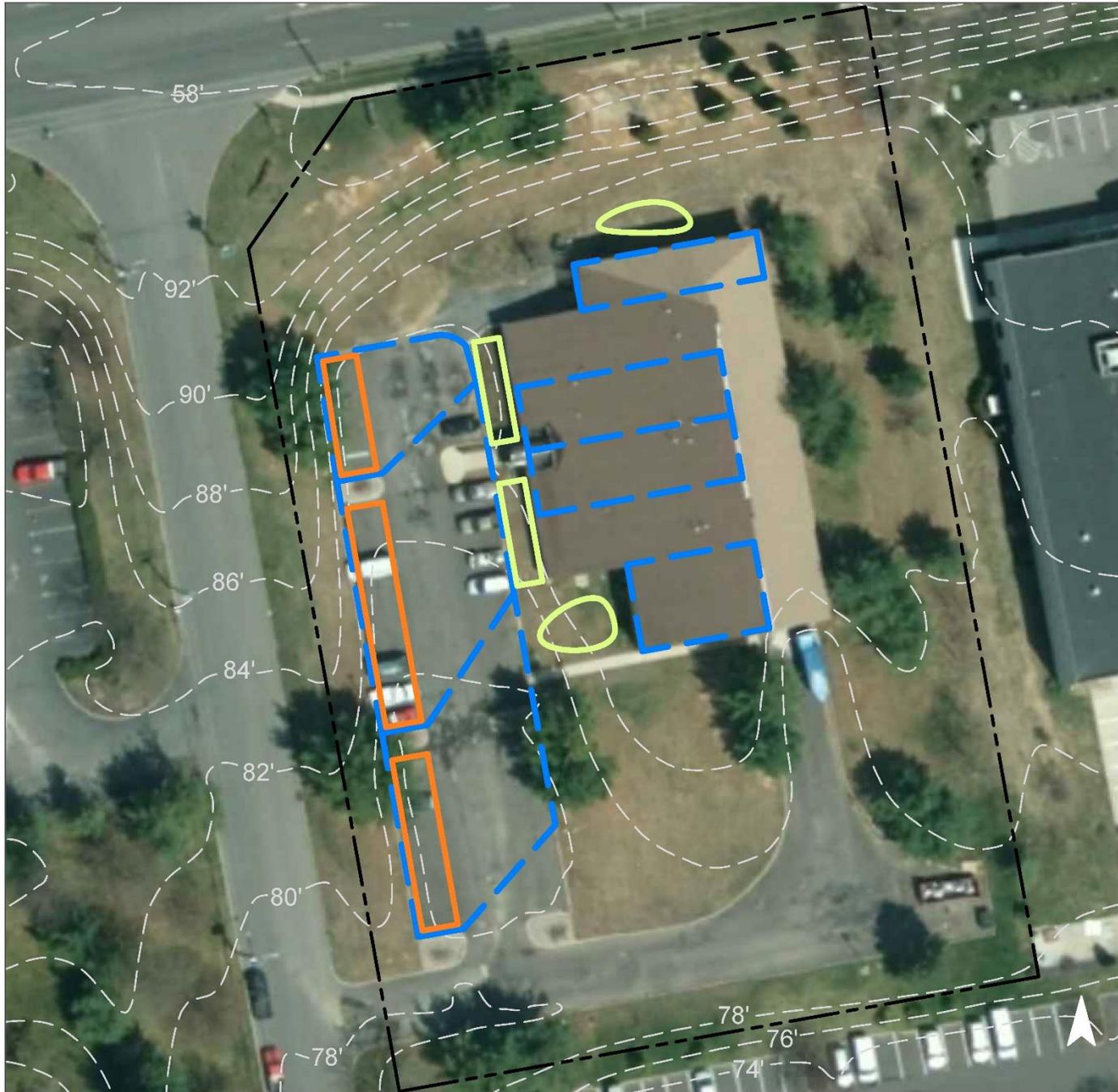


Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
53	50,019	2.4	25.3	229.7	0.039	1.37

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.162	27	11,860	0.45	1,550	\$7,750
Pervious pavement	0.336	56	24,660	0.93	3,755	\$93,875

GREEN INFRASTRUCTURE RECOMMENDATIONS



Caola Company

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



CROCKETT MIDDLE SCHOOL



Subwatershed: Back Creek

Site Area: 1,751,814 sq. ft.

Address: 2631 Kuser Road
Hamilton, NJ 08691

Block and Lot: Block 2592, Lot 2



Bioretention systems can be installed to capture, treat, and infiltrate rooftop runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
14	252,991	12.2	127.8	1,161.6	0.197	6.94

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.534	89	39,200	1.47	5,130	\$25,650

GREEN INFRASTRUCTURE RECOMMENDATIONS



Crockett Middle School

-  bioretention system
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



CUSTOM CALIBRATION SOLUTIONS, LLC



Subwatershed: Back Creek
Site Area: 201,089 sq. ft.
Address: 535 US-130
Hamilton, NJ 08620
Block and Lot: Block 2712, Lot 130



A bioretention system can be installed to capture, treat, and infiltrate parking lot runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Planter boxes can be constructed to allow roof runoff to be reused and can overflow to the adjacent pervious pavement. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
40	81,426	3.9	41.1	373.9	0.063	2.23

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.313	52	22,940	0.86	3,000	\$15,000
Pervious pavement	1.085	182	79,640	2.99	8,680	\$217,000
Planter boxes	n/a	1	n/a	n/a	3 (boxes)	\$3,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Custom Calibrations Solutions, LLC

-  bioretention system
-  pervious pavement
-  planter box
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



HAMILTON MEDICAL ARTS



Subwatershed: Back Creek

Site Area: 182,831 sq. ft.

Address: 2501 Kuser Road
Hamilton, NJ 08691

Block and Lot: Block 2591, Lot 7



Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
66	121,379	5.9	61.3	557.3	0.095	3.33

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.804	135	59,020	2.22	6,970	\$174,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Hamilton Medical Arts

-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



KLEINFELDER



Subwatershed: Back Creek

Site Area: 309,617 sq. ft.

Address: 3 AAA Drive
Hamilton, NJ 08691

Block and Lot: Block 2597, Lot 13



Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A bioretention system can be installed to capture, treat, and infiltrate roadway runoff via curb cuts. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
40	124,614	6.0	62.9	572.2	0.097	3.42

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.065	11	4,780	0.18	625	\$3,125
Pervious pavement	1.200	201	88,070	3.31	11,380	\$284,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



Kleinfelder

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



S. T. PETERSON & CO. INC. OFFICE SPACE



Subwatershed: Back Creek

Site Area: 305,378 sq. ft.

Address: 1 AAA Drive
Hamilton, NJ 08691

Block and Lot: Block 2597, Lot 14

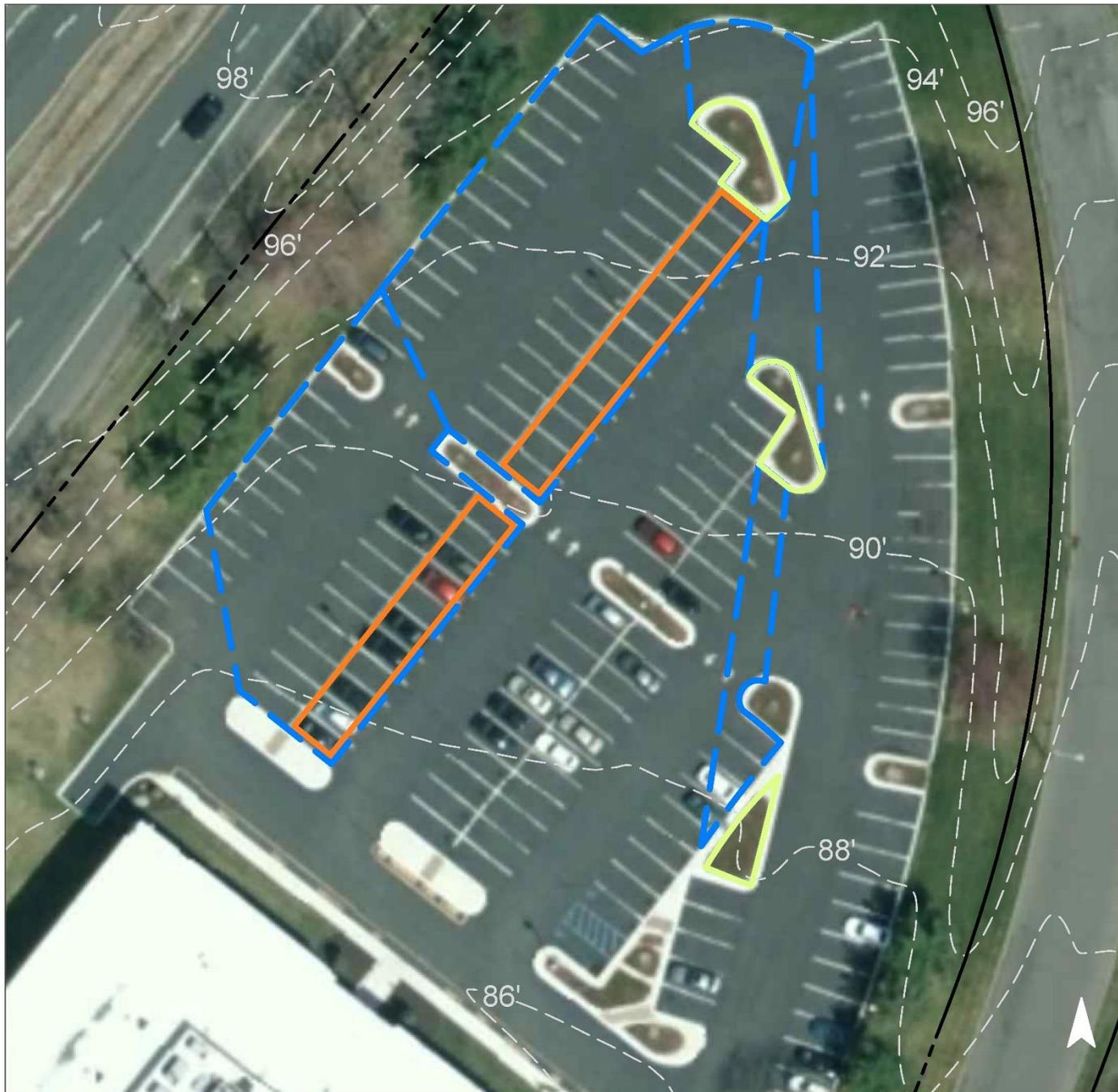


Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Parking lot islands can be transformed into bioretention systems to capture, treat, and infiltrate parking lot runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
38	116,632	5.6	58.9	535.5	0.091	3.20

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.115	19	8,450	0.32	1,120	\$5,600
Pervious pavement	0.482	81	35,370	1.33	4,100	\$102,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



S. T. Peterson & Co. Inc. Office Space

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



SKYLINK TECHNOLOGIES



Subwatershed: Back Creek

Site Area: 69,930 sq. ft.

Address: 5 Marlen Drive
Hamilton, NJ 08691

Block and Lot: Block 2597.01, Lot 5



A bioretention system can be installed to capture, treat, and infiltrate roof runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
89	62,020	3.0	31.3	284.8	0.048	1.70

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.052	9	3,820	0.14	500	\$2,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



Skylink Technologies

-  bioretention system
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



VERIZON



Subwatershed: Back Creek
Site Area: 907,720 sq. ft.
Address: 600 Horizon Drive
Hamilton, NJ 08691
Block and Lot: Block 2612, Lot 5.07, 5.08



Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
48	431,354	20.8	217.9	1,980.5	0.336	11.83

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	4.965	831	364,300	13.69	40,880	\$1,022,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Verizon

-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



YORK RISK SERVICES



Subwatershed: Back Creek
Site Area: 422,358 sq. ft.
Address: 2 South Gold Drive
Hamilton, NJ 08691
Block and Lot: Block 2597.01, Lot 1



Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Bioretention systems can be installed to capture, treat, and infiltrate parking lot runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
37	154,883	7.5	78.2	711.1	0.121	4.25

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.187	31	13,730	0.52	1,825	\$9,125
Pervious pavement	0.809	135	59,360	2.23	6,150	\$153,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



York Risk Services

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



GROW-VILLE COMMUNITY DAY SCHOOL



Subwatershed: Crosswicks Creek

Site Area: 30,612 sq. ft.

Address: 449 Church Street
Hamilton, NJ 08620

Block and Lot: Block 2661, Lot 24, 26

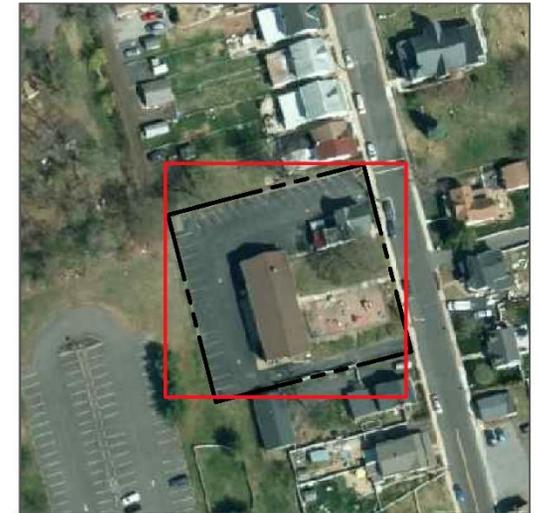
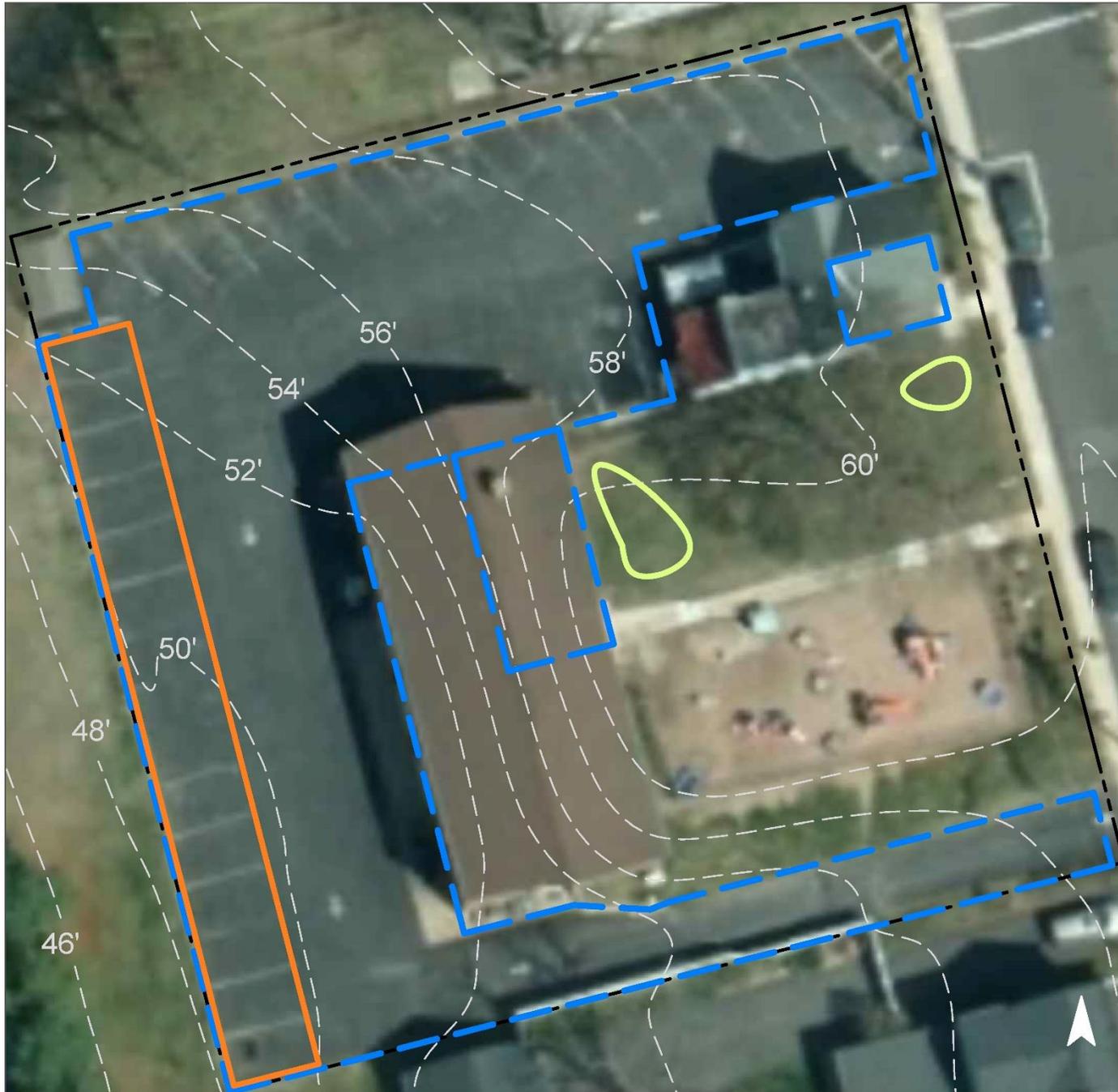


Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
85	26,020	1.3	13.1	119.5	0.020	0.71

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.032	5	2,330	0.09	305	\$1,525
Pervious pavement	0.416	70	30,510	1.15	2,850	\$71,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Grow-Ville Community Day School

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



ROBINSON ELEMENTARY SCHOOL



Subwatershed: Crosswicks Creek

Site Area: 408,677 sq. ft.

Address: 495 Gropp Avenue
Hamilton, NJ 08610

Block and Lot: Block 2548, Lot 17,18,19



A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Bioretention systems can be installed to capture, treat, and infiltrate runoff from the surrounding paved surfaces. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
28	113,018	5.4	57.1	518.9	0.088	3.10

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.518	87	38,000	1.43	4,970	\$24,850
Pervious pavement	0.408	68	29,940	1.13	4,790	\$119,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



Robinson Elementary School

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



ST. RAPHAEL-HOLY ANGELS PARISH



Subwatershed: Crosswicks Creek

Site Area: 611,220 sq. ft.

Address: 3500 South Broad Street
Hamilton, NJ 08610

Block and Lot: Block 2542, Lot 30, 32



Bioretention systems can be installed at the rectory and convent to capture, treat, and infiltrate roof runoff. Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
48	293,454	14.1	148.2	1,347.4	0.229	8.05

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.107	18	7,880	0.30	1,035	\$5,175
Pervious pavement	0.799	134	58,620	2.20	7,700	\$192,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



St. Raphael-Holy Angels Parish

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



SUNNYBRAE ELEMENTARY SCHOOL



Subwatershed: Crosswicks Creek

Site Area: 294,171 sq. ft.

Address: 166 Elton Avenue
Hamilton, NJ 08620

Block and Lot: Block 2606, Lot 126



Bioretention systems can be installed to capture, treat, and infiltrate roof runoff from the school. Parking spaces and play areas can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
26	75,555	3.6	38.2	346.9	0.059	2.07

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.352	59	25,850	0.97	3,400	\$17,000
Pervious pavement	0.264	44	19,400	0.73	4,850	\$121,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Sunnybrae Elementary School

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



SUNNYBRAE LEAGUE PARK



Subwatershed: Crosswicks Creek

Site Area: 1,138,686 sq. ft.

Address: 5 Pleasant Drive
Hamilton, NJ 08620

Block and Lot: Block 2606, Lot 96, 98



Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A bioretention system can be installed to capture, treat, and infiltrate parking lot runoff. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
8	96,109	4.6	48.5	441.3	0.075	2.64

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.068	11	4,970	0.19	650	\$3,250
Pervious pavement	0.949	159	69,640	2.62	8,735	\$218,375

GREEN INFRASTRUCTURE RECOMMENDATIONS



Sunnybrae League Park

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



SWITLIK PARK



Subwatershed: Crosswicks Creek

Site Area: 807,435 sq. ft.

Address: 5 Fisher Place
Hamilton, NJ 08620

Block and Lot: Block 2614, Lot 130



Bioretention systems can be installed to capture, treat, and infiltrate parking lot runoff and roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
15	122,463	5.9	61.8	562.3	0.095	3.36

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.077	13	5,670	0.21	350	\$1,750
Pervious pavement	1.433	240	105,150	3.95	12,150	\$303,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



Switlik Park

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



THE STONE TERRACE



Subwatershed: Crosswicks Creek

Site Area: 527,979 sq. ft.

Address: 2275 Kuser Road
Hamilton, NJ 08690

Block and Lot: Block 2575, Lot 161



Planter boxes can be constructed on the perimeter of the facility to allow roof runoff to be reused. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A bioretention system can be installed in the entry island to capture, treat, and infiltrate parking lot runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
35	186,118	9.0	94.0	854.5	0.145	5.10

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.064	11	4,720	0.18	620	\$3,100
Pervious pavement	1.106	185	81,160	3.05	7,885	\$197,125
Planter boxes	n/a	6	n/a	n/a	7 (boxes)	\$7,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



The Stone Terrace

-  bioretention system
-  pervious pavement
-  planter box
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



YARDVILLE HEIGHTS ELEMENTARY SCHOOL



Subwatershed: Crosswicks Creek

Site Area: 244,009 sq. ft.

Address: 3880 South Broad Street
Hamilton, NJ 08620

Block and Lot: Block 2606, Lot 15



Two bioretention systems can be installed in front of the school to capture roof runoff. Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Part of the play area can also be repaved with pervious pavement. Planter boxes can be constructed on the perimeter of the school in the playground area to allow roof runoff to be reused. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
43	103,719	5.0	52.4	476.2	0.081	2.84

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.054	9	3,940	0.15	520	\$2,600
Pervious pavement	0.635	106	46,590	1.75	5,010	\$125,250
Planter boxes	n/a	3	n/a	n/a	4 (boxes)	\$4,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Yardville Heights Elementary School

-  bioretention system
-  pervious pavement
-  planter box
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



YMCA



Subwatershed: Crosswicks Creek

Site Area: 2,304,067 sq. ft.

Address: 185 Sawmill Road
Hamilton, NJ 08620

Block and Lot: Block 2730, Lot 14.01

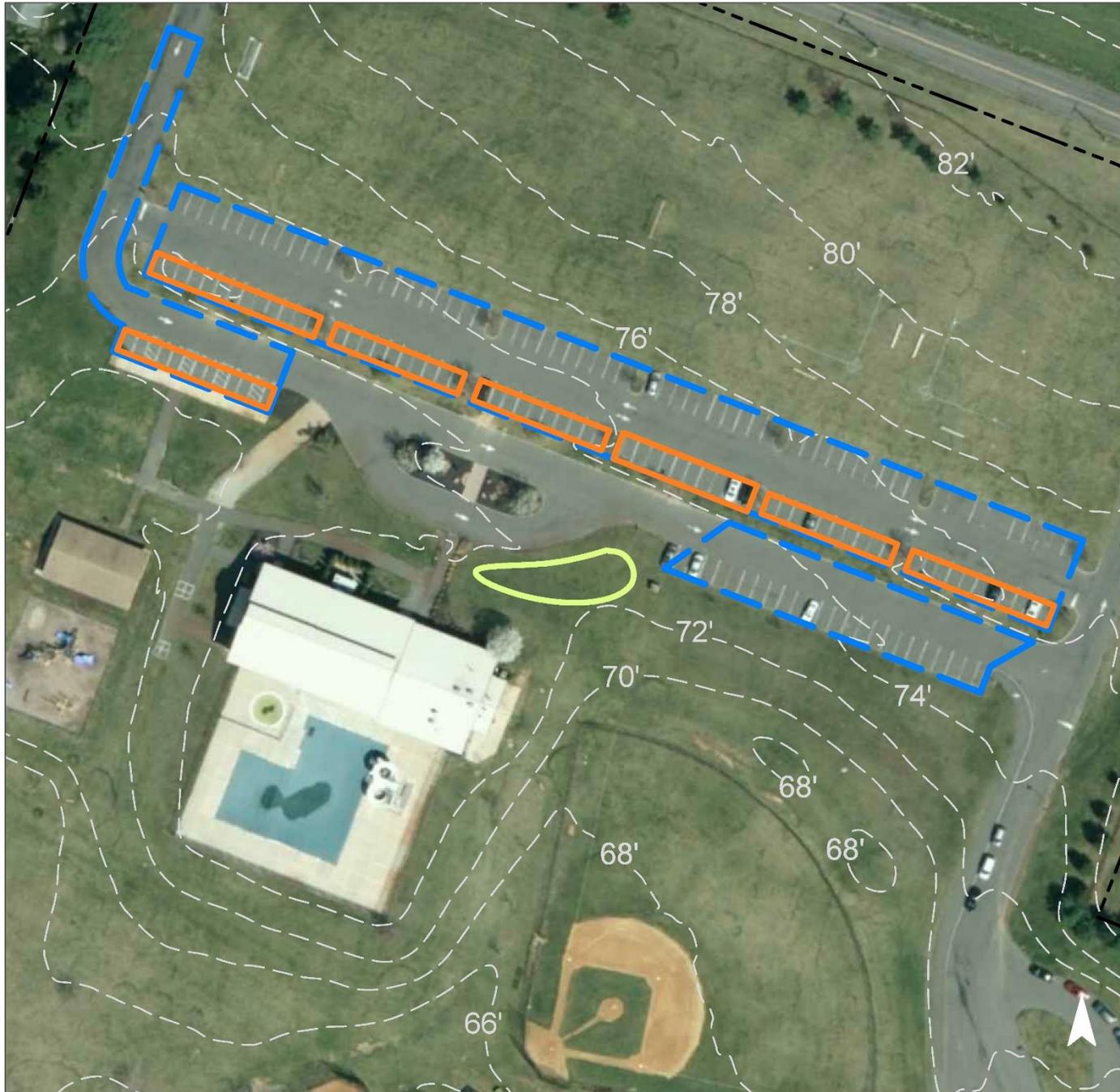


Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A bioretention system can be installed at the front of the building to capture, treat, and infiltrate parking lot runoff via curb cuts. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
10	226,550	10.9	114.4	1,040.2	0.177	6.21

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.236	39	17,300	0.65	3,250	\$16,250
Pervious pavement	1.477	247	108,350	4.07	14,205	\$355,125

GREEN INFRASTRUCTURE RECOMMENDATIONS



YMCA

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



ST. GEORGE UKRAINIAN ORTHODOX CHURCH



Subwatershed: Doctors Creek

Site Area: 536,154 sq. ft.

Address: 839 Yardville Allentown Road
Hamilton, NJ 08620

Block and Lot: Block 2724, Lot 82



There are several opportunities to install bioretention systems to capture, treat, and infiltrate runoff; three are adjacent to the church buildings, and the other is along the driveway. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
20	109,828	5.3	55.5	504.3	0.086	3.01

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.161	27	11,830	0.44	1,550	\$7,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



St. George Ukrainian Orthodox Church

-  bioretention system
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



YARDVILLE ELEMENTARY SCHOOL



Subwatershed: Doctors Creek

Site Area: 187,256 sq. ft.

Address: 450 Yardville Allentown Road
Hamilton, NJ 08620

Block and Lot: Block 2699, Lot 1



Planter boxes can be constructed around the perimeter of the mobile classrooms and school to allow roof runoff to be reused. A bioretention system can be installed to capture, treat, and infiltrate roof runoff on the front lawn of the school. A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
44	81,714	3.9	41.3	375.2	0.064	2.24

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.038	6	2,750	0.10	360	\$1,800
Pervious pavement	0.263	44	19,270	0.72	1,800	\$45,000
Planter boxes	n/a	6	n/a	n/a	8 (boxes)	\$8,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Yardville Elementary School

-  bioretention system
-  pervious pavement
-  planter box
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



CHRIST PRESBYTERIAN CHURCH



Subwatershed: Miry Run

Site Area: 142,625 sq. ft.

Address: 746 Klockner Road
Hamilton, NJ 08619

Block and Lot: Block 1656, Lot 58



Planter boxes can be constructed around the perimeter of the building to allow roof runoff to be reused. A bioretention system can be installed near the main entrance to capture, treat, and infiltrate runoff from the roof. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
23	32,397	1.6	16.4	148.7	0.025	0.89

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.016	3	1,180	0.04	160	\$800
Planter boxes	n/a	3	n/a	n/a	4 (boxes)	\$4,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Christ Presbyterian Church

-  bioretention system
-  planter box
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



CLOVER SQUARE



Subwatershed: Miry Run
Site Area: 887,560 sq. ft.
Address: 3100 Quakerbridge Road
Hamilton, NJ 08619
Block and Lot: Block 1603, Lot 19



Rows of parking spaces throughout the shopping plaza can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
81	721,004	34.8	364.1	3,310.4	0.562	19.77

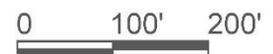
Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	4.451	745	326,560	12.27	34,649	\$866,225

GREEN INFRASTRUCTURE RECOMMENDATIONS



Clover Square

-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



ENTERPRISE VOLUNTEER FIRE COMPANY



Subwatershed: Miry Run

Site Area: 49,506 sq. ft.

Address: 569 Klockner Road
Hamilton, NJ 08619

Block and Lot: Block 1648, Lot 12, 16



Rainwater can be harvested by installing a cistern at the building. The water can be used for cleaning vehicles or for conducting car wash fundraisers. A bioretention system can be installed to capture, treat, and infiltrate roof runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
88	43,673	2.1	22.1	200.5	0.034	1.20

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.031	5	2,240	0.08	300	\$1,500
Rainwater harvesting	0.031	5	1,000	0.04	1,000 (gal)	\$2,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Enterprise Volunteer Fire Company

-  bioretention system
-  rainwater harvesting
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



FIRST PENTECOSTAL PRAYER OF FAITH CHURCH



Subwatershed: Miry Run
Site Area: 35,411 sq. ft.
Address: 3632 Nottingham Way
Hamilton, NJ 08690
Block and Lot: Block 1836, Lot 34



Mirrored bioretention systems can be installed at the entrance of the church to capture, treat, and infiltrate roof runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
87	30,651	1.5	15.5	140.7	0.024	0.84

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.070	12	5,160	0.19	675	\$3,375

GREEN INFRASTRUCTURE RECOMMENDATIONS



**First Pentecostal
Prayer of Faith Church**

-  bioretention system
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



FIRST PRESBYTERIAN CHURCH / YMCA YOUNG WONDERS



Subwatershed: Miry Run

Site Area: 85,330 sq. ft.

Address: 3550 Nottingham Way
Hamilton, NJ 08690

Block and Lot: Block 1830, Lot 20, 50-52

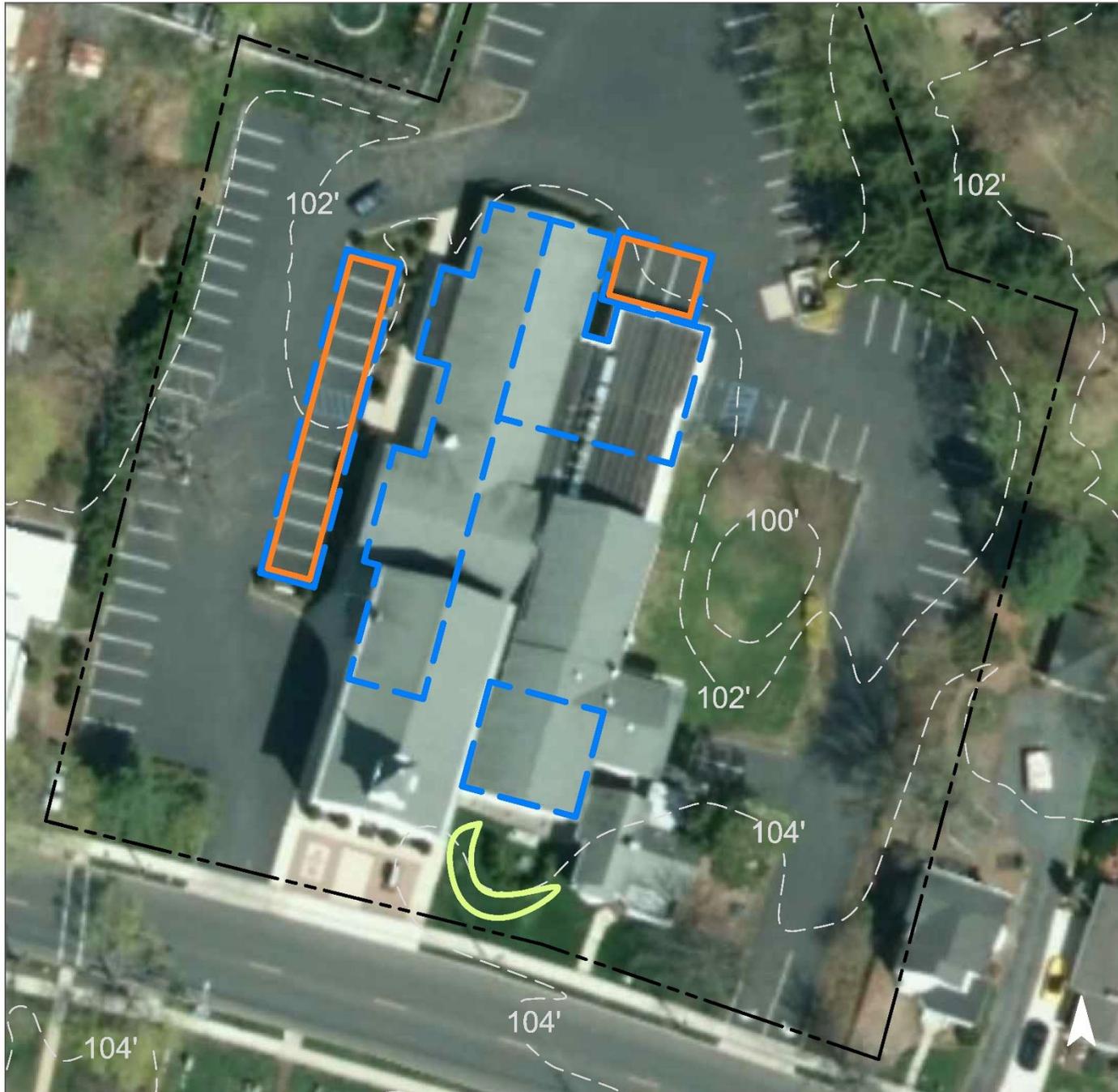


A bioretention system can be installed to capture, treat, and infiltrate roof runoff near the entrance to the church. Rows of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
81	68,988	3.3	34.8	316.7	0.054	1.89

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.035	6	2,540	0.10	335	\$1,675
Pervious pavement	0.156	26	11,480	0.43	2,460	\$61,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



**First Presbyterian Church /
YMCA Young Wonders**

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



H.D. MORRISON ELEMENTARY SCHOOL (UNIVERSITY HEIGHTS)



Subwatershed: Miry Run

Site Area: 562,187 sq. ft.

Address: 645 Paxson Avenue
Hamilton, NJ 08619

Block and Lot: Block 1561, Lot 13, 24, 25



A bioretention system can be installed to capture, treat, and infiltrate paved surface runoff. A section of the adjacent area could also be depaved. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
22	126,391	6.1	63.8	580.3	0.098	3.47

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.101	17	7,440	0.28	975	\$4,875
Pervious pavement	0.567	95	41,580	1.56	4,160	\$104,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



**H.D. Morrison
Elementary School
(University Heights)**

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



HAMILTON SQUARE BAPTIST CHURCH



Subwatershed: Miry Run

Site Area: 156,832 sq. ft.

Address: 3752 Nottingham Way
Hamilton, NJ 08690

Block and Lot: Block 1839, Lot 87



A bioretention system can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
44	68,505	3.3	34.6	314.5	0.053	1.88

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.063	11	4,650	0.17	610	\$3,050
Pervious pavement	0.862	144	63,240	2.38	6,230	\$155,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



Hamilton Square Baptist Church

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



HAMILTON TOWNSHIP SCHOOL DISTRICT



Subwatershed: Miry Run

Site Area: 56,745 sq. ft.

Address: 90 Park Avenue
Hamilton, NJ 08690

Block and Lot: Block 1836, Lot 6, 8



A bioretention system can be installed to capture, treat, and infiltrate roof runoff. A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
87	49,126	2.4	24.8	225.6	0.038	1.35

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.087	15	6,370	0.24	835	\$4,175
Pervious pavement	0.242	41	17,760	0.67	2,270	\$56,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



Hamilton Township School District

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



KLOCKNER ELEMENTARY SCHOOL



Subwatershed: Miry Run

Site Area: 102,765 sq. ft.

Address: 830 Klockner Road
Hamilton, NJ 08619

Block and Lot: Block 1659, Lot 2,3



The row of parking spaces furthest east of the school can be replaced with pervious pavement to capture and infiltrate stormwater. Planter boxes can be constructed around the perimeter of the school to allow roof runoff to be reused. Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
48	49,185	2.4	24.8	225.8	0.038	1.35

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.025	4	1,830	0.07	240	\$1,200
Pervious pavement	0.362	61	26,580	1.00	2,480	\$62,000
Planter boxes	n/a	2	n/a	n/a	3 (boxes)	\$3,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Klockner Elementary School

-  bioretention system
-  pervious pavement
-  planter box
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS

0 50' 100'

MERLIN INDUSTRIES INC.



Subwatershed: Miry Run

Site Area: 935,824 sq. ft.

Address: 2904 East State Street
Hamilton, NJ 08619

Block and Lot: Block 1602, Lot 7



A bioretention system can be installed in front of the building to capture, treat, and infiltrate roof runoff. Pervious pavement can be installed in parking spaces to capture runoff from the parking lot. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
22	203,182	9.8	102.6	932.9	0.158	5.57

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.087	15	6,370	0.24	835	\$4,175
Pervious pavement	0.844	141	61,940	2.33	6,370	\$159,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Merlin Industries Inc.

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



MORGAN ELEMENTARY SCHOOL



Subwatershed: Miry Run

Site Area: 369,401 sq. ft.

Address: 38 Stamford Road
Hamilton, NJ 08619

Block and Lot: Block 1618, Lot 34,40



A bioretention system can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
35	129,743	6.3	65.5	595.7	0.101	3.56

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.066	11	4,880	0.18	640	\$3,200
Pervious pavement	0.412	69	30,260	1.14	4,320	\$108,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Morgan Elementary School

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



NOTTINGHAM LITTLE LEAGUE



Subwatershed: Miry Run

Site Area: 615,843 sq. ft.

Address: 120 Mapleshade Avenue
Hamilton, NJ 08690

Block and Lot: Block 1722, Lot 95,96,105



The existing swale behind the gray building at the ball field can be converted into a bioswale. Additionally, a bioretention system can be installed to capture, treat, and infiltrate parking lot runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
21	127,290	6.1	64.3	584.4	0.099	3.49

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.125	21	9,180	0.34	1,200	\$6,000
Bioswale	0.040	10	385	0.01	770	\$3,850

GREEN INFRASTRUCTURE RECOMMENDATIONS



Nottingham Little League

-  bioretention system
-  bioswale
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



NOTTINGHAM VOLUNTEER FIRE COMPANY STATION 17



Subwatershed: Miry Run

Site Area: 153,281 sq. ft.

Address: 200 Mercer Street
Hamilton, NJ 08690

Block and Lot: Block 1839, Lot 24.01



A bioretention system can be installed to capture, treat, and infiltrate runoff from the roof. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Rainwater can be harvested by installing a cistern at the fire company. The water can be used for cleaning emergency vehicles or for conducting car wash fundraisers. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
93	141,848	6.8	71.6	651.3	0.111	3.89

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.025	4	1,860	0.07	250	\$1,250
Pervious pavement	0.221	37	16,250	0.61	1,520	\$38,000
Rainwater harvesting	0.052	9	2,000	0.08	2,000 (gal)	\$4,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



**Nottingham Volunteer
Fire Company Station 17**

-  bioretention system
-  pervious pavement
-  rainwater harvesting
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



OUR LADY OF SORROWS SCHOOL



Subwatershed: Miry Run

Site Area: 517,440 sq. ft.

Address: 3800 East State Street
Hamilton, NJ 08619

Block and Lot: Block 1666, Lot 80



A bioretention system can be installed in front of the school to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
42	219,134	10.6	110.7	1,006.1	0.171	6.01

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.029	5	2,160	0.08	290	\$1,450
Pervious pavement	1.462	245	107,290	4.03	13,800	\$345,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Our Lady of Sorrows School

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



SAINT MARK UNITED METHODIST CHURCH



Subwatershed: Miry Run

Site Area: 284,082 sq. ft.

Address: 465 Paxson Avenue
Hamilton, NJ 08690

Block and Lot: Block 1622, Lot 8

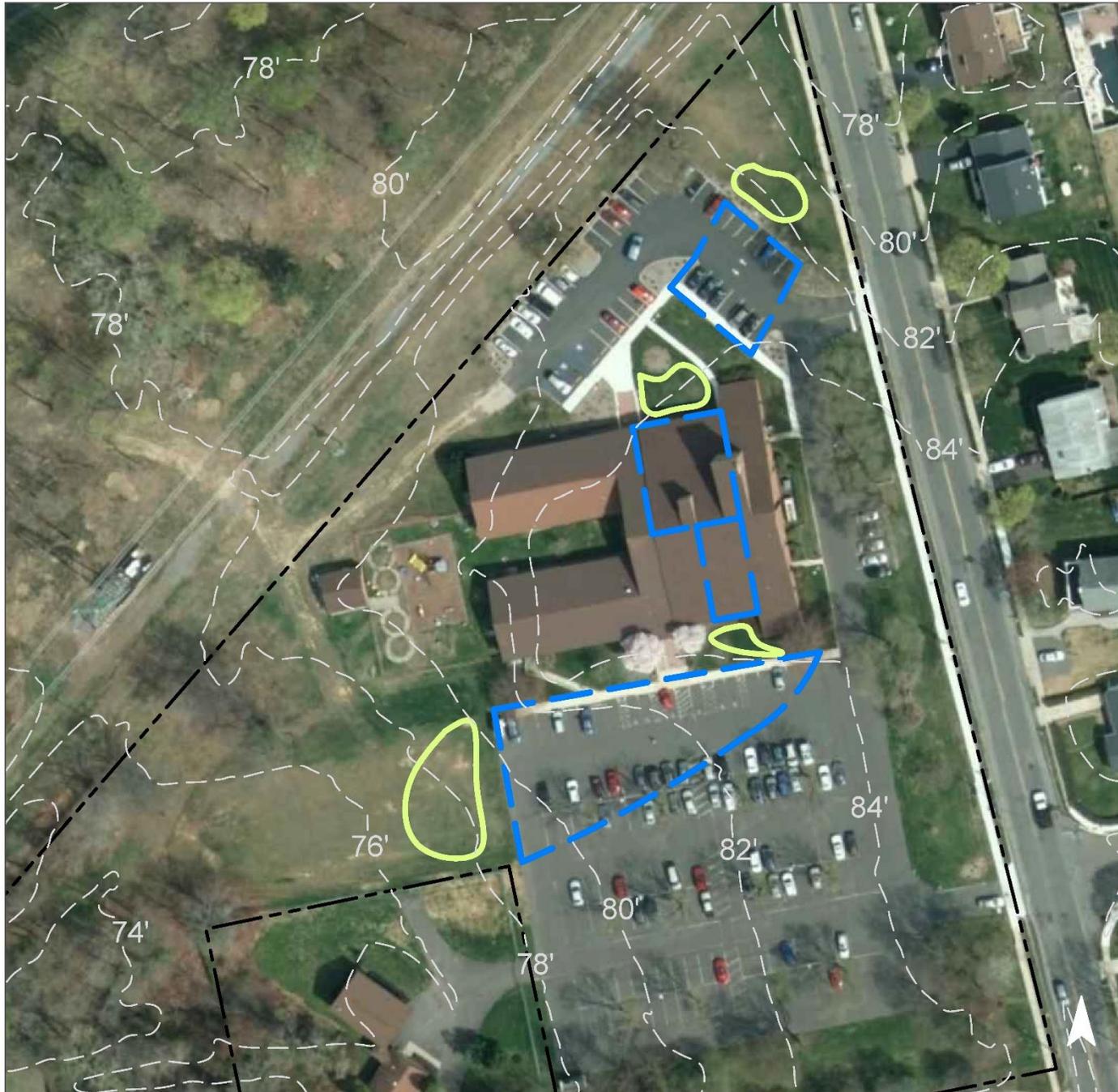


Bioretention systems can be installed to capture, treat, and infiltrate parking lot and roof runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
40	113,873	5.5	57.5	522.8	0.089	3.12

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.608	102	44,640	1.68	5,850	\$29,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Saint Mark United Methodist Church

-  bioretention system
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



UNIVERSITY PLAZA



Subwatershed: Miry Run

Site Area: 167,756 sq. ft.

Address: 96 Flock Road
Hamilton, NJ 08619

Block and Lot: Block 1551, Lot 16



A bioretention system can be installed along the driveway to capture, treat, and infiltrate stormwater via curb cuts. A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
72	120,521	5.8	60.9	553.4	0.094	3.31

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.061	10	4,500	0.17	600	\$3,000
Pervious pavement	0.408	68	29,960	1.13	4,140	\$103,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



University Plaza

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



VFW HAMILTON TOWNSHIP POST



Subwatershed: Miry Run
Site Area: 143,315 sq. ft.
Address: 77 Christine Avenue
Hamilton, NJ 08619
Block and Lot: Block 1660, Lot 25,26



Bioretention systems can be installed to capture, treat, and infiltrate parking lot runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
42	60,776	2.9	30.7	279.0	0.047	1.67

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.145	24	10,610	0.40	1,390	\$6,950
Pervious pavement	0.219	37	16,060	0.60	1,500	\$37,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



VFW Hamilton Township Post

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



ALEXANDER ELEMENTARY SCHOOL



Subwatershed: Pond Run

Site Area: 526,633 sq. ft.

Address: 20 Robert Frost Drive
Hamilton, NJ 08690

Block and Lot: Block 1980, Lot 20



Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. Portions of the play areas can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
24	128,186	6.2	64.7	588.6	0.100	3.52

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.098	16	7,220	0.27	950	\$4,750
Pervious pavement	0.711	119	52,200	1.96	4,880	\$122,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Alexander Elementary School

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



BROMLEY PARK



Subwatershed: Pond Run

Site Area: 219,967 sq. ft.

Address: 1651 East State Street
Hamilton, NJ 08609

Block and Lot: Block 1733, Lot 7

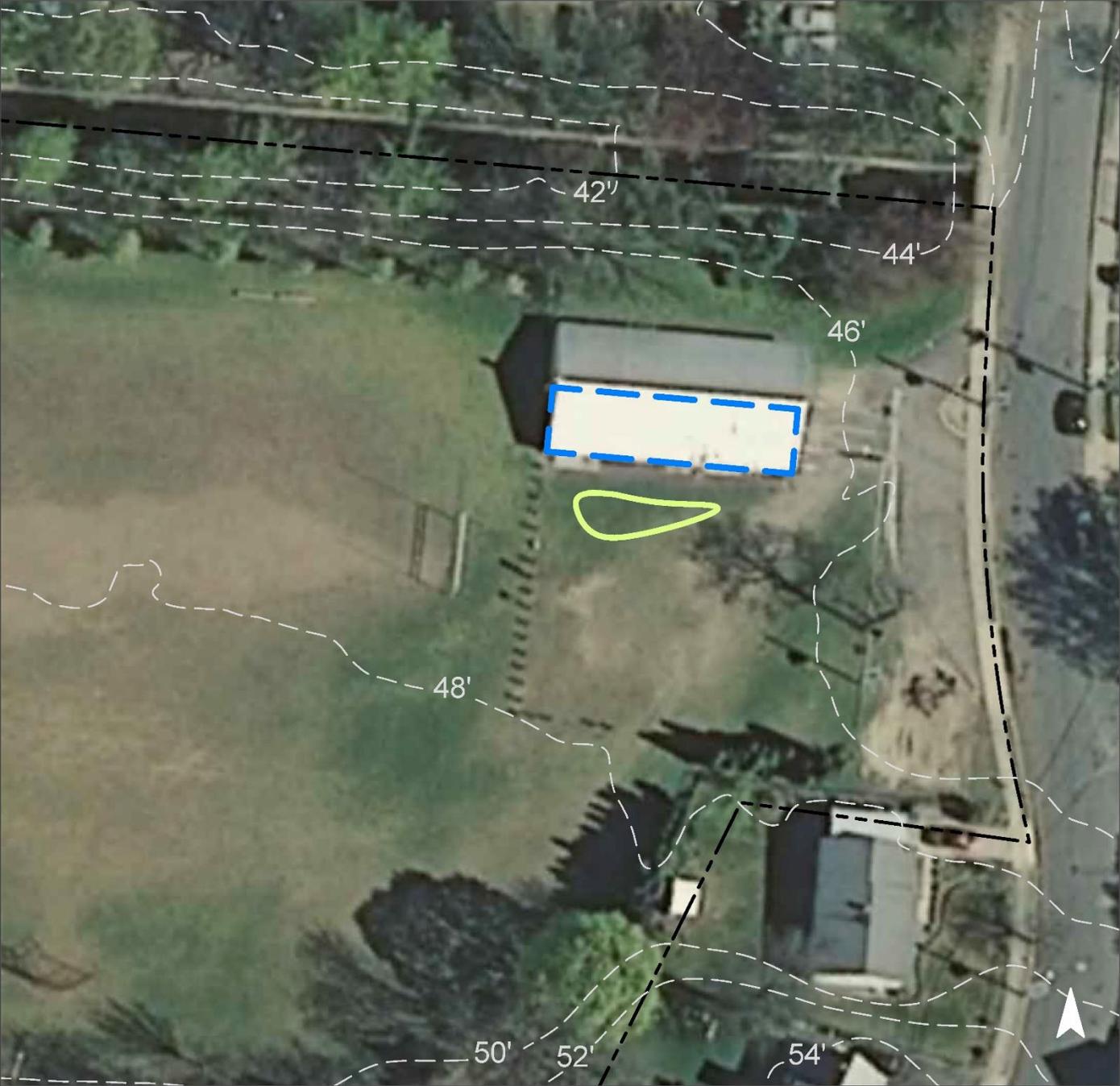


A bioretention system can be installed to capture, treat, and infiltrate runoff generated by the adjacent maintenance building. A channel of Pond Run is present along the park. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
14	29,780	1.4	15.0	136.7	0.023	0.82

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.044	7	3,210	0.12	420	\$2,100

GREEN INFRASTRUCTURE RECOMMENDATIONS



Bromley Park

-  bioretention system
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



COLONIAL VOLUNTEER FIRE COMPANY



Subwatershed: Pond Run
Site Area: 324,471 sq. ft.
Address: 801 Kuser Road
Hamilton, NJ 08619
Block and Lot: Block 2154, Lot 4



Rainwater can be harvested by installing a cistern at the fire company. The water can be used for cleaning emergency vehicles or for conducting car wash fundraisers. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
49	158,286	7.6	79.9	726.8	0.123	4.34

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.746	125	54,780	2.06	5,500	\$137,500
Rainwater harvesting	0.082	14	2,500	0.23	2,500 (gal)	\$5,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Colonial Volunteer Fire Company

-  pervious pavement
-  rainwater harvesting
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



GREENWOOD ELEMENTARY SCHOOL



Subwatershed: Pond Run

Site Area: 83,373 sq. ft.

Address: 2069 Greenwood Avenue
Hamilton, NJ 08609

Block and Lot: Block 1884, Lot 1

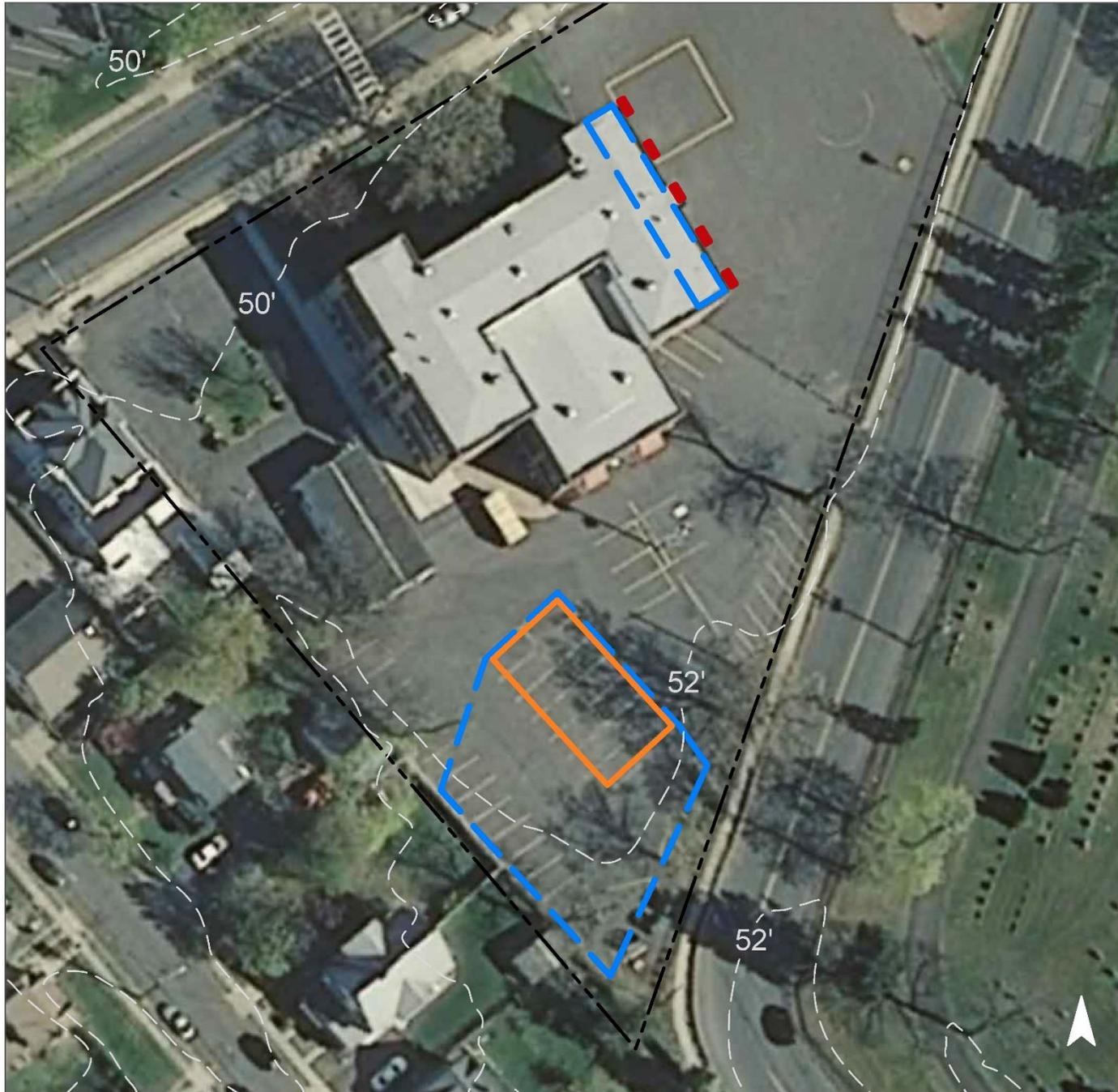


Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Planter boxes can be constructed to allow roof runoff to be reused. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
89	74,555	3.6	37.7	342.3	0.058	2.04

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.217	36	15,950	0.60	2,660	\$66,500
Planter boxes	n/a	4	n/a	n/a	5 (boxes)	\$5,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Greenwood Elementary School

-  pervious pavement
-  planter box
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



HAMILTON GOLF CENTER



Subwatershed: Pond Run

Site Area: 3,076,264 sq. ft.

Address: 5 Justice Samuel A
Alito Jr Way
Hamilton, NJ 08619

Block and Lot: Block 2163, Lot 5,8



Bioretention systems can be installed to capture, treat, and infiltrate roof runoff near the entrance to the building. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
6	198,955	9.6	100.5	913.5	0.155	5.46

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.079	13	5,790	0.22	760	\$3,800
Pervious pavement	0.197	33	14,450	0.54	1,350	\$33,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



Hamilton Golf Center

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



HAMILTON LANES



Subwatershed: Pond Run

Site Area: 240,604 sq. ft.

Address: 1200 Kuser Road
Hamilton, NJ 08619

Block and Lot: Block 2163, Lot 9



A section of the parking lot can be depaved, and a bioretention system can be installed to capture, treat, and infiltrate parking lot runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater from the parking lot and the building's rooftop. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
67	162,114	7.8	81.9	744.3	0.126	4.45

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.242	41	17,780	0.67	2,325	\$11,625
Pervious pavement	1.286	215	94,400	3.55	13,380	\$334,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



Hamilton Lanes

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



HAMILTON TOWNSHIP MUNICIPAL BUILDING



Subwatershed: Pond Run

Site Area: 436,805 sq. ft.

Address: 2100 Greenwood Avenue
Hamilton, NJ 08609

Block and Lot: Block 1757, Lot 24

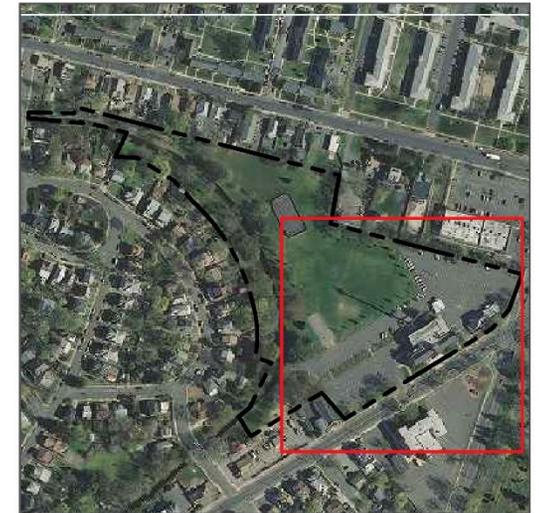
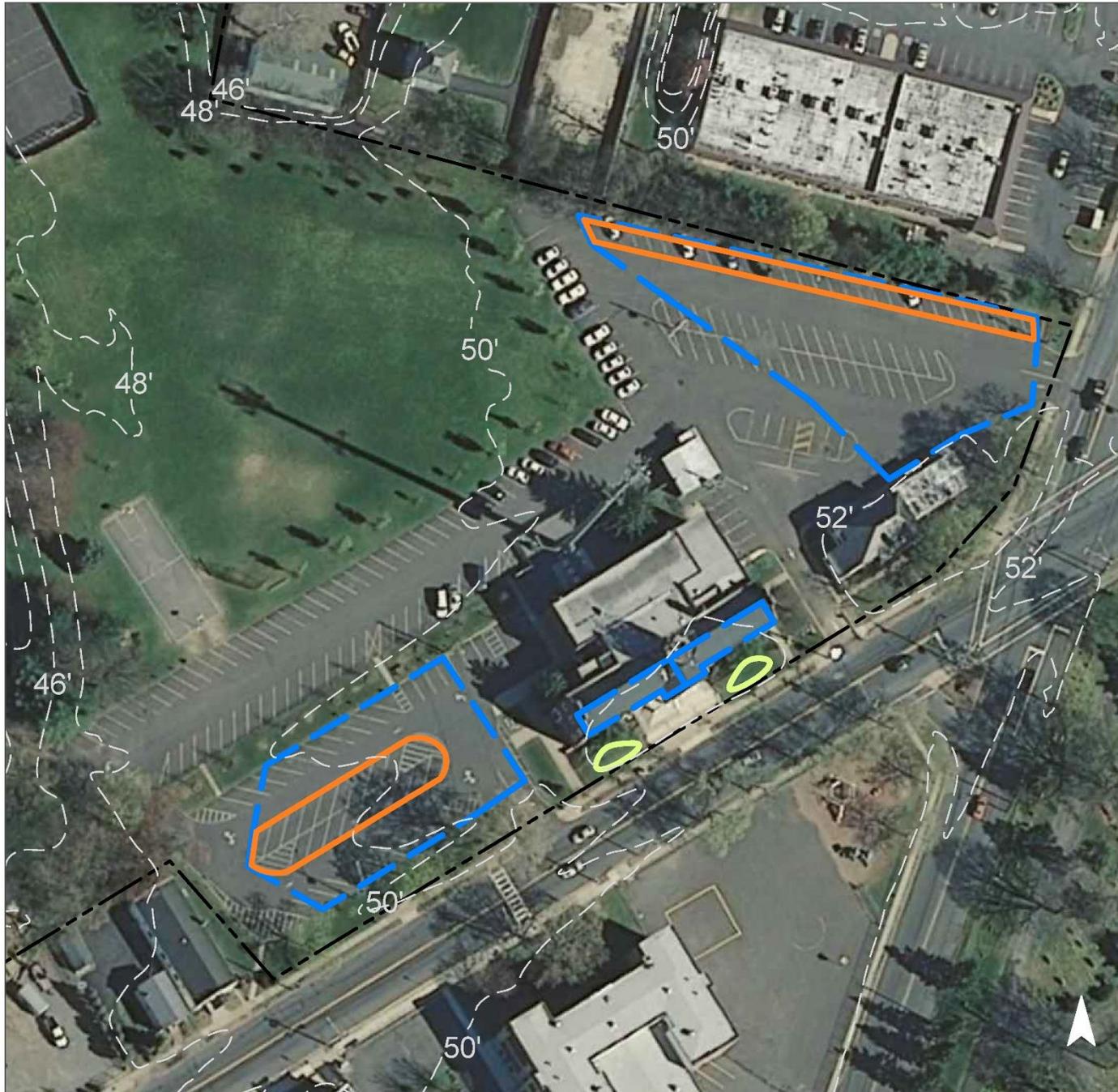


Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
38	164,366	7.9	83.0	754.7	0.128	4.51

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.059	10	4,300	0.16	250	\$1,250
Pervious pavement	0.961	161	70,540	2.65	9,900	\$247,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



Hamilton Township Municipal Building

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



HAMILTON TOWNSHIP LIBRARY



Subwatershed: Pond Run

Site Area: 350,879 sq. ft.

Address: 1 Justice Samuel A
Alito Jr Way
Hamilton, NJ 08619

Block and Lot: Block 2163, Lot 6



A bioretention system can be installed to capture, treat, and infiltrate sidewalk runoff via a trench drain. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
34	118,144	5.7	59.7	542.4	0.092	3.24

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.032	5	2,370	0.09	310	\$1,550
Pervious pavement	0.466	78	34,220	1.29	4,275	\$106,875

GREEN INFRASTRUCTURE RECOMMENDATIONS



Hamilton Township Library

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



HAMILTON TOWNSHIP POLICE DIVISION



Subwatershed: Pond Run
Site Area: 419,914 sq. ft.
Address: 1270 Whitehorse
Mercerville Road
Hamilton, NJ 08619
Block and Lot: Block 2163, Lot 7



Bioretention systems can be installed to capture, treat, and infiltrate parking lot runoff. A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
52	218,343	10.5	110.3	1,002.5	0.170	5.99

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.233	39	17,130	0.64	2,240	\$11,200
Pervious pavement	0.414	69	30,400	1.14	2,840	\$71,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Hamilton Township Police Division

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



KUSER ELEMENTARY SCHOOL



Subwatershed: Pond Run

Site Area: 114,206 sq. ft.

Address: 70 Newkirk Avenue
Hamilton, NJ 08629

Block and Lot: Block 2023, Lot 31,32,42,43

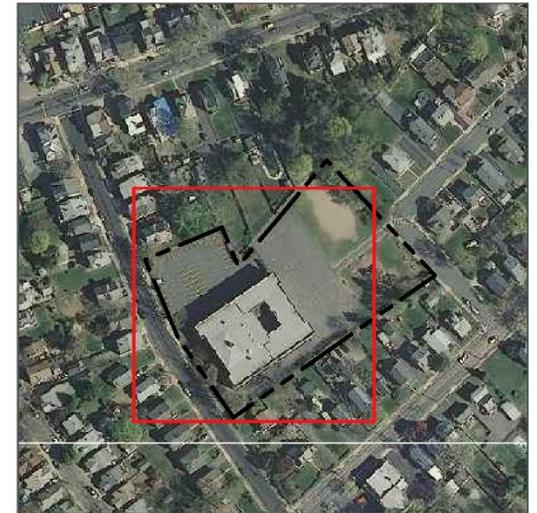
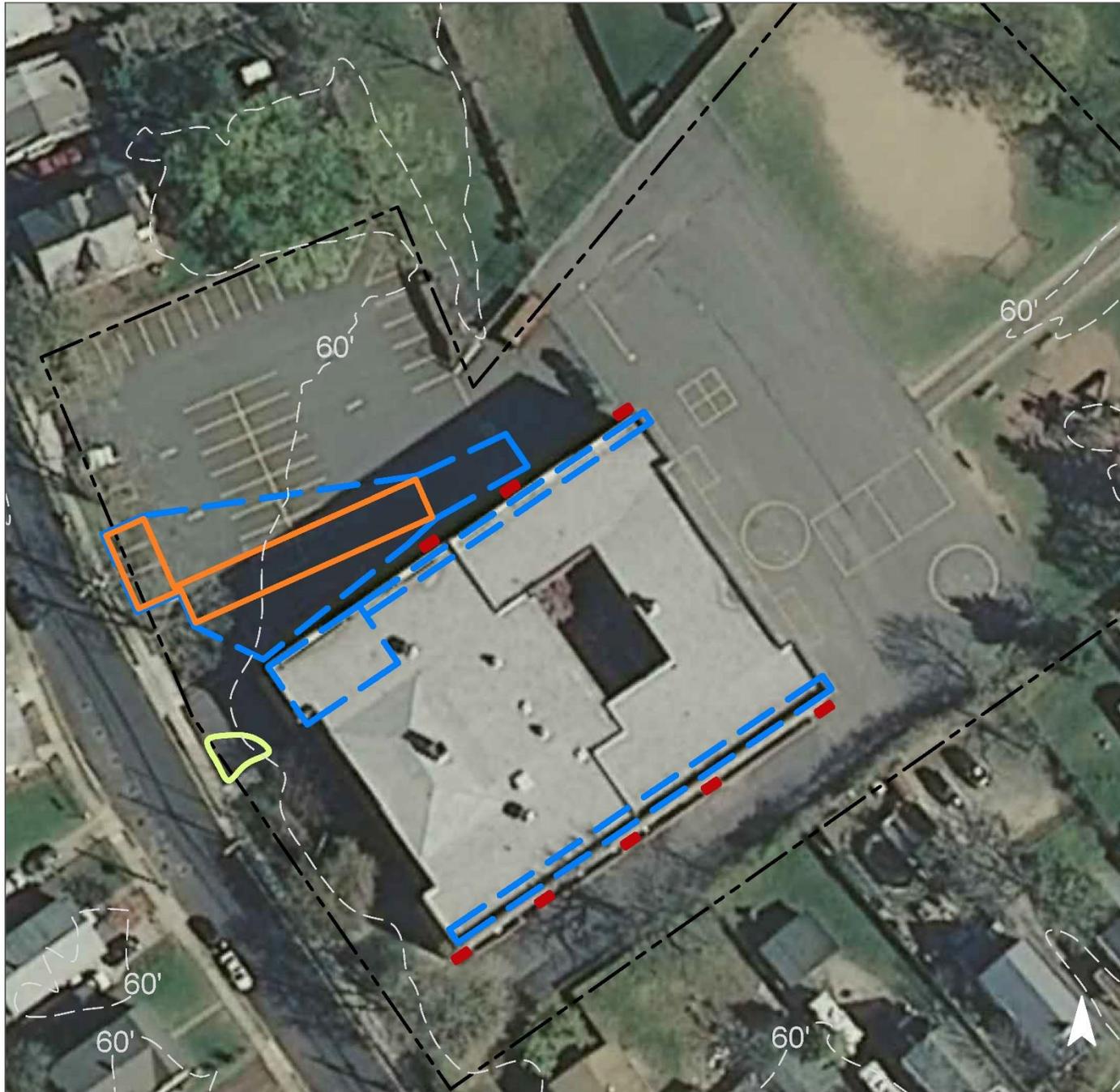


A bioretention system can be installed at the front of the building to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Planter boxes can be constructed to allow roof runoff to be reused. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
67	76,683	3.7	38.7	352.1	0.060	2.10

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.026	4	1,910	0.07	250	\$1,250
Pervious pavement	0.150	25	11,040	0.41	2,440	\$61,000
Planter boxes	n/a	6	n/a	n/a	8 (boxes)	\$8,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Kuser Elementary School

-  bioretention system
-  pervious pavement
-  planter box
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



LANGTREE ELEMENTARY SCHOOL



Subwatershed: Pond Run

Site Area: 679,288 sq. ft.

Address: 2080 Whatley Road
Hamilton, NJ 08690

Block and Lot: Block 1925, Lot 19



Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
13	88,838	4.3	44.9	407.9	0.069	2.44

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.314	53	23,050	0.87	3,020	\$15,100
Pervious pavement	0.405	68	29,740	1.12	4,210	\$105,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Langtree Elementary School

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



MERCERVILLE ELEMENTARY SCHOOL



Subwatershed: Pond Run

Site Area: 197,433 sq. ft.

Address: 60 Regina Avenue
Hamilton, NJ 08619

Block and Lot: Block 1694, Lot 27,28,29,30



Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
58	113,776	5.5	57.5	522.4	0.089	3.12

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.760	127	55,730	2.09	5,290	\$132,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Mercerville Elementary School

-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



PACE CHARTER SCHOOL



Subwatershed: Pond Run

Site Area: 88,487 sq. ft.

Address: 1949 Hamilton Avenue
Hamilton, NJ 08619

Block and Lot: Block 1917, Lot 4



Two bioretention systems can be installed in front of the school to capture, treat, and infiltrate parking lot runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
46	40,404	1.9	20.4	185.5	0.031	1.11

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.122	20	8,930	0.34	1,180	\$5,900
Pervious pavement	0.335	56	24,600	0.92	3,240	\$81,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Pace Charter School

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



REYNOLDS MIDDLE SCHOOL



Subwatershed: Pond Run

Site Area: 1,235,105 sq. ft.

Address: 2145 Yardville Hamilton Square Road
Hamilton, NJ 08690

Block and Lot: Block 1943, Lot 5



Bioretention systems can be installed to capture, treat, and infiltrate parking lot and roof runoff. Planter boxes can be constructed along the pavilion to allow roof runoff to be reused. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
23	284,929	13.7	143.9	1,308.2	0.222	7.81

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.192	32	14,070	0.53	1,840	\$9,200
Planter boxes	n/a	6	n/a	n/a	8 (boxes)	\$8,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Reynolds Middle School

-  bioretention system
-  planter box
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



SAYEN ELEMENTARY SCHOOL



Subwatershed: Pond Run

Site Area: 538,634 sq. ft.

Address: 3333 Nottingham Way
Hamilton, NJ 08690

Block and Lot: Block 1828, Lot 14



Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. Planter boxes can be constructed to allow roof runoff to be reused. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
15	80,043	3.9	40.4	367.5	0.062	2.20

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.220	37	16,160	0.61	2,115	\$10,575
Planter boxes	n/a	2	n/a	n/a	3 (boxes)	\$3,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Sayen Elementary School

-  bioretention system
-  planter box
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



ST. GREGORY THE GREAT CATHOLIC CHURCH



Subwatershed: Pond Run

Site Area: 663,284 sq. ft.

Address: 4620 Nottingham Way
Hamilton, NJ 08690

Block and Lot: Block 1841, Lot 182,183



Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Rainwater can be harvested by installing a cistern to provide water for the school's garden. Planter boxes can be constructed to allow roof runoff to be reused. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
51	338,012	16.3	170.7	1,551.9	0.263	9.27

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.204	34	14,990	0.56	1,960	\$9,800
Pervious pavement	2.114	354	155,110	5.83	15,070	\$376,750
Planter boxes	n/a	5	n/a	n/a	6 (boxes)	\$6,000
Rainwater harvesting	0.043	7	1,300	0.12	1,300 (gal)	\$2,600

GREEN INFRASTRUCTURE RECOMMENDATIONS



St. Gregory the Great Catholic Church

-  bioretention system
-  pervious pavement
-  planter box
-  rainwater harvesting
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



SUBURBAN PLAZA (WALMART)



Subwatershed: Pond Run
Site Area: 1,058,104 sq. ft.
Address: 1700 Nottingham Way
Hamilton, NJ 08619
Block and Lot: Block 1589, Lot 167,168



Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
88	925,875	44.6	467.6	4,251.0	0.721	25.39

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.328	55	24,090	0.91	35,100	\$877,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



Suburban Plaza (Walmart)

-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



TRENTON CATHOLIC ACADEMY



Subwatershed: Pond Run

Site Area: 1,562,067 sq. ft.

Address: 175 Leonard Avenue
Hamilton, NJ 08610

Block and Lot: Block 2154, Lot 1.01,2



Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
14	213,685	10.3	107.9	981.1	0.166	5.86

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.350	59	25,690	0.97	3,360	\$16,800
Pervious pavement	1.706	286	125,190	4.70	13,515	\$337,875

GREEN INFRASTRUCTURE RECOMMENDATIONS



Trenton Catholic Academy

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



WHITEHORSE PLAZA SHOPPING CENTER



Subwatershed: Pond Run

Site Area: 366,404 sq. ft.

Address: 1750 Whitehorse
Mercerville Road
Hamilton, NJ 08619

Block and Lot: Block 1922, Lot 7



Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
85	310,784	15.0	157.0	1,426.9	0.242	8.52

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	1.781	298	130,690	4.91	13,950	\$348,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



Whitehorse Plaza Shopping Center

-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



ALDI



Subwatershed: Shady Brook

Site Area: 174,577 sq. ft.

Address: 2735 South Broad Street
Hamilton, NJ 08610

Block and Lot: Block 2451, Lot 2

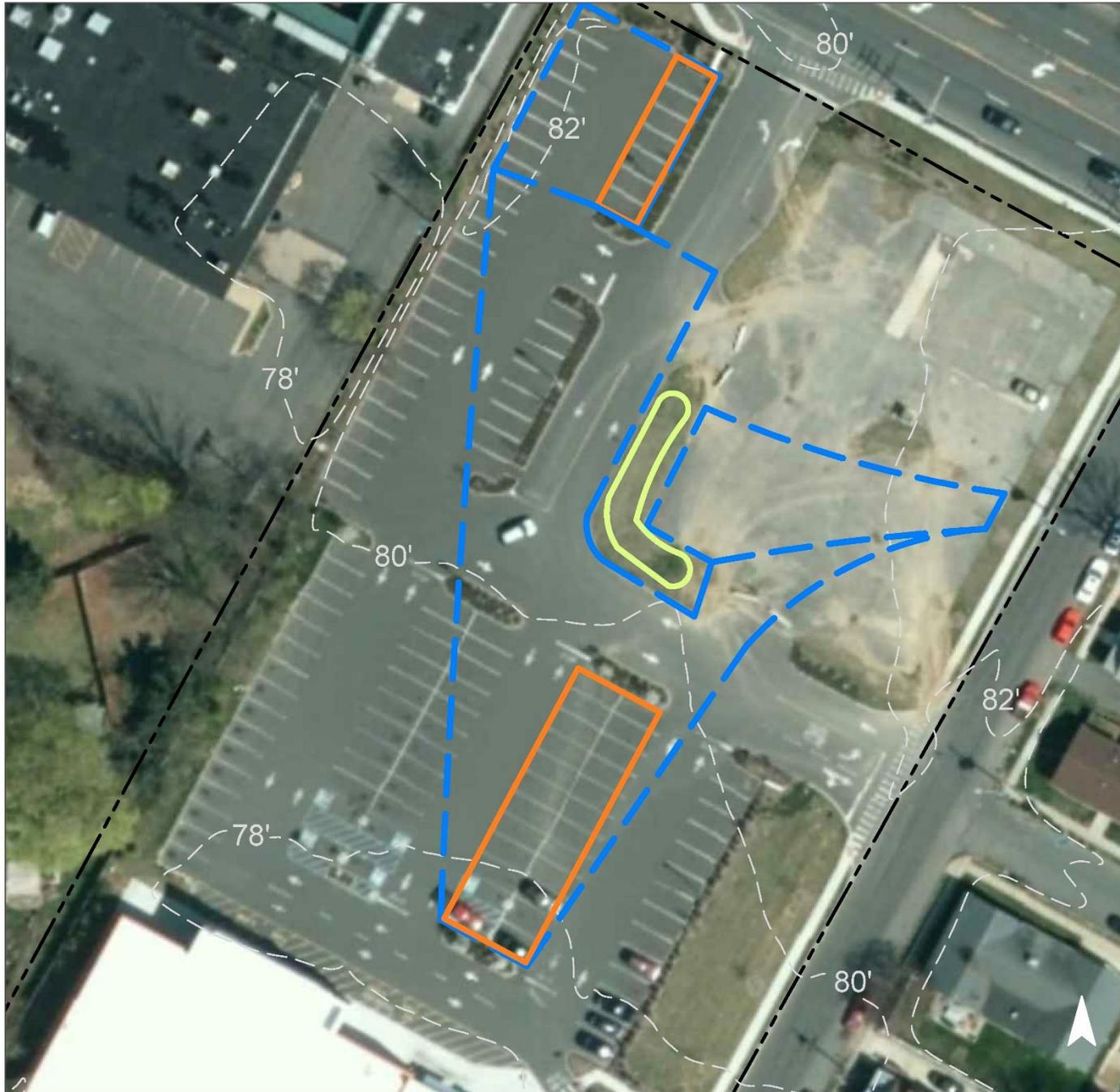


A bioretention system can be installed to capture, treat, and infiltrate runoff from the abandoned parking lot in front of the store. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
79	138,254	6.7	69.8	634.8	0.108	3.79

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.104	17	7,640	0.29	1,000	\$5,000
Pervious pavement	0.686	115	50,310	1.89	5,235	\$130,875

GREEN INFRASTRUCTURE RECOMMENDATIONS



Aldi

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



DUETZVILLE PARK



Subwatershed: Shady Brook

Site Area: 848,988 sq. ft.

Address: 498 Bunting Avenue
Hamilton, NJ 08611

Block and Lot: Block 2187, Lot 3,4



A bioretention system can be installed to capture, treat, and infiltrate roof runoff from the recreation building. A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
10	81,162	3.9	41.0	372.6	0.063	2.23

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.039	7	2,880	0.11	376	\$1,881
Pervious pavement	0.337	56	24,700	0.93	3,420	\$85,500

GREEN INFRASTRUCTURE RECOMMENDATIONS



Duetzville Park

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



GEORGE E. WILSON ELEMENTARY SCHOOL



Subwatershed: Shady Brook

Site Area: 931,393 sq. ft.

Address: 600 East Park Avenue
Hamilton, NJ 08610

Block and Lot: Block 2379, Lot 1,31

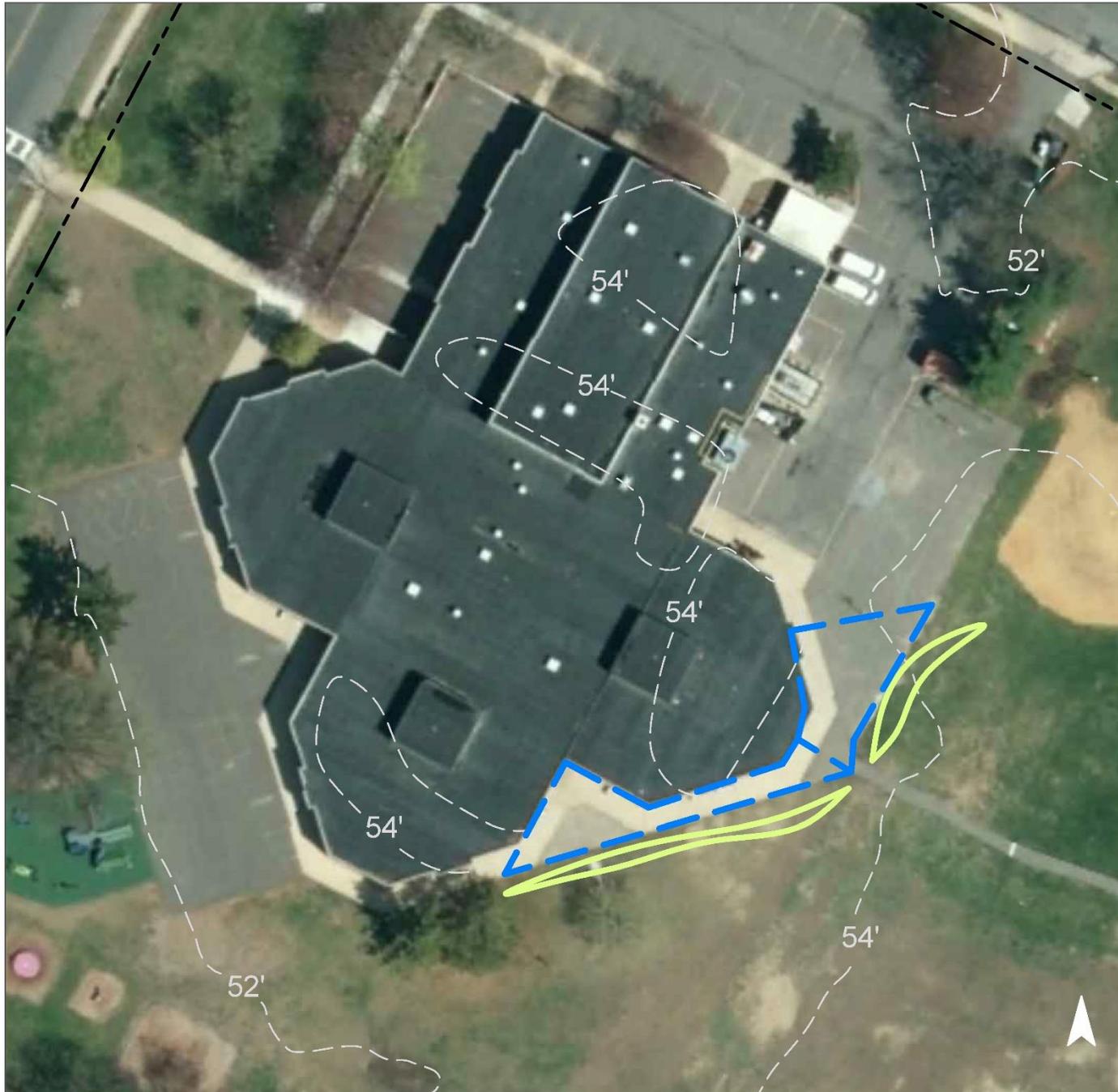


Bioretention systems can be installed to capture, treat, and infiltrate runoff from adjacent paved surfaces. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
15	139,279	6.7	70.3	639.5	0.109	3.82

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.098	16	7,210	0.27	950	\$4,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



**George E. Wilson
Elementary School**

-  bioretention system
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



GRICE MIDDLE SCHOOL



Subwatershed: Shady Brook

Site Area: 954,219 sq. ft.

Address: 901 Whitehorse-Hamilton
Square Road
Hamilton, NJ 08610

Block and Lot: Block 2445, Lot 21,51



Bioretention systems can be installed to capture, treat, and infiltrate roof runoff generated from paved surfaces. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
26	244,895	11.8	123.7	1,124.4	0.191	6.72

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.114	19	8,360	0.31	1,100	\$5,500
Pervious pavement	1.203	201	88,270	3.32	11,450	\$286,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Grice Middle School

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



HAMILTON EDUCATIONAL PROGRAM



Subwatershed: Shady Brook

Site Area: 42,765 sq. ft.

Address: 310 Rowan Avenue
Hamilton, NJ 08610

Block and Lot: Block 2362, Lot 1



A bioretention system can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
82	35,165	1.7	17.8	161.5	0.027	0.96

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.036	6	2,640	0.10	350	\$1,750
Pervious pavement	0.308	52	22,620	0.85	3,320	\$83,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Hamilton Educational Program

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



HAMILTON HIGH SCHOOL WEST



Subwatershed: Shady Brook

Site Area: 382,143 sq. ft.

Address: 2720 South Clinton Avenue
Hamilton, NJ 08610

Block and Lot: Block 2346, Lot 1-3, 17-25

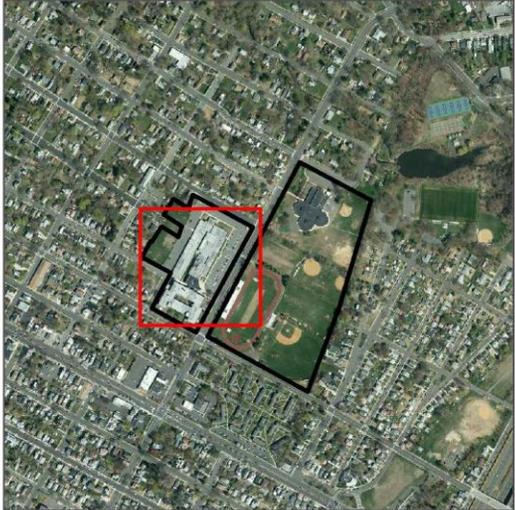
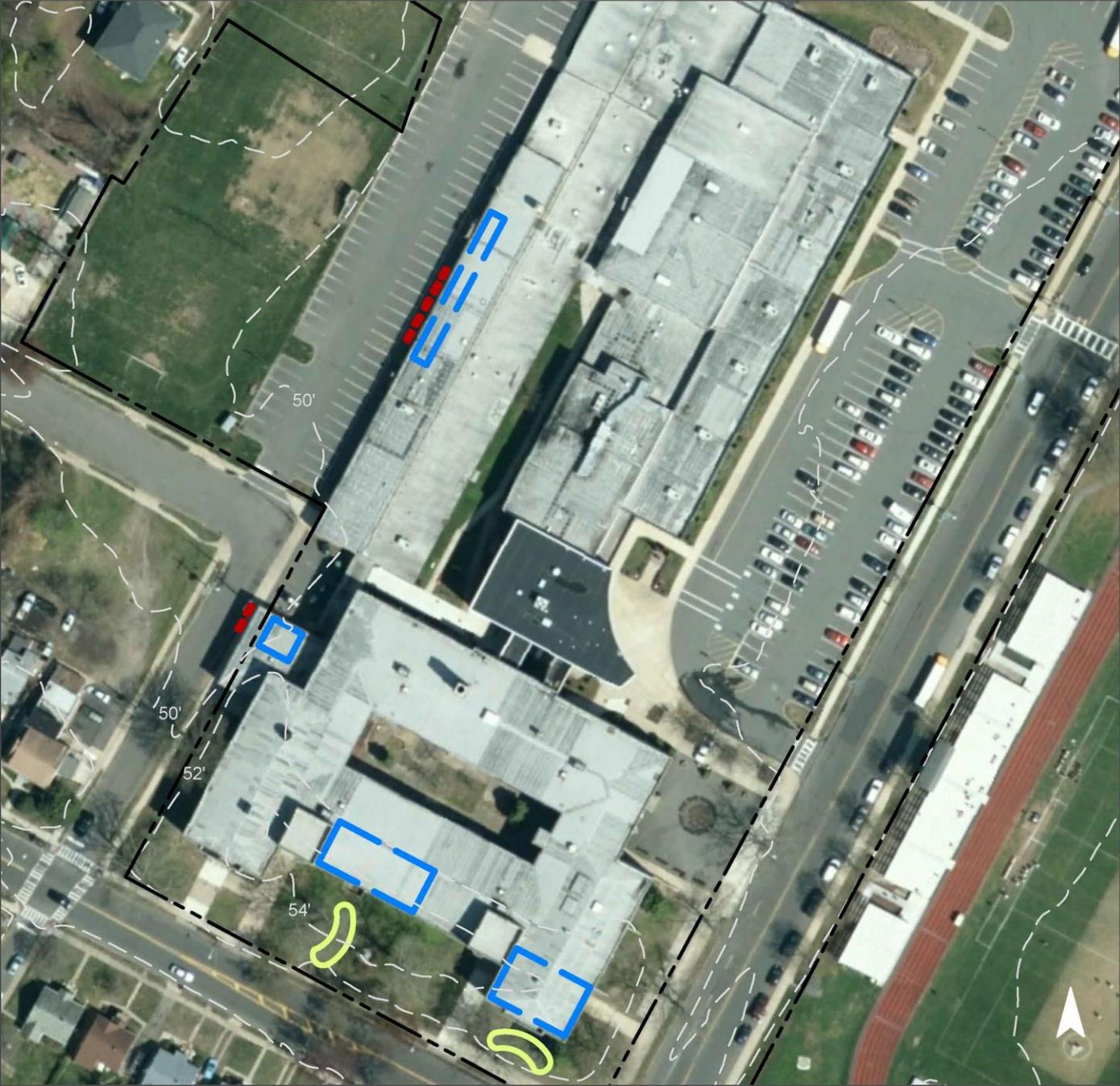


Bioretention systems can be installed to capture, treat, and infiltrate rooftop runoff. Planter boxes can be constructed where disconnected downspouts are discharging stormwater into parking areas. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
78	296,723	14.3	149.9	1,362.4	0.231	8.14

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.104	17	7,640	0.29	1,000	\$5,000
Planter boxes	n/a	6	n/a	n/a	7 (boxes)	\$7,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Hamilton High School West

-  bioretention system
-  planter box
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



INDEPENDENCE MALL



Subwatershed: Shady Brook

Site Area: 1,113,428 sq. ft.

Address: 2496 South Broad Street
Hamilton, NJ 08610

Block and Lot: Block 2389, Lot 3,5



A bioretention system can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
94	1,050,665	50.7	530.6	4,824.0	0.819	28.82

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.125	21	9,180	0.34	1,200	\$6,000
Pervious pavement	1.570	263	115,190	4.33	13,815	\$345,375

GREEN INFRASTRUCTURE RECOMMENDATIONS



Independence Mall

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



K MCCOY INC. INSURANCE AGENCY



Subwatershed: Shady Brook

Site Area: 30,764 sq. ft.

Address: 1878 Arena Drive
Hamilton, NJ 08610

Block and Lot: Block 2531, Lot 1

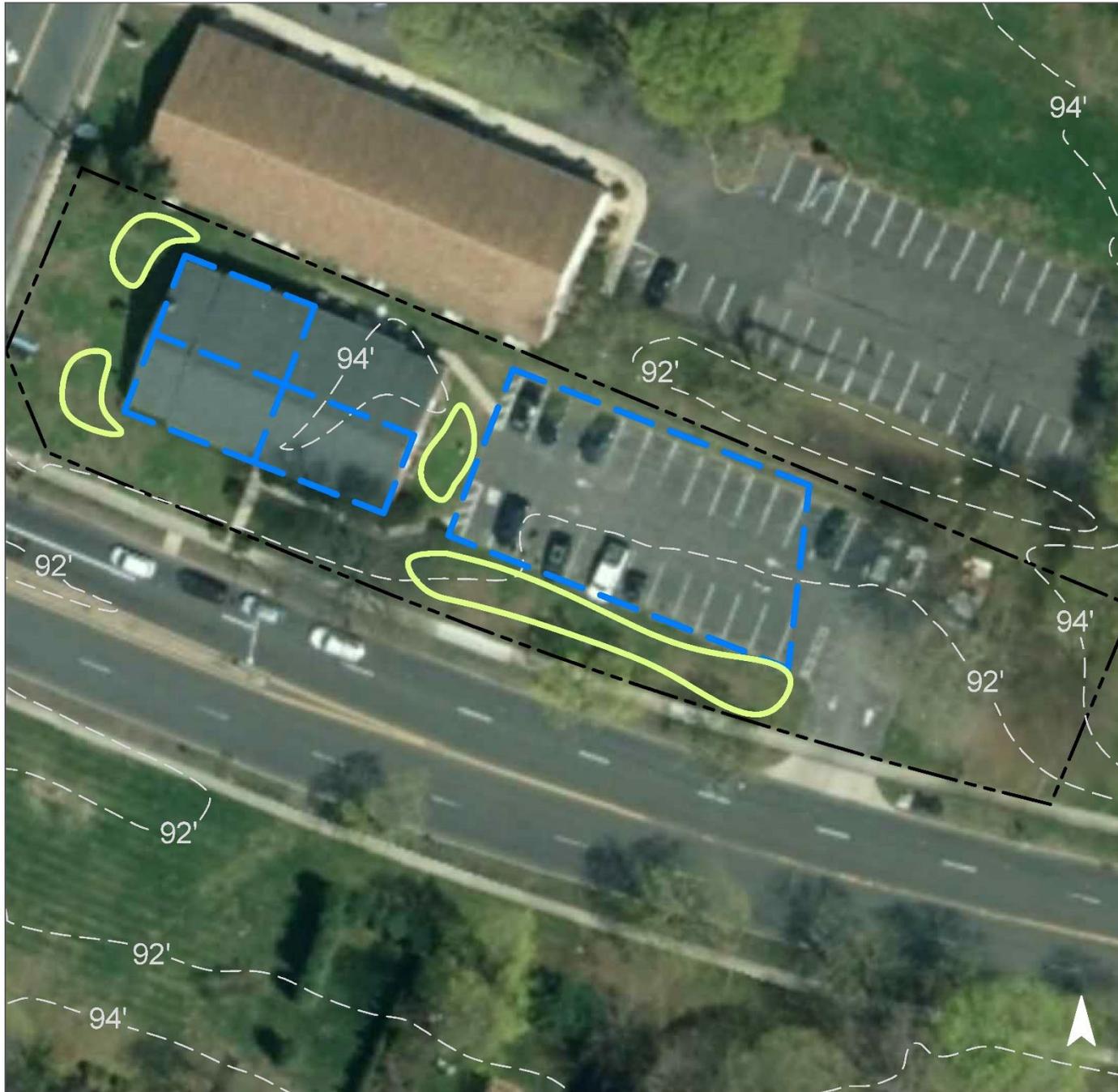


Bioretention systems can be installed to capture, treat, and infiltrate parking lot and roof runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
65	19,997	1.0	10.1	91.8	0.016	0.55

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.261	44	19,120	0.72	2,515	\$12,575

GREEN INFRASTRUCTURE RECOMMENDATIONS



K McCoy Inc. Insurance Agency

-  bioretention system
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



KISTHARDT ELEMENTARY SCHOOL



Subwatershed: Shady Brook

Site Area: 203,419 sq. ft.

Address: 215 Harcourt Drive
Hamilton, NJ 08610

Block and Lot: Block 2411, Lot 13



A bioretention system can be installed to capture, treat, and infiltrate runoff from the roof and paved playground. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
41	84,386	4.1	42.6	387.4	0.066	2.31

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.017	3	1,240	0.05	165	\$825
Pervious pavement	0.307	51	22,560	0.85	2,880	\$72,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Kisthardt Elementary School

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



LALOR ELEMENTARY SCHOOL



Subwatershed: Shady Brook

Site Area: 129,800 sq. ft.

Address: 25 Barnt Deklyn Road
Hamilton, NJ 08610

Block and Lot: Block 2212, Lot 1



Bioretention systems can be installed to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Planter boxes can be constructed around the perimeter of the building to allow roof runoff to be reused. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
42	54,848	2.6	27.7	251.8	0.043	1.50

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.060	10	4,410	0.17	580	\$2,900
Pervious pavement	0.106	18	7,740	0.29	975	\$24,375
Planter boxes	n/a	3	n/a	n/a	4 (boxes)	\$4,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Lalor Elementary School

-  bioretention system
-  pervious pavement
-  planter box
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



LIFE ST. FRANCIS



Subwatershed: Shady Brook
Site Area: 25,000 sq. ft.
Address: 1435 Liberty Street
Hamilton, NJ 08610
Block and Lot: Block 2033, Lot 1

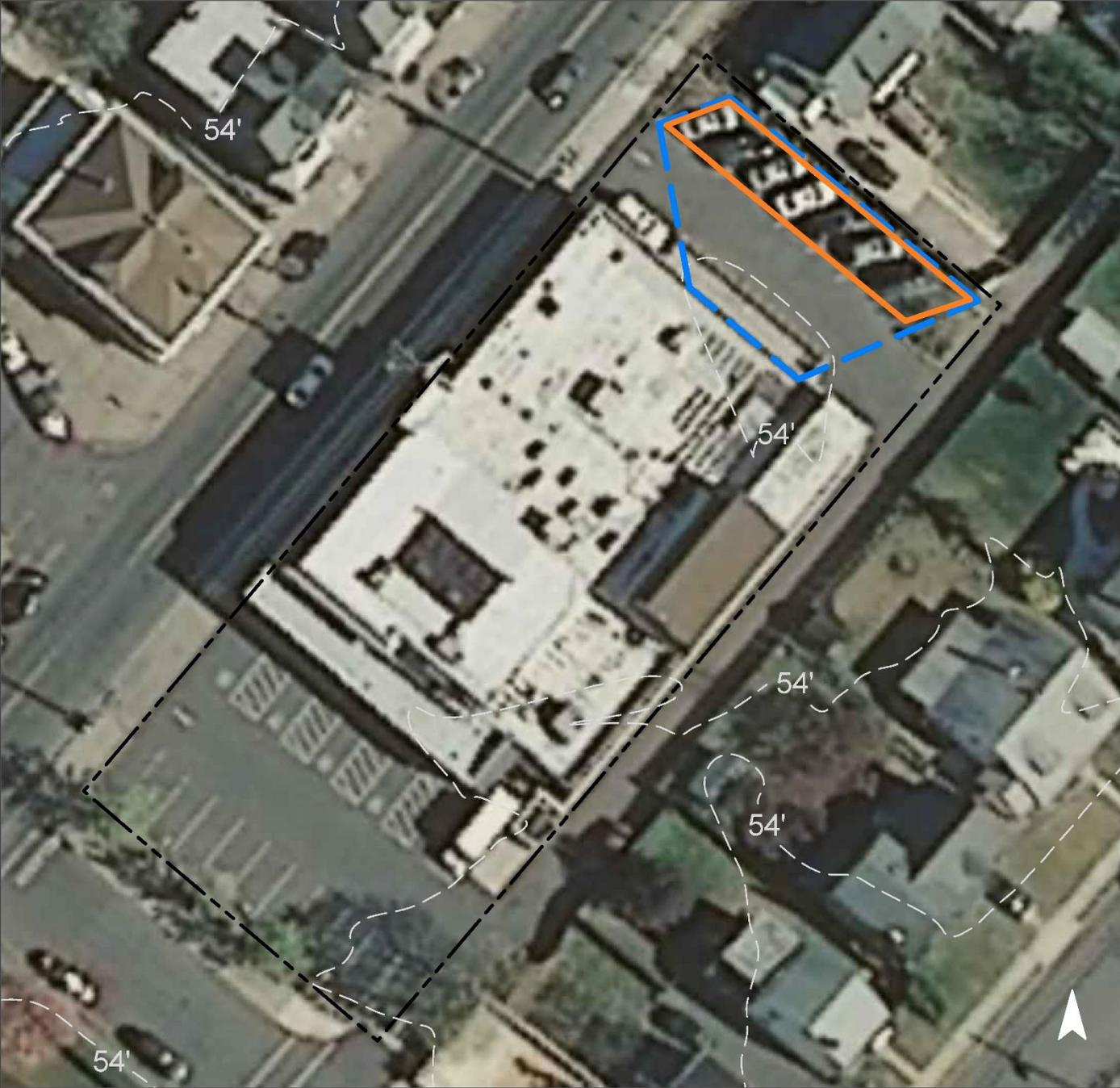


A row of parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
90	22,500	1.1	11.4	103.3	0.018	0.62

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.081	14	5,960	0.22	1,400	\$35,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Life St. Francis

-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



MCGALLIARD ELEMENTARY SCHOOL



Subwatershed: Shady Brook

Site Area: 437,779 sq. ft.

Address: 1600 Arena Drive
Hamilton, NJ 08610

Block and Lot: Block 2474, Lot 48

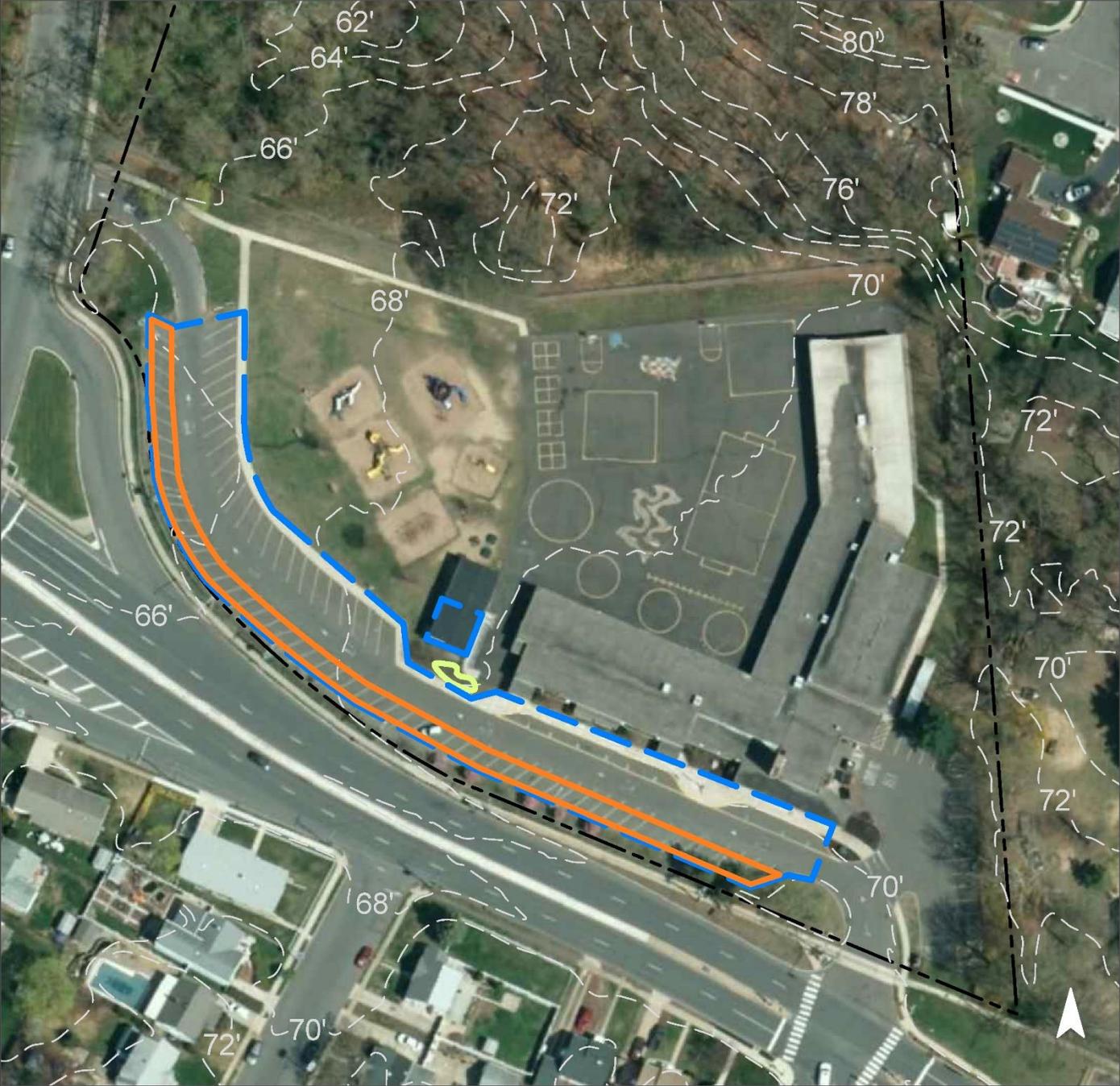


A bioretention system can be installed near the trailer building to capture, treat, and infiltrate roof runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater from the parking lot. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
33	145,044	7.0	73.3	665.9	0.113	3.98

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.020	3	1,500	0.06	200	\$1,000
Pervious pavement	0.858	144	62,970	2.37	9,970	\$249,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



McGalliard Elementary School

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



RUSLING HOSE FIRE COMPANY



Subwatershed: Shady Brook

Site Area: 41,181 sq. ft.

Address: 13 Rennie Street
Hamilton, NJ 08610

Block and Lot: Block 2302, Lot 1



A bioretention system can be installed near the front of the building to capture, treat, and infiltrate street runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
75	30,885	1.5	15.6	141.8	0.024	0.85

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.152	26	11,180	0.42	1,465	\$7,325
Pervious pavement	0.242	40	17,750	0.67	2,285	\$57,125

GREEN INFRASTRUCTURE RECOMMENDATIONS



Rusling Hose Fire Company

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



ST. MARK LUTHERAN CHURCH



Subwatershed: Shady Brook

Site Area: 45,290 sq. ft.

Address: 350 White Horse Avenue
Hamilton, NJ 08610

Block and Lot: Block 2493, Lot 7,8,9,10

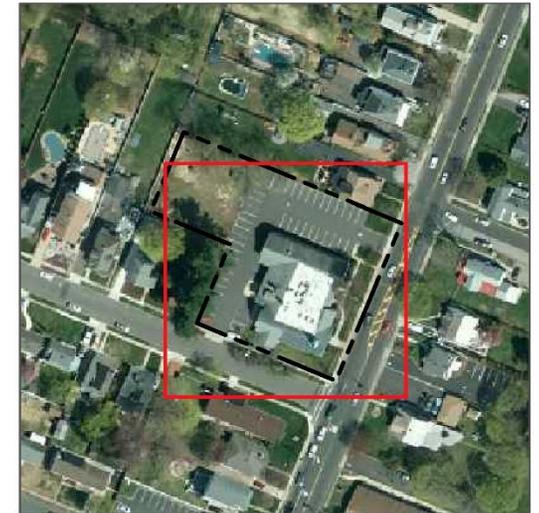


Bioretention systems can be installed to capture, treat, and infiltrate parking lot runoff. Parking spaces can be replaced with pervious pavement to capture and infiltrate stormwater. Additional rainwater can be harvested by installing a second rain barrel or small cistern on the shed near the raised garden beds. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
40	32,042	1.5	16.2	147.1	0.025	0.88

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention systems	0.075	12	5,480	0.21	720	\$3,600
Pervious pavement	0.499	84	36,610	1.38	3,420	\$85,500
Rainwater harvesting	0.003	0	100	0.01	100 (gal)	\$200

GREEN INFRASTRUCTURE RECOMMENDATIONS



St. Mark Lutheran Church

-  bioretention system
-  pervious pavement
-  rainwater harvesting
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



TRUE SERVANT PRESCHOOL ACADEMY



Subwatershed: Shady Brook

Site Area: 34,069 sq. ft.

Address: 2630 South Broad Street
Hamilton, NJ 08610

Block and Lot: Block 2423, Lot 2, 24

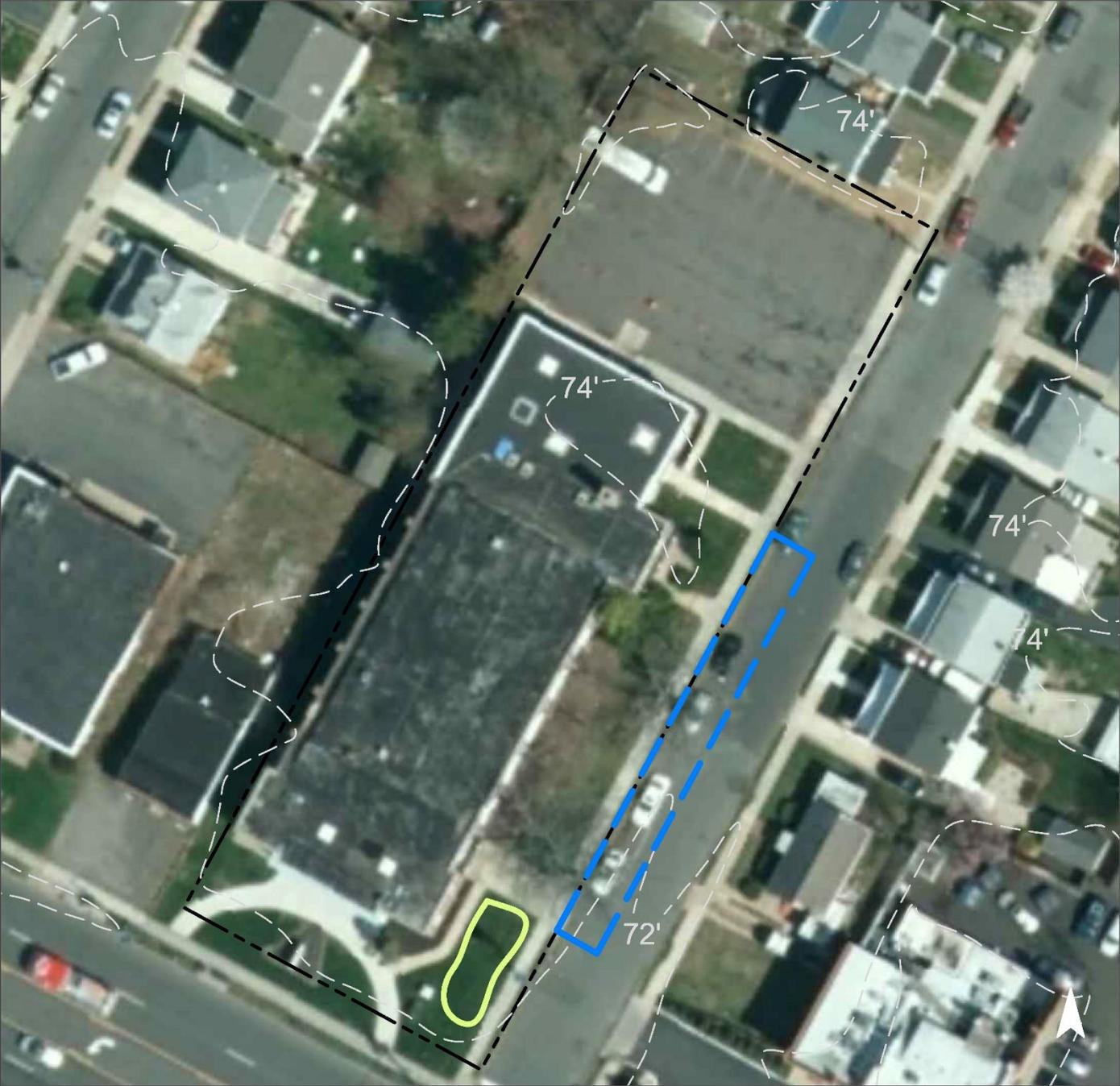


A bioretention system can be installed near the front of the building by using a trench drain to capture, treat, and infiltrate street runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
89	30,209	1.5	15.3	138.7	0.024	0.83

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.156	26	11,470	0.43	550	\$2,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



True Servant Preschool Academy

-  bioretention system
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



Attachment 2

Summary of Existing Conditions

Summary of Existing Conditions

Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial)			Runoff Volumes from I.C.	
								TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Water Quality Storm (1.25" over 2-hours) (Mgal)	Annual (Mgal)
ASSUNPINK CREEK SUBWATERSHED	70.51	3,071,259				1,875,191	43.05	90.4	947.1	8,609.7	1.461	51.43
1 BLV Holding Company Inc. Total Site Info	2.94	128,109	1581	13, 14	60	76,494	1.76	3.7	38.6	351.2	0.060	2.10
2 Cornell Heights Field Total Site Info	4.77	207,769	1535	19	24	49,319	1.13	2.4	24.9	226.4	0.038	1.35
3 Ibis Plaza Office Suites Total Site Info	8.34	363,367	1521	113, 114	86	313,593	7.20	15.1	158.4	1,439.8	0.244	8.60
4 Medallion Care Total Site Info	16.73	728,833	1505	9	45	325,970	7.48	15.7	164.6	1,496.6	0.254	8.94
5 Siemens Industry & Delaval Turbomachinery Total Site Info	37.72	1,643,180	1517	1	68	1,109,814	25.48	53.5	560.5	5,095.6	0.865	30.44
BACK CREEK SUBWATERSHED	120.52	5,249,690				1,736,491	39.86	83.7	877.0	7,972.9	1.353	47.63
6 AAA Mid Atlantic Total Site Info	21.23	924,624	2612	5.02	30	276,011	6.34	13.3	139.4	1,267.3	0.215	7.57
7 Abandon Restaurant Total Site Info	1.82	79,478	2686	1, 2	82	65,161	1.50	3.1	32.9	299.2	0.051	1.79
8 Caola Company Total Site Info	2.18	94,850	2591	14	53	50,019	1.15	2.4	25.3	229.7	0.039	1.37
9 Crockett Middle School Total Site Info	40.22	1,751,814	2592	2	14	252,991	5.81	12.2	127.8	1,161.6	0.197	6.94
10 Custom Calibrations Solutions, LLC Total Site Info	4.62	201,089	2712	130	40	81,426	1.87	3.9	41.1	373.9	0.063	2.23
11 Hamilton Medical Arts Total Site Info	4.20	182,831	2591	7	66	121,379	2.79	5.9	61.3	557.3	0.095	3.33

Summary of Existing Conditions

Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial)			Runoff Volumes from I.C.	
								TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Water Quality Storm (1.25" over 2-hours) (Mgal)	Annual (Mgal)
12 Kleinfelder Total Site Info	7.11	309,617	2597	13	40	124,614	2.86	6.0	62.9	572.2	0.097	3.42
13 S. T. Peterson & Co. Inc. Office Space Total Site Info	7.01	305,378	2597	14	38	116,632	2.68	5.6	58.9	535.5	0.091	3.20
14 Skylink Technologies Total Site Info	1.61	69,930	2597.01	5	89	62,020	1.42	3.0	31.3	284.8	0.048	1.70
15 Verizon Total Site Info	20.84	907,720	2612	5.07, 5.08	48	431,354	9.90	20.8	217.9	1,980.5	0.336	11.83
16 York Risk Services Total Site Info	9.70	422,358	2597.01	1	37	154,883	3.56	7.5	78.2	711.1	0.121	4.25
CROSSWICKS CREEK SUBWATERSHED	146.16	6,366,857				1,243,006	28.54	59.9	627.8	5,707.1	0.969	34.09
17 Grow-Ville Community Day School Total Site Info	0.70	30,612	2661	24, 26	85	26,020	0.60	1.3	13.1	119.5	0.020	0.71
18 Robinson Elementary School Total Site Info	9.38	408,677	2548	17, 18, 19	28	113,018	2.59	5.4	57.1	518.9	0.088	3.10
19 St. Raphael-Holy Angels Parish Total Site Info	14.03	611,220	2542	30, 32	48	293,454	6.74	14.1	148.2	1,347.4	0.229	8.05
20 Sunnybrae Elementary School Total Site Info	6.75	294,171	2606	126	26	75,555	1.73	3.6	38.2	346.9	0.059	2.07
21 Sunnybrae League Park Total Site Info	26.14	1,138,686	2606	96, 98	8	96,109	2.21	4.6	48.5	441.3	0.075	2.64
22 Switlik Park Total Site Info	18.54	807,435	2614	130	15	122,463	2.81	5.9	61.8	562.3	0.095	3.36

Summary of Existing Conditions

Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial)			Runoff Volumes from I.C.	
								TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Water Quality Storm (1.25" over 2-hours) (Mgal)	Annual (Mgal)
23 The Stone Terrace Total Site Info	12.12	527,979	2575	161	35	186,118	4.27	9.0	94.0	854.5	0.145	5.10
24 Yardville Heights Elementary School Total Site Info	5.60	244,009	2606	15	43	103,719	2.38	5.0	52.4	476.2	0.081	2.84
25 YMCA Total Site Info	52.89	2,304,067	2730	14.01	10	226,550	5.20	10.9	114.4	1,040.2	0.177	6.21
DOCTORS CREEK SUBWATERSHED	16.61	723,410				191,542	4.40	9.2	96.7	879.4	0.149	5.25
26 St. George Ukrainian Orthodox Church Total Site Info	12.31	536,154	2724	82	20	109,828	2.52	5.3	55.5	504.3	0.086	3.01
27 Yardville Elementary School Total Site Info	4.30	187,256	2699	1	44	81,714	1.88	3.9	41.3	375.2	0.064	2.24
MIRY RUN SUBWATERSHED	120.89	5,265,901				2,306,287	52.95	111.2	1164.8	10,589.0	1.797	63.25
28 Christ Presbyterian Church Total Site Info	3.27	142,625	1656	58	23	32,397	0.74	1.6	16.4	148.7	0.025	0.89
29 Clover Square Total Site Info	20.38	887,560	1603	19	81	721,004	16.55	34.8	364.1	3,310.4	0.562	19.77
30 Enterprise Volunteer Fire Co. Total Site Info	1.14	49,506	1648	12, 16	88	43,673	1.00	2.1	22.1	200.5	0.034	1.20
31 First Pentecostal Prayer of Faith Church Total Site Info	0.81	35,411	1836	34	87	30,651	0.70	1.5	15.5	140.7	0.024	0.84
32 First Presbyterian Church/YMCA Young Wonders Total Site Info	1.96	85,330	1830	20, 50, 51, 52	81	68,988	1.58	3.3	34.8	316.7	0.054	1.89
33 H.D. Morrison Elementary School (University Heights) Total Site Info	12.91	562,187	1561	13, 24, 25	22	126,391	2.90	6.1	63.8	580.3	0.098	3.47

Summary of Existing Conditions

Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial)			Runoff Volumes from I.C.	
								TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Water Quality Storm (1.25" over 2-hours) (Mgal)	Annual (Mgal)
34 Hamilton Square Baptist Church Total Site Info	3.60	156,832	1839	87	44	68,505	1.57	3.3	34.6	314.5	0.053	1.88
35 Hamilton Township School District Total Site Info	1.30	56,745	1836	6, 8	87	49,126	1.13	2.4	24.8	225.6	0.038	1.35
36 Klockner Elementary School Total Site Info	2.36	102,765	1659	2, 3	48	49,185	1.13	2.4	24.8	225.8	0.038	1.35
37 Merlin Industries Inc. Total Site Info	21.48	935,824	1602	7	22	203,182	4.66	9.8	102.6	932.9	0.158	5.57
38 Morgan Elementary School Total Site Info	8.48	369,401	1618	34, 40	35	129,743	2.98	6.3	65.5	595.7	0.101	3.56
39 Nottingham Little League Total Site Info	14.14	615,843	1722	95, 96, 105	21	127,290	2.92	6.1	64.3	584.4	0.099	3.49
40 Nottingham Volunteer Fire Company Station 17 Total Site Info	3.52	153,281	1839	24.01	93	141,848	3.26	6.8	71.6	651.3	0.111	3.89
41 Our Lady of Sorrows School Total Site Info	11.88	517,440	1666	80	42	219,134	5.03	10.6	110.7	1,006.1	0.171	6.01
42 Saint Mark United Methodist Church Total Site Info	6.52	284,082	1622	8	40	113,873	2.61	5.5	57.5	522.8	0.089	3.12
43 University Plaza Total Site Info	3.85	167,756	1551	16	72	120,521	2.77	5.8	60.9	553.4	0.094	3.31
44 VFW Hamilton Township Post Total Site Info	3.29	143,315	1660	25, 26	42	60,776	1.40	2.9	30.7	279.0	0.047	1.67

Summary of Existing Conditions

Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial)			Runoff Volumes from I.C.	
								TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Water Quality Storm (1.25" over 2-hours) (Mgal)	Annual (Mgal)
POND RUN SUBWATERSHED	279.66	12,181,921				3,725,758	85.53	179.6	1881.7	17,106.3	2.903	102.19
45 Alexander Elementary School Total Site Info	12.09	526,633	1980	20	24	128,186	2.94	6.2	64.7	588.6	0.100	3.52
46 Bromley Park Total Site Info	5.05	219,967	1733	7	14	29,780	0.68	1.4	15.0	136.7	0.023	0.82
47 Colonial Volunteer Fire Company Total Site Info	7.45	324,471	2154	4	49	158,286	3.63	7.6	79.9	726.8	0.123	4.34
48 Greenwood Elementary School Total Site Info	1.91	83,373	1884	1	89	74,555	1.71	3.6	37.7	342.3	0.058	2.04
49 Hamilton Golf Center Total Site Info	70.62	3,076,264	2163	5, 8	6	198,955	4.57	9.6	100.5	913.5	0.155	5.46
50 Hamilton Lanes Total Site Info	5.52	240,604	2163	9	67	162,114	3.72	7.8	81.9	744.3	0.126	4.45
51 Hamilton Township Municipal Building Total Site Info	10.03	436,805	1757	24	38	164,366	3.77	7.9	83.0	754.7	0.128	4.51
52 Hamilton Township Library Total Site Info	8.06	350,879	2163	6	34	118,144	2.71	5.7	59.7	542.4	0.092	3.24
53 Hamilton Township Police Division Total Site Info	9.64	419,914	2163	7	52	218,343	5.01	10.5	110.3	1,002.5	0.170	5.99
54 Kuser Elementary School Total Site Info	2.62	114,206	2023	31, 32, 42 43	67	76,683	1.76	3.7	38.7	352.1	0.060	2.10
55 Langtree Elementary School Total Site Info	15.59	679,288	1925	19	13	88,838	2.04	4.3	44.9	407.9	0.069	2.44
56 Mercerville Elementary School Total Site Info	4.53	197,433	1694	27, 28 , 29, 30	58	113,776	2.61	5.5	57.5	522.4	0.089	3.12

Summary of Existing Conditions

Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial)			Runoff Volumes from I.C.	
								TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Water Quality Storm (1.25" over 2-hours) (Mgal)	Annual (Mgal)
57 Pace Charter School Total Site Info	2.03	88,487	1917	4	46	40,404	0.93	1.9	20.4	185.5	0.031	1.11
58 Reynolds Middle School Total Site Info	28.35	1,235,105	1943	5	23	284,929	6.54	13.7	143.9	1,308.2	0.222	7.81
59 Sayen Elementary School Total Site Info	12.37	538,634	1828	14	15	80,043	1.84	3.9	40.4	367.5	0.062	2.20
60 St. Gregory the Great Catholic Church Total Site Info	15.23	663,284	1841	182, 183	51	338,012	7.76	16.3	170.7	1,551.9	0.263	9.27
61 Suburban Plaza (Walmart) Total Site Info	24.29	1,058,104	1589	167, 168	88	925,875	21.26	44.6	467.6	4,251.0	0.721	25.39
62 Trenton Catholic Academy Total Site Info	35.86	1,562,067	2154	1.01, 2	14	213,685	4.91	10.3	107.9	981.1	0.166	5.86
63 Whitehorse Plaza Shopping Center Total Site Info	8.41	366,404	1922	7	85	310,784	7.13	15.0	157.0	1,426.9	0.242	8.52
SHADY BROOK SUBWATERSHED	123.85	5,394,812				2,406,053	55.24	116.0	1215.2	11,047.1	1.875	65.99
64 Aldi Total Site Info	4.01	174,577	2451	2	79	138,254	3.17	6.7	69.8	634.8	0.108	3.79
65 Duetzville Park Total Site Info	19.49	848,988	2187	3, 4	10	81,162	1.86	3.9	41.0	372.6	0.063	2.23
66 George E. Wilson Elementary School Total Site Info	21.38	931,393	2379	1, 31	15	139,279	3.20	6.7	70.3	639.5	0.109	3.82
67 Grice Middle School Total Site Info	21.91	954,219	2445	21, 51	26	244,895	5.62	11.8	123.7	1,124.4	0.191	6.72

Summary of Existing Conditions

Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial)			Runoff Volumes from I.C.	
								TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Water Quality Storm (1.25" over 2-hours) (Mgal)	Annual (Mgal)
68 Hamilton Educational Program Total Site Info	0.98	42,765	2362	1	82	35,165	0.81	1.7	17.8	161.5	0.027	0.96
69 Hamilton High School West Total Site Info	8.77	382,143	2346	1-3,17-25	78	296,723	6.81	14.3	149.9	1,362.4	0.231	8.14
70 Independence Mall Total Site Info	25.56	1,113,428	2389	3, 5	94	1,050,665	24.12	50.7	530.6	4,824.0	0.819	28.82
71 K McCoy Inc. Insurance Agency Total Site Info	0.71	30,764	2531	1	65	19,997	0.46	1.0	10.1	91.8	0.016	0.55
72 Kisthardt Elementary School Total Site Info	4.67	203,419	2411	13	41	84,386	1.94	4.1	42.6	387.4	0.066	2.31
73 Lalor Elementary School Total Site Info	2.98	129,800	2212	1	42	54,848	1.26	2.6	27.7	251.8	0.043	1.50
74 Life St. Francis Total Site Info	0.57	25,000	2033	1	90	22,500	0.52	1.1	11.4	103.3	0.018	0.62
75 McGalliard Elementary School Total Site Info	10.05	437,779	2474	48	33	145,044	3.33	7.0	73.3	665.9	0.113	3.98
76 Rusling Hose Fire Company Total Site Info	0.95	41,181	2302	1	75	30,885	0.71	1.5	15.6	141.8	0.024	0.85
77 St. Mark Lutheran Church Total Site Info	1.04	45,290	2493	7, 8, 9, 10	71	32,042	0.74	1.5	16.2	147.1	0.025	0.88
78 True Servant Preschool Academy Total Site Info	0.78	34,069	2423	24	89	30,209	0.69	1.5	15.3	138.7	0.024	0.83

Attachment 3

Summary of Proposed Green Infrastructure Practices

Summary of Proposed Green Infrastructure Practices

Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area		Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost (\$/unit)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									
ASSUNPINK CREEK SUBWATERSHED	135,145	3.10	3.521	589	258,380	9.71				\$814,625	7.2%
1 BLV Holding Company Inc.											
Bioretention system	1,600	0.04	0.042	7	3,060	0.11	400	\$5	SF	\$2,000	2.1%
Pervious pavement	16,785	0.39	0.437	73	32,090	1.21	5,080	\$25	SF	\$127,000	21.9%
Total Site Info	18,385	0.42	0.479	80	35,150	1.32				\$129,000	24.0%
2 Cornell Heights Field											
Bioretention systems	15,200	0.35	0.396	66	29,060	1.09	3,850	\$5	SF	\$19,250	30.8%
Total Site Info	15,200	0.35	0.396	66	29,060	1.09				\$19,250	30.8%
3 Ibis Plaza Office Suites											
Pervious pavement	46,065	1.06	1.200	201	88,070	3.31	11,380	\$25	SF	\$284,500	14.7%
Total Site Info	46,065	1.06	1.200	201	88,070	3.31				\$284,500	14.7%
4 Medallion Care											
Pervious pavement	27,795	0.64	0.724	121	53,140	2.00	8,250	\$25	SF	\$206,250	8.5%
Total Site Info	27,795	0.64	0.724	121	53,140	2.00				\$206,250	8.5%
5 Siemens Industry & Delaval Turbomachinery											
Bioretention system	6,700	0.15	0.175	29	12,810	0.48	1,675	\$5	SF	\$8,375	0.6%
Pervious pavement	21,000	0.48	0.547	92	40,150	1.51	6,690	\$25	SF	\$167,250	1.9%
Total Site Info	27,700	0.64	0.722	121	52,960	1.99				\$175,625	2.5%
BACK CREEK SUBWATERSHED	554,920	12.74	14.450	2,420	1,060,300	39.84				\$2,891,250	32.0%
6 AAA Mid Atlantic											
Bioretention system	5,900	0.14	0.154	26	11,280	0.42	1,475	\$5	SF	\$7,375	2.1%
Pervious pavement	105,850	2.43	2.758	462	202,370	7.60	26,850	\$25	SF	\$671,250	38.3%
Total Site Info	111,750	2.57	2.912	487	213,650	8.02				\$678,625	40.5%
7 Abandon Restaurant											
Pervious pavement	16,450	0.38	0.429	72	31,450	1.18	3,720	\$25	SF	\$93,000	25.2%
Total Site Info	16,450	0.38	0.429	72	31,450	1.18				\$93,000	25.2%

Summary of Proposed Green Infrastructure Practices

Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area		Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost (\$/unit)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									
8 Caola Company											
Bioretention system	6,200	0.14	0.162	27	11,860	0.45	1,550	\$5	SF	\$7,750	12.4%
Pervious pavement	12,900	0.30	0.336	56	24,660	0.93	3,755	\$25	SF	\$93,875	25.8%
Total Site Info	19,100	0.44	0.498	83	36,520	1.38				\$101,625	38.2%
9 Crockett Middle School											
Bioretention systems	20,500	0.47	0.534	89	39,200	1.47	5,130	\$5	SF	\$25,650	8.1%
Total Site Info	20,500	0.47	0.534	89	39,200	1.47				\$25,650	8.1%
10 Custom Calibrations Solutions, LLC											
Bioretention system	12,000	0.28	0.313	52	22,940	0.86	3,000	\$5	SF	\$15,000	14.7%
Pervious pavement	41,655	0.96	1.085	182	79,640	2.99	8,680	\$25	SF	\$217,000	51.2%
Planter box (downspout)	325	0.01	n/a	1	n/a	n/a	3	\$1,000	box	\$3,000	0.4%
Total Site Info	53,980	1.24	1.398	235	102,580	3.85				\$235,000	66.3%
11 Hamilton Medical Arts											
Pervious pavement	30,875	0.71	0.804	135	59,020	2.22	6,970	\$25	SF	\$174,250	25.4%
Total Site Info	30,875	0.71	0.804	135	59,020	2.22				\$174,250	25.4%
12 Kleinfelder											
Bioretention system	2,500	0.06	0.065	11	4,780	0.18	625	\$5	SF	\$3,125	2.0%
Pervious pavement	46,065	1.06	1.200	201	88,070	3.31	11,380	\$25	SF	\$284,500	37.0%
Total Site Info	48,565	1.11	1.265	212	92,850	3.49				\$287,625	39.0%
13 S. T. Peterson & Co. Inc. Office Space											
Bioretention system	4,420	0.10	0.115	19	8,450	0.32	1,120	\$5	SF	\$5,600	3.8%
Pervious pavement	18,500	0.42	0.482	81	35,370	1.33	4,100	\$25	SF	\$102,500	15.9%
Total Site Info	22,920	0.53	0.597	100	43,820	1.65				\$108,100	19.7%
14 Skylink Technologies											
Bioretention system	2,000	0.05	0.052	9	3,820	0.14	500	\$5	SF	\$2,500	3.2%
Total Site Info	2,000	0.05	0.052	9	3,820	0.14				\$2,500	3.2%
15 Verizon											
Pervious pavement	190,550	4.37	4.965	831	364,300	13.69	40,880	\$25	SF	\$1,022,000	44.2%
Total Site Info	190,550	4.37	4.965	831	364,300	13.69				\$1,022,000	44.2%

Summary of Proposed Green Infrastructure Practices

Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area		Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost (\$/unit)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									
16 York Risk Services											
Bioretention system	7,180	0.16	0.187	31	13,730	0.52	1,825	\$5	SF	\$9,125	4.6%
Pervious pavement	31,050	0.71	0.809	135	59,360	2.23	6,150	\$25	SF	\$153,750	20.0%
Total Site Info	38,230	0.88	0.996	167	73,090	2.75				\$162,875	24.7%
CROSSWICKS CREEK SUBWATERSHED	347,580	7.98	8.995	1,514	660,020	24.82				\$1,790,875	28.0%
17 Grow-Ville Community Day School											
Bioretention system	1,220	0.03	0.032	5	2,330	0.09	305	\$5	SF	\$1,525	4.7%
Pervious pavement	15,960	0.37	0.416	70	30,510	1.15	2,850	\$25	SF	\$71,250	61.3%
Total Site Info	17,180	0.39	0.448	75	32,840	1.24				\$72,775	66.0%
18 Robinson Elementary School											
Bioretention systems	19,875	0.46	0.518	87	38,000	1.43	4,970	\$5	SF	\$24,850	17.6%
Pervious pavement	15,660	0.36	0.408	68	29,940	1.13	4,790	\$25	SF	\$119,750	13.9%
Total Site Info	35,535	0.82	0.926	155	67,940	2.56				\$144,600	31.4%
19 St. Raphael-Holy Angels Parish											
Bioretention system	4,120	0.09	0.107	18	7,880	0.30	1,035	\$5	SF	\$5,175	1.4%
Pervious pavement	30,660	0.70	0.799	134	58,620	2.20	7,700	\$25	SF	\$192,500	10.4%
Total Site Info	34,780	0.80	0.906	152	66,500	2.50				\$197,675	11.9%
20 Sunnybrae Elementary School											
Bioretention system	13,520	0.31	0.352	59	25,850	0.97	3,400	\$5	SF	\$17,000	17.9%
Pervious pavement	10,150	0.23	0.264	44	19,400	0.73	4,850	\$25	SF	\$121,250	13.4%
Total Site Info	23,670	0.54	0.617	103	45,250	1.70				\$138,250	31.3%
21 Sunnybrae League Park											
Bioretention system	2,600	0.06	0.068	11	4,970	0.19	650	\$5	SF	\$3,250	2.7%
Pervious pavement	36,425	0.84	0.949	159	69,640	2.62	8,735	\$25	SF	\$218,375	37.9%
Total Site Info	39,025	0.90	1.017	170	74,610	2.81				\$221,625	40.6%
22 Switlik Park											
Bioretention system	2,965	0.07	0.077	13	5,670	0.21	350	\$5	SF	\$1,750	2.4%
Pervious pavement	55,000	1.26	1.433	240	105,150	3.95	12,150	\$25	SF	\$303,750	44.9%
Total Site Info	57,965	1.33	1.510	253	110,820	4.16				\$305,500	47.3%

Summary of Proposed Green Infrastructure Practices

Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area		Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost (\$/unit)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									
23 The Stone Terrace											
Bioretention system	2,470	0.06	0.064	11	4,720	0.18	620	\$5	SF	\$3,100	1.3%
Pervious pavement	42,450	0.97	1.106	185	81,160	3.05	7,885	\$25	SF	\$197,125	22.8%
Planter box (downspout)	1,500	0.03	n/a	6	n/a	n/a	7	\$1,000	box	\$7,000	0.8%
Total Site Info	46,420	1.07	1.170	201	85,880	3.23				\$207,225	24.9%
24 Yardville Heights Elementary School											
Bioretention system	2,060	0.05	0.054	9	3,940	0.15	520	\$5	SF	\$2,600	2.0%
Pervious pavement	24,365	0.56	0.635	106	46,590	1.75	5,010	\$25	SF	\$125,250	23.5%
Planter box (downspout)	860	0.02	n/a	3	n/a	n/a	4	\$1,000	box	\$4,000	0.8%
Total Site Info	27,285	0.63	0.689	118	50,530	1.90				\$131,850	26.3%
25 YMCA											
Bioretention system	9,050	0.21	0.236	39	17,300	0.65	3,250	\$5	SF	\$16,250	4.0%
Pervious pavement	56,670	1.30	1.477	247	108,350	4.07	14,205	\$25	SF	\$355,125	25.0%
Total Site Info	65,720	1.51	1.712	287	125,650	4.72				\$371,375	29.0%
DOCTORS CREEK SUBWATERSHED	19,425	0.45	0.461	84	33,850	1.26				\$62,550	10.1%
26 St. George Ukrainian Orthodox Church											
Bioretention systems	6,185	0.14	0.161	27	11,830	0.44	1,550	\$5	SF	\$7,750	5.6%
Total Site Info	6,185	0.14	0.161	27	11,830	0.44				\$7,750	5.6%
27 Yardville Elementary School											
Bioretention system	1,440	0.03	0.038	6	2,750	0.10	360	\$5	SF	\$1,800	1.8%
Pervious pavement	10,080	0.23	0.263	44	19,270	0.72	1,800	\$25	SF	\$45,000	12.3%
Planter box (downspout)	1,720	0.04	n/a	6	n/a	n/a	8	\$1,000	box	\$8,000	2.1%
Total Site Info	13,240	0.30	0.300	57	22,020	0.82				\$54,800	16.2%
MIRY RUN SUBWATERSHED	459,940	10.56	11.905	2,001	867,955	32.61				\$2,190,250	19.9%
28 Christ Presbyterian Church											
Bioretention system	620	0.01	0.016	3	1,180	0.04	160	\$5	SF	\$800	1.9%
Planter box (downspout)	860	0.02	n/a	3	n/a	n/a	4	\$1,000	box	\$4,000	2.7%
Total Site Info	1,480	0.03	0.016	6	1,180	0.04				\$4,800	4.6%

Summary of Proposed Green Infrastructure Practices

Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area		Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost (\$/unit)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									
29 Clover Square											
Pervious pavement	170,810	3.92	4.451	745	326,560	12.27	34,649	\$25	SF	\$866,225	23.7%
Total Site Info	170,810	3.92	4.451	745	326,560	12.27				\$866,225	23.7%
30 Enterprise Volunteer Fire Co.											
Bioretention system	1,175	0.03	0.031	5	2,240	0.08	300	\$5	SF	\$1,500	2.7%
Rainwater harvesting	1,175	0.03	0.031	5	1,000	0.04	1,000	\$2	gal	\$2,000	2.7%
Total Site Info	2,350	0.05	0.061	10	3,240	0.12				\$3,500	5.4%
31 First Pentecostal Prayer of Faith Church											
Bioretention system	2,700	0.06	0.070	12	5,160	0.19	675	\$5	SF	\$3,375	8.8%
Total Site Info	2,700	0.06	0.070	12	5,160	0.19				\$3,375	8.8%
32 First Presbyterian Church/YMCA Young Wonders											
Bioretention system	1,330	0.03	0.035	6	2,540	0.10	335	\$5	SF	\$1,675	1.9%
Pervious pavement	6,005	0.14	0.156	26	11,480	0.43	2,460	\$25	SF	\$61,500	8.7%
Total Site Info	7,335	0.17	0.191	32	14,020	0.53				\$63,175	10.6%
33 H.D. Morrison Elementary School (University Heights)											
Bioretention system	3,890	0.09	0.101	17	7,440	0.28	975	\$5	SF	\$4,875	3.1%
Pervious pavement	21,750	0.50	0.567	95	41,580	1.56	4,160	\$25	SF	\$104,000	17.2%
Total Site Info	25,640	0.59	0.668	112	49,020	1.84				\$108,875	20.3%
34 Hamilton Square Baptist Church											
Bioretention system	2,430	0.06	0.063	11	4,650	0.17	610	\$5	SF	\$3,050	3.5%
Pervious pavement	33,075	0.76	0.862	144	63,240	2.38	6,230	\$25	SF	\$155,750	48.3%
Total Site Info	35,505	0.82	0.925	155	67,890	2.55				\$158,800	51.8%
35 Hamilton Township School District											
Bioretention system	3,330	0.08	0.087	15	6,370	0.24	835	\$5	SF	\$4,175	6.8%
Pervious pavement	9,290	0.21	0.242	41	17,760	0.67	2,270	\$25	SF	\$56,750	18.9%
Total Site Info	12,620	0.29	0.329	55	24,130	0.91				\$60,925	25.7%
36 Klockner Elementary School											
Bioretention system	960	0.02	0.025	4	1,830	0.07	240	\$5	SF	\$1,200	2.0%
Pervious pavement	13,900	0.32	0.362	61	26,580	1.00	2,480	\$25	SF	\$62,000	28.3%
Planter box (downspout)	645	0.01	n/a	2	n/a	n/a	3	\$1,000	box	\$3,000	1.3%
Total Site Info	15,505	0.36	0.387	67	28,410	1.07				\$66,200	31.5%

Summary of Proposed Green Infrastructure Practices

Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area		Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost (\$/unit)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									
37 Merlin Industries Inc.											
Bioretention system	3,330	0.08	0.087	15	6,370	0.24	835	\$5	SF	\$4,175	1.6%
Pervious pavement	32,400	0.74	0.844	141	61,940	2.33	6,370	\$25	SF	\$159,250	15.9%
Total Site Info	35,730	0.82	0.931	156	68,310	2.57				\$163,425	17.6%
38 Morgan Elementary School											
Bioretention system	2,550	0.06	0.066	11	4,880	0.18	640	\$5	SF	\$3,200	2.0%
Pervious pavement	15,825	0.36	0.412	69	30,260	1.14	4,320	\$25	SF	\$108,000	12.2%
Total Site Info	18,375	0.42	0.479	80	35,140	1.32				\$111,200	14.2%
39 Nottingham Little League											
Bioretention system	4,800	0.11	0.125	21	9,180	0.34	1,200	\$5	SF	\$6,000	3.8%
Bioswale	3,050	0.07	0.040	10	385	0.01	770	\$5	SF	\$3,850	2.4%
Total Site Info	7,850	0.18	0.165	30	9,565	0.35				\$9,850	6.2%
40 Nottingham Volunteer Fire Company Station 17											
Bioretention system	970	0.02	0.025	4	1,860	0.07	250	\$5	SF	\$1,250	0.7%
Pervious pavement	8,500	0.20	0.221	37	16,250	0.61	1,520	\$25	SF	\$38,000	6.0%
Rainwater harvesting	2,000	0.05	0.052	9	2,000	0.08	2,000	\$2	gal	\$4,000	1.4%
Total Site Info	11,470	0.26	0.299	50	20,110	0.76				\$43,250	8.1%
41 Our Lady of Sorrows School											
Bioretention system	1,130	0.03	0.029	5	2,160	0.08	290	\$5	SF	\$1,450	0.5%
Pervious pavement	56,120	1.29	1.462	245	107,290	4.03	13,800	\$25	SF	\$345,000	25.6%
Total Site Info	57,250	1.31	1.492	250	109,450	4.11				\$346,450	26.1%
42 Saint Mark United Methodist Church											
Bioretention system	23,350	0.54	0.608	102	44,640	1.68	5,850	\$5	SF	\$29,250	20.5%
Total Site Info	23,350	0.54	0.608	102	44,640	1.68				\$29,250	20.5%
43 University Plaza											
Bioretention system	2,350	0.05	0.061	10	4,500	0.17	600	\$5	SF	\$3,000	1.9%
Pervious pavement	15,670	0.36	0.408	68	29,960	1.13	4,140	\$25	SF	\$103,500	13.0%
Total Site Info	18,020	0.41	0.470	79	34,460	1.30				\$106,500	15.0%
44 VFW Hamilton Township Post											
Bioretention system	5,550	0.13	0.145	24	10,610	0.40	1,390	\$5	SF	\$6,950	9.1%
Pervious pavement	8,400	0.19	0.219	37	16,060	0.60	1,500	\$25	SF	\$37,500	13.8%
Total Site Info	13,950	0.32	0.363	61	26,670	1.00				\$44,450	23.0%

Summary of Proposed Green Infrastructure Practices

Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area		Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost (\$/unit)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									
POND RUN SUBWATERSHED	579,005	13.29	14.922	2,521	1,089,530	41.15				\$3,582,500	15.5%
45 Alexander Elementary School											
Bioretention system	3,775	0.09	0.098	16	7,220	0.27	950	\$5	SF	\$4,750	2.9%
Pervious pavement	27,300	0.63	0.711	119	52,200	1.96	4,880	\$25	SF	\$122,000	21.3%
Total Site Info	31,075	0.71	0.810	136	59,420	2.23				\$126,750	24.2%
46 Bromley Park											
Bioretention system	1,680	0.04	0.044	7	3,210	0.12	420	\$5	SF	\$2,100	5.6%
Total Site Info	1,680	0.04	0.044	7	3,210	0.12				\$2,100	5.6%
47 Colonial Volunteer Fire Company											
Pervious pavement	28,650	0.66	0.746	125	54,780	2.06	5,500	\$25	SF	\$137,500	18.1%
Rainwater harvesting	3,150	0.07	0.082	14	2,500	0.23	2,500	\$2	gal	\$5,000	2.0%
Total Site Info	31,800	0.73	0.829	139	57,280	2.29				\$142,500	20.1%
48 Greenwood Elementary School											
Pervious pavement	8,340	0.19	0.217	36	15,950	0.60	2,660	\$25	SF	\$66,500	11.2%
Planter box (downspout)	1,000	0.02	n/a	4	n/a	n/a	5	\$1,000	box	\$5,000	1.3%
Total Site Info	9,340	0.21	0.217	40	15,950	0.60				\$71,500	12.5%
49 Hamilton Golf Center											
Bioretention system	3,030	0.07	0.079	13	5,790	0.22	760	\$5	SF	\$3,800	1.5%
Pervious pavement	7,560	0.17	0.197	33	14,450	0.54	1,350	\$25	SF	\$33,750	3.8%
Total Site Info	10,590	0.24	0.276	46	20,240	0.76				\$37,550	5.3%
50 Hamilton Lanes											
Bioretention system	9,300	0.21	0.242	41	17,780	0.67	2,325	\$5	SF	\$11,625	5.7%
Pervious pavement	49,375	1.13	1.286	215	94,400	3.55	13,380	\$25	SF	\$334,500	30.5%
Total Site Info	58,675	1.35	1.529	256	112,180	4.22				\$346,125	36.2%
51 Hamilton Township Municipal Building											
Bioretention system	2,250	0.05	0.059	10	4,300	0.16	250	\$5	SF	\$1,250	1.4%
Pervious pavement	36,900	0.85	0.961	161	70,540	2.65	9,900	\$25	SF	\$247,500	22.4%
Total Site Info	39,150	0.90	1.020	171	74,840	2.81				\$248,750	23.8%
52 Hamilton Township Library											
Bioretention system	1,240	0.03	0.032	5	2,370	0.09	310	\$5	SF	\$1,550	1.0%
Pervious pavement	17,900	0.41	0.466	78	34,220	1.29	4,275	\$25	SF	\$106,875	15.2%
Total Site Info	19,140	0.44	0.499	83	36,590	1.38				\$108,425	16.2%

Summary of Proposed Green Infrastructure Practices

Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area		Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost (\$/unit)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									
53 Hamilton Township Police Division											
Bioretention systems	8,960	0.21	0.233	39	17,130	0.64	2,240	\$5	SF	\$11,200	4.1%
Pervious pavement	15,900	0.37	0.414	69	30,400	1.14	2,840	\$25	SF	\$71,000	7.3%
Total Site Info	24,860	0.57	0.648	108	47,530	1.78				\$82,200	11.4%
54 Kuser Elementary School											
Bioretention system	1,000	0.02	0.026	4	1,910	0.07	250	\$5	SF	\$1,250	1.3%
Pervious pavement	5,775	0.13	0.150	25	11,040	0.41	2,440	\$25	SF	\$61,000	7.5%
Planter box (downspout)	1,720	0.04	n/a	6	n/a	n/a	8	\$1,000	box	\$8,000	2.2%
Total Site Info	8,495	0.20	0.177	36	12,950	0.48				\$70,250	11.1%
55 Langtree Elementary School											
Bioretention system	12,060	0.28	0.314	53	23,050	0.87	3,020	\$5	SF	\$15,100	13.6%
Pervious pavement	15,555	0.36	0.405	68	29,740	1.12	4,210	\$25	SF	\$105,250	17.5%
Total Site Info	27,615	0.63	0.720	120	52,790	1.99				\$120,350	31.1%
56 Mercerville Elementary School											
Pervious pavement	29,150	0.67	0.760	127	55,730	2.09	5,290	\$25	SF	\$132,250	25.6%
Total Site Info	29,150	0.67	0.760	127	55,730	2.09				\$132,250	25.6%
57 Pace Charter School											
Bioretention system	4,670	0.11	0.122	20	8,930	0.34	1,180	\$5	SF	\$5,900	11.6%
Pervious pavement	12,870	0.30	0.335	56	24,600	0.92	3,240	\$25	SF	\$81,000	31.9%
Total Site Info	17,540	0.40	0.457	77	33,530	1.26				\$86,900	43.4%
58 Reynolds Middle School											
Bioretention systems	7,360	0.17	0.192	32	14,070	0.53	1,840	\$5	SF	\$9,200	2.6%
Planter box (downspout)	1,720	0.04	n/a	6	n/a	n/a	8	\$1,000	box	\$8,000	0.6%
Total Site Info	9,080	0.21	0.192	38	14,070	0.53				\$17,200	3.2%
59 Sayen Elementary School											
Bioretention system	8,450	0.19	0.220	37	16,160	0.61	2,115	\$5	SF	\$10,575	10.6%
Planter box (downspout)	575	0.01	n/a	2	n/a	n/a	3	\$1,000	box	\$3,000	0.7%
Total Site Info	9,025	0.21	0.220	39	16,160	0.61				\$13,575	11.3%
60 St. Gregory the Great Catholic Church											
Bioretention system	7,840	0.18	0.204	34	14,990	0.56	1,960	\$5	SF	\$9,800	2.3%
Pervious pavement	81,130	1.86	2.114	354	155,110	5.83	15,070	\$25	SF	\$376,750	24.0%
Planter box (downspout)	1,290	0.03	n/a	5	n/a	n/a	6	\$1,000	box	\$6,000	0.4%
Rainwater harvesting	1,650	0.04	0.043	7	1,300	0.12	1,300	\$2	gal	\$2,600	0.5%
Total Site Info	91,910	2.11	2.361	400	171,400	6.51				\$395,150	27.2%

Summary of Proposed Green Infrastructure Practices

Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area		Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost (\$/unit)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									
61 Suburban Plaza (Walmart)											
Pervious pavement	12,600	0.29	0.328	55	24,090	0.91	35,100	\$25	SF	\$877,500	1.4%
Total Site Info	12,600	0.29	0.328	55	24,090	0.91				\$877,500	1.4%
62 Trenton Catholic Academy											
Bioretention system	13,440	0.31	0.350	59	25,690	0.97	3,360	\$5	SF	\$16,800	6.3%
Pervious pavement	65,480	1.50	1.706	286	125,190	4.70	13,515	\$25	SF	\$337,875	30.6%
Total Site Info	78,920	1.81	2.056	344	150,880	5.67				\$354,675	36.9%
63 Whitehorse Plaza Shopping Center											
Pervious pavement	68,360	1.57	1.781	298	130,690	4.91	13,950	\$25	SF	\$348,750	22.0%
Total Site Info	68,360	1.57	1.781	298	130,690	4.91				\$348,750	22.0%
SHADY BROOK SUBWATERSHED	292,585	6.72	7.562	1,275	554,730	20.88				\$1,526,306	12.2%
64 Aldi											
Bioretention system	4,000	0.09	0.104	17	7,640	0.29	1,000	\$5	SF	\$5,000	2.9%
Pervious pavement	26,315	0.60	0.686	115	50,310	1.89	5,235	\$25	SF	\$130,875	19.0%
Total Site Info	30,315	0.70	0.790	132	57,950	2.18				\$135,875	21.9%
65 Duetzville Park											
Bioretention system	1,505	0.03	0.039	7	2,880	0.11	376	\$5	SF	\$1,881	1.9%
Pervious pavement	12,920	0.30	0.337	56	24,700	0.93	3,420	\$25	SF	\$85,500	15.9%
Total Site Info	14,425	0.33	0.376	63	27,580	1.04				\$87,381	17.8%
66 George E. Wilson Elementary School											
Bioretention system	3,770	0.09	0.098	16	7,210	0.27	950	\$5	SF	\$4,750	2.7%
Total Site Info	3,770	0.09	0.098	16	7,210	0.27				\$4,750	2.7%
67 Grice Middle School											
Bioretention system	4,375	0.10	0.114	19	8,360	0.31	1,100	\$5	SF	\$5,500	1.8%
Pervious pavement	46,170	1.06	1.203	201	88,270	3.32	11,450	\$25	SF	\$286,250	18.9%
Total Site Info	50,545	1.16	1.317	220	96,630	3.63				\$291,750	20.6%
68 Hamilton Educational Program											
Bioretention system	1,380	0.03	0.036	6	2,640	0.10	350	\$5	SF	\$1,750	3.9%
Pervious pavement	11,830	0.27	0.308	52	22,620	0.85	3,320	\$25	SF	\$83,000	33.6%
Total Site Info	13,210	0.30	0.344	58	25,260	0.95				\$84,750	37.6%

Summary of Proposed Green Infrastructure Practices

Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area		Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost (\$/unit)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									
69 Hamilton High School West											
Bioretention systems	4,000	0.09	0.104	17	7,640	0.29	1,000	\$5	SF	\$5,000	1.3%
Planter box (downspout)	1,505	0.03	n/a	6	n/a	n/a	7	\$1,000	box	\$7,000	0.5%
Total Site Info	5,505	0.13	0.104	23	7,640	0.29				\$12,000	1.9%
70 Independence Mall											
Bioretention system	4,800	0.11	0.125	21	9,180	0.34	1,200	\$5	SF	\$6,000	0.5%
Pervious pavement	60,250	1.38	1.570	263	115,190	4.33	13,815	\$25	SF	\$345,375	5.7%
Total Site Info	65,050	1.49	1.695	284	124,370	4.67				\$351,375	6.2%
71 K McCoy Inc. Insurance Agency											
Bioretention system	10,000	0.23	0.261	44	19,120	0.72	2,515	\$5	SF	\$12,575	50.0%
Total Site Info	10,000	0.23	0.261	44	19,120	0.72				\$12,575	50.0%
72 Kisthardt Elementary School											
Bioretention system	650	0.01	0.017	3	1,240	0.05	165	\$5	SF	\$825	0.8%
Pervious pavement	11,800	0.27	0.307	51	22,560	0.85	2,880	\$25	SF	\$72,000	14.0%
Total Site Info	12,450	0.29	0.324	54	23,800	0.90				\$72,825	14.8%
73 Lalor Elementary School											
Bioretention system	2,310	0.05	0.060	10	4,410	0.17	580	\$5	SF	\$2,900	4.2%
Pervious pavement	4,050	0.09	0.106	18	7,740	0.29	975	\$25	SF	\$24,375	7.4%
Planter box (downspout)	860	0.02	n/a	3	n/a	n/a	4	\$1,000	box	\$4,000	1.6%
Total Site Info	7,220	0.17	0.166	31	12,150	0.46				\$31,275	13.2%
74 Life St. Francis											
Pervious pavement	3,120	0.07	0.081	14	5,960	0.22	1,400	\$25	SF	\$35,000	13.9%
Total Site Info	3,120	0.07	0.081	14	5,960	0.22				\$35,000	13.9%
75 McGalliard Elementary School											
Bioretention system	785	0.02	0.020	3	1,500	0.06	200	\$5	SF	\$1,000	0.5%
Pervious pavement	32,940	0.76	0.858	144	62,970	2.37	9,970	\$25	SF	\$249,250	22.7%
Total Site Info	33,725	0.77	0.879	147	64,470	2.43				\$250,250	23.3%
76 Rusling Hose Fire Company											
Bioretention system	5,850	0.13	0.152	26	11,180	0.42	1,465	\$5	SF	\$7,325	18.9%
Pervious pavement	9,285	0.21	0.242	40	17,750	0.67	2,285	\$25	SF	\$57,125	30.1%
Total Site Info	15,135	0.35	0.394	66	28,930	1.09				\$64,450	49.0%

Summary of Proposed Green Infrastructure Practices

Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area		Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost (\$/unit)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									
77 St. Mark Lutheran Church											
Bioretention system	2,865	0.07	0.075	12	5,480	0.21	720	\$5	SF	\$3,600	8.9%
Pervious pavement	19,150	0.44	0.499	84	36,610	1.38	3,420	\$25	SF	\$85,500	59.8%
Rainwater harvesting	100	0.00	0.003	0	100	0.01	100	\$2	gal	\$200	0.3%
Total Site Info	22,115	0.51	0.576	96	42,190	1.60				\$89,300	69.0%
78 True Servant Preschool Academy											
Bioretention system	6,000	0.14	0.156	26	11,470	0.43	550	\$5	SF	\$2,750	19.9%
Total Site Info	6,000	0.14	0.156	26	11,470	0.43				\$2,750	19.9%

Attachment 4
**Nonstructural Stormwater Management Strategies and
How to Demonstrate “Maximum Extent Practicable”**

1. Protect areas that provide water quality benefits or areas particularly susceptible to erosion and sediment loss.
Requirement: Applicant must identify all existing riparian buffers, corridors, wetlands, and highly erodible soils on the plans. Disturbance of these areas must be prevented by installing fencing, identification signage, and/or other protective elements. All proposed measures must be clearly indicated on the plans.
2. Minimize impervious surfaces and break up or disconnect the flow of runoff over impervious surfaces.
Requirement: Applicant must demonstrate that impervious cover is less than 10% of the site or that any impervious areas exceeding 10% of the site area are disconnected to prevent stormwater runoff from flowing directly into the storm sewer system and/or nearby waterways.
3. Maximize the protection of natural drainage features and vegetation.
Requirement: Applicant must identify these features and vegetation on the plans and protect these features with fencing or justify disturbance of these areas and provide a plan for restoration of these areas. All proposed measures must be clearly indicated on the plans.
4. Minimize the decrease in the "time of concentration" from pre-construction to post-construction. "Time of concentration" is defined as the time it takes for runoff to travel from the hydraulically most distant point of the drainage area to the point of interest within a watershed.
Requirement: If #2 is satisfied; this criterion also is satisfied.
5. Minimize land disturbance including clearing and grading.
Requirement: Applicant is allowed to clear an area up to 150% of the final right of way (ROW) of the roadway. The Applicant is only allowed to clear up to 150% of the width of a final driveway. The Applicant is only allowed to clear up to 50 feet around a structure footprint.
6. Minimize soil compaction.
Requirement: All limits of disturbance must be fenced off to prevent heavy equipment entering these areas.
7. Provide low-maintenance landscaping that encourages retention and planting of native vegetation and minimizes the use of lawns, fertilizers and pesticides.
Requirement: A landscape plan signed and sealed by a New Jersey Licensed Landscape Architect must be submitted to the Township that shows all turfgrass areas and all landscaped areas. A minimum of 10% of proposed landscape areas shall use native vegetation species.

8. Provide vegetated open-channel conveyance systems discharging into and through stable vegetated areas.

Requirement: A minimum of 10% of all stormwater conveyance must be accomplished through the use of open channel vegetated channels.

9. Provide other source controls to prevent or minimize the use or exposure of pollutants at the site to prevent or minimize the release of those pollutants into stormwater runoff. These source controls include, but are not limited to:

- i. Site design features that help to prevent accumulation of trash and debris in drainage systems.

Requirement: All catch basins must comply with MS4 regulations.

- ii. Site design features that help to prevent discharge of trash and debris from drainage systems.

Requirement: All catch basins must comply with MS4 regulations.

- iii. Site design features that help to prevent and/or contain spills or other harmful accumulations of pollutants at industrial or commercial developments.

Requirement: All outdoor chemical storage areas shall be covered and have secondary containment in compliance with Federal, State, and Local regulations.

- iv. When establishing vegetation after land disturbance, applying fertilizer in accordance with the requirements established under the Soil Erosion and Sediment Control Act, N.J.S.A. 4:24-39 et seq., and implementing rules.

Requirement: Applicant must have an approved soil erosion and sediment control permit and comply with all requirements.

**Appendix 5: Property Class 15 Parcels for
Retrofits**

Property Class 15 Parcels

Block	Lot	Property Class	Property Address	Owner	Facility Type	Area (acres)
1512	8	15A	1070 MER-EDINBURG RD	HAYES SUSAN	SCHOOL	15.74
1561	24	15A	PAXSON AVE	COSTANZO SALVATORE V	VACANT LAND	2.61
1561	25	15A	645 PAXSON AVE	ROBINSON LAUREN M	SCHOOLS	2.47
1618	34	15A	38 STAMFORD RD	SABET MARGUERITE	SCHOOLS	8.30
1618	40	15A	SARANAC RD	HAM TWP-BD OF ED C/O N ZDANOWICZ	VACANT LAND	0.18
1631	37	15A	1085 OLD TRENTON RD	MERCER COUNTY VOC SCHOOL	SCHOOLS	3.07
1659	2	15A	830 KLOCKNER AVE	OKUPSKI CHRISTOPHER M & LILLIAN P	SCHOOLS	0.92
1694	28	15A	60 REGINA AVE	HAM TWP-BD OF ED C/O N ZDANOWICZ	SCHOOLS	0.86
1694	30	15A	REGINA AVE	HAM TWP-BD OF ED C/O N ZDANOWICZ	ATHLETIC FIELD	0.46
1771	1	15A	1055 KLOCKNER RD	ARGUETA ANTONIO & EDNA	SCHOOLS	26.10
1828	14	15A	3333 NOTTINGHAM WAY	DEBLOIS JAMES S	SCHOOLS	12.37
1836	8	15A	90 PARK AVE	WARWICK EUGENE E ETUX	SCHOOLS	0.31
1884	1	15A	2069 GREENWOOD AVE	SEALY VIRGINIA	SCHOOLS	1.91
1925	19	15A	2080 WHATLEY RD	WYLIE ROBERT & PAMELA	SCHOOLS	15.59
1943	5	15A	2145 YDV-HAM SQ RD	BOYCE ROBERT & KATHERINE	SCHOOLS	28.35
1943	7	15A	2900 KLOCKNER RD	HAMILTON TWP-BOARD OF ED	SCHOOLS	14.08
1943	8	15A	KLOCKNER RD	ROGERS GLENN H & MARY RAE	ATHLETIC FIELD	34.67
1943	9	15A	KLOCKNER ROAD	SMITH GEORGE R & BARBARA D	ATHLETIC FIELD	2.67
1980	20	15A	20 ROBERT FROST DR	BERRIOS ALYSSA	SCHOOLS	12.09
2023	42	15A	70 NEWKIRK AVE	CALDERON ROBERT & VAZQUEZ LYSSETTE	SCHOOLS	1.65
2212	1	15A	25 BARNT DEKLYN RD	COUNTY OF MERCER	SCHOOLS	2.98
2346	1	15A	2720 S CLINTON AVE	WILLIAMS MAYSO ETUX	SCHOOLS	7.48
2346	2	15A	WILLIAM ST	HAMILTON TWP-BOARD OF ED	SCHOOLS	0.33
2346	3	15A	WILLIAM ST	HAMILTON TWP-BOARD OF ED	111371-PARKING AREA	0.14
2346	17	15A	GRAND AVE	HAMILTON TWP-BOARD OF ED	PARKING	0.07
2346	23	15A	GRAND AVE	WILLIAMS MAYSO ETUX	PARKING	0.24
2346	25	15A	GRAND AVE	COMMUNITY CAP.,LLC	PARKING	0.07
2379	1	15A	S CLINTON AVE	ALFARO EDDY J	RECREATION FIELDS	13.67
2379	31	15A	600 PARK AVE	HAMILTON TWP-BOARD OF ED	WILSON SCHOOL	7.72
2411	13	15A	215 HARCOURT DR	LELLAHI HOSSEIN & DIANA	SCHOOLS	4.67
2445	21	15A	ANDOVER WAY	HAM TWP-BD OF ED C/O N ZDANOWICZ	VACANT LAND	0.60
2445	51	15A	901 WH-HAM SQ RD	HAM TWP-BD OF ED C/O N ZDANOWICZ	SCHOOLS	21.31
2445.01	27	15A	ANDOVER WAY	HAM TWP-BD OF ED C/O N ZDANOWICZ	SCHOOL WALKWAY	0.06
2474	48	15A	1600 ARENA DR	ALPERT ANDREW & STAVRAKIS CARLEIGH	SCHOOLS	10.05
2548	17	15A	495 GROPP AVE	SMIEGOCKI JOSEPH M & EILEEN M	SCHOOLS	4.13
2592	2	15A	2631 KUSER RD	HHR HAMILTON REAL ESTATE LLC	SCHOOLS	40.22
2606	15	15A	3880 BROAD ST	TWP OF HAMILTON	SCHOOLS	5.60
2606.02	126	15A	166 ELTON AVE	WAKELEY SARAH L	SCHOOLS	6.75
2699	1	15A	450 YDV-AlLENTOWN RD	HAM TWP-BD OF ED C/O N ZDANOWICZ	SCHOOLS	4.30
1508	15	15B	SLOAN AVE	NEW JERSEY TRANSIT CORP C/O ENERGY	VACANT LAND	0.23
1589	179	15B	60 SCULPTORS WAY	JOHNSON ART & EDUCATION FOUNDATION,	#173230-SCH OF SCULP	6.03
2612	5.05	15B	KLOCKNER RD	HORIZON CTR,LLC C/O MACK-CALI	VACANT LAND	10.21
1501	2	15C	SWEETBRIAR AVE	HAMILTON TRANSIT CORP CNTR INC C/O	VACANT LAND	2.23
1501	4	15C	SWEETBRIAR AVE	MURPHY KATHLEEN A	VACANT LAND	0.89
1501	55.02	15C	RUTGERS AVE	MILLER ERIC I & KIMBERLY R	VACANT LAND	0.77
1501	69	15C	RUTGERS AVE	TWP OF HAMILTON	VACANT LAND	0.28
1501	70	15C	RUTGERS AVE	TWP OF HAMILTON	VACANT LAND	0.33
1501	71	15C	RUTGERS AVE	TWP OF HAMILTON	VACANT LAND	0.28
1501	81	15C	RUTGERS AVE	TWP OF HAMILTON	VACANT LAND	0.24
1501	82	15C	RUTGERS AVE	TWP OF HAMILTON	VACANT LAND	0.18
1501	83	15C	RUTGERS AVE	TWP OF HAMILTON	VACANT LAND	0.14
1501	84	15C	RUTGERS AVE	TWP OF HAMILTON	TAX FORECLOSURE	0.30
1501	85	15C	CARNEGIE AVE	TWP OF HAMILTON	VACANT LAND	0.69
1501	86	15C	RUTGERS AVE	EISENBELL JOHN & DEBRA	TAX FORECLOSURE	0.28
1501	107	15C	VETTERLEIN AVE	EISENBELL JOHN & DEBRA	VACANT LAND	0.17
1501	108	15C	VETTERLEIN AVE	TWP OF HAMILTON	VACANT LAND	0.03
1501	128	15C	CARNEGIE AVE	TWP OF HAMILTON	TAX FORECLOSURE	14.29
1504	24.05	15C	COLTON CT	SCARBOROUGH WILLIAM P & KIMBERLY A	DRAINAGE	0.43
1505	1	15C	21 ELECTRONICS DR	PENN CEN.TRANS CO.-AMTRAK TAX & INS	VACANT LAND	153.19
1506	1	15C	YOUNGS RD	TWP OF HAMILTON	VACANT LAND	18.60
1509	3	15C	MER-QUAKER BR RD	GROBELS BARRY (THE ESTATE OF)	GAME PRESERVE	34.32
1511	58	15C	HUGHES DR	SEARL THOMAS D	VACANT LAND	0.78
1512	27	15C	HUGHES DR	COUNTY OF MERCER	PARK	42.37
1512	28	15C	HUGHES DR	COUNTY OF MERCER	PARK	39.88
1512	30	15C	3885 MER-QUAKER BR RD	COUNTY OF MERCER	GAME PRESERVE	60.39
1518	1	15C	YOUNGS RD	TWP OF HAMILTON	VACANT LAND	32.86
1518	2	15C	SLOAN AVE	TWP OF HAMILTON	VACANT LAND	12.16
1518	5	15C	SLOAN AVE	ER/UDC HAMILTON, LLC	TRAIN STA/BUS GAR	45.30
1518	6.01	15C	SLOAN AVE	ER/UDC HAMILTON, LLC	VACANT LAND	5.05

Property Class 15 Parcels

Block	Lot	Property Class	Property Address	Owner	Facility Type	Area (acres)
1518	7	15C	720 SLOAN AVE	ER/UDC HAMILTON, LLC	MAINTENANCE BUILDIN	6.91
1518	8	15C	760 SLOAN AVE	NEW JERSEY TRANSIT CORP C/O ENERGY	VACANT LAND	2.01
1518	9	15C	SLOAN AVE	NEW JERSEY TRANSIT CORP C/O ENERGY	VACANT LAND	4.50
1519	2	15C	SLOAN AVE	TWP OF HAMILTON	VACANT LAND	23.53
1519	3	15C	YOUNGS RD	TRIPLE NET INVESTMENTS VIII, LP	VACANT LAND	175.13
1519	4	15C	YOUNGS RD	TWP OF HAMILTON	178428-VACANT LAND	6.39
1519	75	15C	FERNDALE AVE	RICASOLI & SANTIN INVESTMENT CO	CONCESSION STAND	11.45
1519	79	15C	SLOAN AVE	TWP OF HAMILTON	VACANT LAND	0.69
1519	84	15C	SLOAN AVE	MAXIMONIS WILLIAM JOSEPH II	VACANT LAND	0.69
1519	101	15C	SLOAN AVE	TWP OF HAMILTON	VACANT LAND	1.36
1529	7	15C	ROBIN DR	MINOGUE STEPHEN & CYNTHIA	VACANT LAND	2.06
1535	19	15C	LEHIGH AVE	HAJJAR CHRISTOPHER M	VACANT LAND	4.77
1542	50	15C	VEITTERLEIN AVE	CARNEY ROBERT J	TAX FORECLOSURE	0.11
1550	15	15C	MER-QUAKER BR RD	DONES YVETTE	#173177 VACANT LAND	1.20
1561	13	15C	PAXSON AVE	COMPTON ARLENE N,COMPTON MORRIS JR	VACANT LAND	7.83
1563	10	15C	30 TAR HEELS RD EAST	ALLEN ERIC S & AMY E	RETENTION BASIN	0.50
1565	43	15C	JEFFREY LANE	ANDREANIDIS ANASTASIOS & ALINE	VACANT LAND	0.65
1569	29	15C	5 TARA CT	MANNOR MANU S & JAMES TEENA	RETENTION BASIN	1.13
1571	1	15C	ASSUNPINK BLVD	STATE OF NJ DEPT OF ENV PROTECTION	VACANT LAND	1.25
1578	13	15C	FIFTH AVE	TWP OF HAMILTON	VACANT LAND	0.05
1578	34	15C	FOURTH AVE	VILLAFUERTE ALEXANDER E & MARIA G	VACANT LAND	0.05
1581	19.02	15C	INDUSTRIAL DR	NEYCO, LLC	RAILROAD	3.59
1581	29	15C	SWEETBRIAR AVE	UNJRR & CANAL CO-NATL RR PASS.CORP	VACANT LAND	2.77
1584	16.01	15C	ASSUNPINK BLVD	TWP OF HAMILTON	PUMPING STATION	0.05
1592	24	15C	CALIFORNIA AVE	LISE MICHAEL A & GALLI-LISE LISA R	VACANT LAND	0.06
1594	10	15C	BERRISFORD AVE	DIMEMMO JOSEPH JR	TAX FORECLOSURE	0.06
1594	24	15C	50 KENTUCKY AVE	DIMEMMO JOSEPH JR	RESIDENCE	0.17
1598	15	15C	NEBRASKA AVE	TWP OF HAMILTON	TAX FORECLOSURE	0.06
1601	15	15C	EDDY LA	AARONSON KENNETH H	TAX FORECLOSURE	0.11
1602	5	15C	E STATE ST	TWP OF HAMILTON	PUMPING STATION	0.17
1602	11	15C	KLOCKNER AVE	ED'S SUCCESSFUL PROPERTIES,LLC	PUMPING STATION	0.46
1602	12	15C	KLOCKNER AVE	ED'S SUCCESSFUL PROPERTIES,LLC	PUMPING STATION	0.25
1603	15.04	15C	SLOAN AVE	BAILEY CLIFFORD & CYNTHIA	VACANT LAND	43.01
1603	22	15C	3080 MER-QUAKER BR RD	KELLY RENEE	PARK	12.30
1610	25	15C	MER-QUAKER BR RD	SINGLETON SCOTT L & REBECCA L	VACANT LAND	0.03
1614	24.01	15C	FLOCK RD	TWP OF HAMILTON	VACANT LAND #156600	9.60
1614	36	15C	PAXSON AVE	TWP OF HAMILTON	VACANT LAND	4.21
1614	37	15C	KINO BLVD	GORDON KEVIN & FALLON	VACANT LAND	3.90
1614	62	15C	KINO BLVD	MC GLINCHY PETER J & KATHLEEN	VACANT LAND	0.58
1614	93	15C	MER-QUAKER BR RD	CLUGSTEN CHRISTOPHER & REBECCA	PUMPING STATION	0.08
1614	94	15C	MER-QUAKER BR RD	ROGA MICHAEL ANDREW	VACANT LAND	0.63
1614	95	15C	MER-QUAKER BR RD	JASINSKI JOANN	VACANT LAND	10.46
1614	96	15C	KINO BLVD	REIFER EDWARD J & CAROL A	VACANT LAND	0.20
1614	99	15C	BROOKWOOD RD	SASKO MATTHEW A	VACANT LAND	7.92
1614	100	15C	KINO CT	SASKO MATTHEW A	VACANT LAND	0.41
1620	4	15C	GUILFORD LA	WALSH DONALD P JR & DENISE	VACANT LAND	0.06
1622	10.01	15C	PAXSON AVE	JAMIESON MURRAY A & KATHLEEN	VACANT LAND	8.61
1623	10	15C	MER-EDINBURG RD	TWP OF HAMILTON	VACANT LAND	0.07
1623	11	15C	MER-EDINBURG RD	TWP OF HAMILTON	#181988 VACANT LAND	1.13
1623	20	15C	PAXSON AVE	DELFINO JOHN & KAREN	VACANT LAND	0.78
1623	21	15C	PAXSON AVE	JONES THOMAS M ETUX	VACANT LAND	2.27
1629	28	15C	PINEHURST CT	SEVERINO ANTHONY & MARYANN	DRAINAGE	1.38
1629	29.04	15C	DOGWOOD LANE	NAYA WAYNE & DECKER KATHLEEN	DETENTION BASIN	5.20
1629	37	15C	FLOCK RD	PIZZULLO KURT & MARY LOU	VACANT LAND	3.01
1629	67	15C	FLOCK RD	TWP OF HAMILTON	VACANT LAND	2.69
1629	68	15C	FLOCK RD	HURLEY PATRICK & SANDRA	VACANT LAND	1.60
1629	90	15C	CATAWBA DR	ATTENSON JOEL & ELLEN D	VACANT LAND	6.64
1629	120	15C	MER-EDINBURG RD	BOCHENEK JOSEPH A & CYNTHIA A	VACANT LAND	5.79
1631	41	15C	HUGHES DR	COUNTY OF MERCER-DIV OF PLANNING	DAM SITE	2.87
1631	43	15C	508 HUGHES DR	BARBALACE DONNA MARIE	LAKE	4.86
1631	45	15C	HUGHES DR	COUNTY OF MERCER-DIV OF PLANNING	DAM SITE	4.39
1631	46	15C	434 HUGHES DR	SMITH RAYMOND & CAROL	#178500 RESIDENCE	4.29
1631	64	15C	HUGHES DR	PERRY JOSEPH A & SHARON D	DAM SITE	16.81
1631	74	15C	CLARION CT	PONTANI PAUL & CAROLYN	DAM SITE	3.48
1636	3	15C	WHITEHEAD RD	UNNJRR & CANAL CO-NATL RR PASS COR	VACANT LAND	0.35
1636	4	15C	1849 E STATE ST	UNNJRR & CANAL CO-NATL RR PASS COR	INDUSTRIAL BUILDING	2.02
1637	11	15C	1758 E STATE ST	JONES JASPER N & JONES DELORES M	VACANT LAND	0.03
1637	12	15C	1756 E STATE ST	JONES JASPER N & JONES DELORES M	VACANT LAND	0.03
1637	13	15C	1754 E STATE ST	JONES JASPER N & JONES DELORES M	VACANT LAND	0.03

Property Class 15 Parcels

Block	Lot	Property Class	Property Address	Owner	Facility Type	Area (acres)
1637	14	15C	1752 E STATE ST	NUPUR REALTY LLC	VACANT LAND	0.03
1637	15	15C	1750 E STATE ST	DOGGETT VERNA C/O	VACANT LAND	0.03
1637	16	15C	1748 E STATE ST	DOGGETT VERNA C/O	VACANT LAND	0.03
1637	17	15C	1746 E STATE ST	DOGGETT VERNA C/O	VACANT LAND	0.03
1638	1	15C	NOTTINGHAM WAY	TWP OF HAMILTON	MUNICIPAL BLDG.	1.09
1638	2	15C	NOTTINGHAM WAY	TWP OF HAMILTON	VACANT LAND	0.72
1638	7	15C	1721 E STATE ST	PADALINO VINCENT D	VACANT LAND	0.13
1638	8	15C	E STATE ST	REYES PAMELA S ETVIR	VACANT LAND	0.02
1639	1	15C	1745 E STATE ST	PEREA FREDDY	BROMLEY CENTER	0.31
1641	1.01	15C	1801 E STATE ST	TWP OF HAMILTON	PARKING AREA	0.26
1641	1.02	15C	1805 E STATE ST	TWP OF HAMILTON	#191825-VOL FIRE CO	0.63
1642	5	15C	OLIVIA AVE	CONGOLEUM CORPORATION	VACANT LAND	0.01
1656	6	15C	KLOCKNER AVE	LOPEZ RUVI & BURCH CAROL	VACANT LAND	51.56
1656	26	15C	353 ARMOUR AVE	TWP OF HAMILTON	REFRESHMENT STAND	3.52
1657	1	15C	KLOCKNER AVE	WERKMAN K,CARUSO E M & CWICK A C	TAX FORECLOSURE	0.23
1660	38	15C	2150 NOTTINGHAM WAY	LAWITZ LEWIS & THERESA	ARMORY	4.64
1697	45	15C	AUDREY PL	TWP OF HAMILTON	VACANT LAND	0.01
1702	68	15C	MER-EDINBURG RD	GURLAVICH KIMBERLY S,CLAPPER ANDREW	VACANT LAND 76809	5.96
1717	23	15C	BAINBRIDGE CT	TWP OF HAMILTON	VACANT LAND	0.10
1717	25	15C	BAINBRIDGE CT	TWP OF HAMILTON	VACANT LAND	0.57
1722	6	15C	233 HUGHES DR	SHIPP FREDERICK J & CAROL L	#164280-VACANT LAND	6.75
1722	7	15C	155 HUGHES DR	ADEZIO PAUL R & SUELLEN E	PARK	28.08
1722	23	15C	PARK AVE	MAIN LINE HOME SOLUTIONS, LLC	PUMPING STATION	0.15
1722	96	15C	SAYEN DR	BOCHIARO JOHN & BETH	VACANT LAND	0.07
1722	105	15C	130 MAPLE SHADE AVE EAST	MELITI PAUL III & GINA	REFRESHMENT STAND	10.91
1722	107	15C	79 ZIEGLERS LA	SKWARA FRANK	VACANT LAND #182279	8.59
1722	127	15C	ARROWWOOD DR	TWP OF HAMILTON	VACANT LAND	0.27
1722	152	15C	CRESTWOOD DR	SKWARA FRANK	VACANT LAND	3.35
1725	6	15C	APPLEGATE DR	DUNCAN JENNIFER GAIL	VACANT LAND	2.00
1727	2	15C	JOHNSTON AVE	TWP OF HAMILTON	VACANT LAND	0.01
1727	13	15C	ROBERTS AVE	MANN DAVID E SR	VACANT LAND	0.03
1727	22	15C	N JOHNSTON AVENUE	SUMMERS RENEE	VACANT LAND	0.08
1728	1	15C	NOTTINGHAM WAY	DESSALINES ALFRED	VACANT LAND	0.02
1729	1.01	15C	N JOHNSTON AVE	DANIELS CATHY	VACANT LAND	0.82
1729	7	15C	ROBERTS AVE	TWP OF HAMILTON	TAX FORECLOSURE	0.04
1729	15	15C	1637 ROBERTS AVE	HAMID L SYED LLC	VACANT LAND	0.09
1729	17	15C	NOTTINGHAM WAY	BLUSHTAIN SIMAH & SARA C/O GERLITZ	VACANT LAND	0.02
1729	35	15C	E STATE ST	TWP OF HAMILTON	VACANT LAND	0.02
1729	36	15C	E STATE ST	MORRIS ANNIE ETVIR	TAX FORECLOSURE	0.10
1733	7	15C	1651 E STATE ST	TWP OF HAMILTON	PARK	5.06
1733	86	15C	PARK LA	TWP OF HAMILTON	VACANT LAND	0.04
1733	87	15C	PARK LA	ESKAROUS SAMIR	VACANT LAND	0.04
1734	42	15C	NOTTINGHAM WAY	TWP OF HAMILTON	VACANT LAND	0.03
1743	2	15C	CONNECTICUT AVE	GP & TL ASSOCIATES, LLC	VACANT LAND	1.06
1752	15	15C	GREENWOOD AVE	TWP OF HAMILTON	VACANT LAND	0.18
1752	23	15C	HOLLYWOOD DR	HAMILTON PATRICIA B	FLOOD CONTROL DAM	0.62
1757	24	15C	2090 GREENWOOD AVE	LACOUR BRUCE & POINTON THERESA	MUNICIPAL BLDG	10.03
1772	30.01	15C	2210 HAMILTON AVE	WEISNECK LOUISE A	HOSPITAL	6.05
1772	37	15C	1277 BELL AVE	LIVING ROOM REALTY, LLC	MAINT BLDGS	2.09
1779	43.04	15C	BIRKSHIRE COURT	FULLER ROBERT & STEINERT LESLIE C/O	VACANT LAND	1.81
1779	48	15C	KLOCKNER RD	FULLER ROBERT & STEINERT LESLIE C/O	VACANT LAND	10.74
1784	5	15C	NOTTINGHAM WAY	HABER MICHAEL & MARIA	HIGHWAYS	0.85
1804	58	15C	CLIFFORD AVE	H & P TOWER BUILDING, LLC	WATER TANK	0.38
1804	96	15C	KLOCKNER ROAD	POND RUN ASSOCIATES, LLC	CEMETERY	4.02
1805	32	15C	2711 NOTTINGHAM WAY	CARISBROOK ASSET HOLDING TRUST	#191827-FIRE HOUSE	1.77
1807	14	15C	WESTON AVE	MERIAS ELENI ETVIR	VACANT LAND	0.04
1809	12	15C	WILSON AVE	BOWERS JEANNE T	VACANT LAND	0.01
1816	48.08	15C	VAN SANT DR	LISIEWSKI RICHARD L & JOANNE	DETENTION BASIN	0.55
1824	21	15C	PAXSON AVE	MCCARTHY THOMAS J & DAWN E	VACANT LAND	21.79
1824	50	15C	WHATLEY RD	SHUREN JANET L	VACANT LAND	0.78
1824	51	15C	WHATLEY RD	TWP OF HAMILTON	VACANT LAND	0.68
1824.02	18	15C	PAXSON AVENUE EXT	ZHANG TIAN ZHOU & LIN XIU ZHEN	VACANT LAND	8.27
1824.03	1	15C	ESTATES BLVD	FLEMING RICKEY R & PATRICIA L	VACANT LAND	3.66
1824.03	62	15C	20 PERIWINKLE LA	TWP OF HAMILTON	VACANT LAND	0.39
1824.03	63	15C	ESTATES BLVD	MCCARRICK ROBERT E ETUX	VACANT LAND	0.20
1824.03	80	15C	PERIWINKLE LA	MCCARRICK ROBERT E ETUX	VACANT LAND	0.21
1828	47	15C	31 PAXSON AVE EXT	CENTURY PLAZA, LLC	RESCUE SQUAD	0.50
1830	64	15C	NOTTINGHAM WAY	BALDASARI LAWRENCE & LINDA	VACANT LAND	0.04
1839	1	15C	3704-06 NOTTINGHAM WAY	TWP OF HAMILTON	PARK	0.15

Property Class 15 Parcels

Block	Lot	Property Class	Property Address	Owner	Facility Type	Area (acres)
1839	11.02	15C	EMILY PLACE	HORAN JOSEPH P & CAROLYN M	VACANT LAND	0.46
1839	24.01	15C	200 MERCER ST	GRANT VICTORIA J	#138182 VOL FIRE CO	3.52
1839	24.03	15C	ACRES DR	SIMPSON JAMES & MARGARET	DRAINAGE	0.16
1841	61	15C	MERCER ST	SPAIR THOMAS F	#158363 VACANT LAND	15.32
1841	62	15C	BREE DR	STRAMA DOROTA	VACANT LAND	0.62
1841	81	15C	CENTURY WAY	TWP OF HAMILTON	PUMPING STATION	0.07
1841	96	15C	MERCER ST	REVOIR KEVIN & JACQUELINE	VACANT LAND	6.79
1841	104	15C	MIRY BROOK RD	MCSORLEY JAMES J & GERALDINE	VACANT LAND	34.16
1841	111	15C	SHAWNEE DR	TWP OF HAMILTON	PUMPING STATION	0.20
1841	115	15C	SENECA LA	ROBSON DERWOOD	VACANT LAND	0.03
1841	138	15C	NOTTINGHAM WAY	WARWICK JOHN W III & SUSAN L	#146936-VACANT LAND	5.46
1841	166	15C	WELL DR	COUNTY OF MERCER	#146936-VACANT LAND	0.08
1867	1	15C	BROWN DR	TWP OF HAMILTON	VACANT LAND	0.06
1880	45	15C	BROMLEY AVE	HODGES HARDY III & MC COY EVETTE	VACANT LAND	0.49
1880	73	15C	BROMLEY AVE	HODGES HARDY III & MC COY EVETTE	VACANT LAND	0.08
1880	104	15C	FLETCHER AVE	POLI MICHAEL A & CHERYL M	TAX FORECLOSURE	0.16
1880	123	15C	JOHNSTON AVE	POLI MICHAEL A & CHERYL M	VACANT LAND	0.71
1880	130	15C	JOHNSTON AVE	TWP OF HAMILTON	VACANT LAND	0.44
1890	45	15C	WARD AVE	NELSON HENRY & BERNICE	VACANT LAND	0.10
1899	1	15C	D'ARCY AVE	TWP OF HAMILTON	VACANT LAND	0.42
1899	13	15C	HOBART AVE	TWP OF HAMILTON	VACANT LAND	0.38
1911	15	15C	HAMILTON AVE	TORRES JAIRO & CLAUDIA	VACANT LAND	0.13
1913	1	15C	KUSER RD	TWP OF HAMILTON	VACANT LAND	1.45
1913	5	15C	CYPRESS LA	TWP OF HAMILTON	VACANT LAND	2.32
1913	13	15C	409 CYPRESS LA	TWP OF HAMILTON	RECREATION CENTER	7.13
1913	15.05	15C	CYPRESS LANE	KHUDA NURALAIN & NASHAT MUQSITA	#168284-VAC LAND	13.84
1913	108	15C	BROOK LA	TWP OF HAMILTON	VACANT LAND	0.06
1913	110	15C	BROOK LA	TWP OF HAMILTON	VACANT LAND	0.06
1913	114	15C	41 BROOK LA	TWP OF HAMILTON	VACANT LAND	0.06
1913	122	15C	HAMILTON AVE	RITTER DENNIS & MARY	VACANT LAND	0.01
1913	152	15C	LEUCKEL AVE	TWP OF HAMILTON	VACANT LAND	0.06
1913	156	15C	LEUCKEL AVE	VETO MANDRIQUE D JR & MARILOU	VACANT LAND	0.06
1913	160	15C	LEUCKEL AVE	TWP OF HAMILTON	VACANT LAND	0.13
1913	199	15C	ARBOR AVE	CSOLAK JOHN A ETUX	VACANT LAND	0.05
1913	265	15C	KUSER RD	DORSEY ROBERT E	VACANT LAND	0.40
1913	292.03	15C	JUNE AVE	JOHN LINDA	VACANT LAND	0.18
1913	389	15C	LEONARD AVE	RAZA BASIT,KHAN JAVERIA & KHAN S U	VACANT LAND	12.85
1913	413	15C	KUSER RD	WORTH LORI M	VACANT LAND	24.56
1913	433	15C	KUSER RD	PSEG SERVICES CORP - 6TH FLOOR	VACANT LAND	7.11
1915	6	15C	SCATTERGOOD AVE	MELENDEZ MALVIN	VACANT LAND	0.01
1915	10	15C	SCATTERGOOD AVE	TWP OF HAMILTON	VACANT LAND-#119471	0.02
1915	14	15C	BROOK LA	MESSEROLL JOHN	VACANT LAND	0.06
1915	17	15C	BROOK LA	TWP OF HAMILTON	VACANT LAND	0.06
1915	18	15C	BROOK LA	TWP OF HAMILTON	VACANT LAND	0.06
1915	31	15C	45 POPE AVE	TWP OF HAMILTON	VACANT LAND	0.12
1916	18	15C	41 BENTLEY AVE	GRESAVAGE MATTHEW J,ERESIA KIMBERLY	VACANT LAND	0.07
1917	61	15C	38 BENTLEY AVE	BARRETT BRIANNE & PRICE MICHAEL	VACANT LAND	0.09
1921	1	15C	KLOCKNER RD	PSEG SERVICES CORP - 6TH FLOOR	VACANT LAND	1.80
1921	9	15C	CYPRESS LA	BIANCAMANO FRANCINE M	VACANT LAND	3.31
1922	7	15C	1750 WH-MER RD	PIOTROSKI EVA J	COMMERCIAL BUILDING	8.41
1922	11	15C	CYPRESS LA	HALSTON BUILDERS ASSOCIATES, LLC	VACANT LAND	14.27
1922	13	15C	CYPRESS LN	HALSTON BUILDERS ASSOCIATES, LLC	LAMONT AVE EXTN	0.25
1924	12	15C	WH-MER RD	STOKER JOHN WILLIAM	VACANT LAND	0.48
1925	16	15C	ESTATES BLVD	TWP OF HAMILTON	VACANT LAND	0.24
1925	17	15C	ESTATES BLVD	TWP OF HAMILTON	VACANT LAND	2.22
1925	18	15C	ESTATES BLVD	TWP OF HAMILTON	VACANT LAND	0.02
1925	42	15C	RIVULET WAY	MARTIN WILLIAM & AMY	VACANT LAND	1.54
1943	6	15C	ESTATES BLVD	TWP OF HAMILTON	VACANT LAND-#118952	1.81
1958	5	15C	1709 STATE HWY 33	RICHMOND MATTHEW & TARALYNNE	#190960-RESIDENCE	1.80
1960	13	15C	GEORGE DYE RD	THE PLUMSTEAD GROUP, LLC	TAX FORECLOSURE	0.17
1961	164	15C	INNOCENZI DR	KRISAK KEVIN E & CHRISTINE M	VACANT LAND	2.56
1961	196	15C	NOTTINGHAM WAY	TWP OF HAMILTON	VACANT LAND	0.35
1961	197	15C	NOTTINGHAM WAY	TWP OF HAMILTON	VACANT LAND	2.31
1961	203	15C	NOTTINGHAM WAY	GILMAN KENNETH G	VACANT LAND	3.11
1961	209	15C	KUSER RD	CAMPIONI G RICHARD & CAROL A	VACANT LAND	5.32
1967	28	15C	ENDICOTT RD	CHIN JOHN W	PUMPING STATION	2.15
1979	28	15C	ENDICOTT RD	PROCACCINI RICHARD J & KAREN	PUMPING STATION	0.72
1980	1	15C	ESTATES BLVD	ZIEGLER ROBERT III	VACANT LAND	5.33
1980	12	15C	ESTATES BLVD	GERSHON JASON F & TIFFANY B	VACANT LAND	1.87

Property Class 15 Parcels

Block	Lot	Property Class	Property Address	Owner	Facility Type	Area (acres)
1980	19	15C	CARL SANDBURG DR	MARINOS GEORGE	VACANT LAND	0.94
1980	55	15C	GEORGE DYE RD	DALY BRIAN & FESSLER CHRISTINA	VACANT LAND	0.30
1980	56	15C	GEORGE DYE RD	TWP OF HAMILTON	VACANT LAND	0.45
1980.01	1	15C	CARL SANDBURG DR	TWP OF HAMILTON	VACANT LAND	0.03
1986	5	15C	GEORGE DYE RD	OLISZEWSKI ADAM	VACANT LAND	4.41
1986	34	15C	TUDOR DR	VAJO MICHAEL G ETUX	VACANT LAND	1.65
1992	3	15C	LIMEWOOD DR	TWP OF HAMILTON	VACANT LAND	2.04
1992	4	15C	RED CEDAR DR	TWP OF HAMILTON	PARK	3.40
1992	10	15C	RED CEDAR DR	TWP OF HAMILTON	PARK	0.34
1992	11	15C	RED CEDAR DR	TWP OF HAMILTON	PARK	0.34
1992	12	15C	RED CEDAR DR	TWP OF HAMILTON	PARK	0.34
1992	13	15C	RED CEDAR DR	TWP OF HAMILTON	PARK	0.34
1993	23	15C	GREAT OAK RD	SHIN HYUN JIN & SHIN OK HEE	VACANT LAND	0.79
1993	31	15C	GREAT OAK RD	GOODWIN THOMAS G & DIANE K	DET BASIN	2.17
1999	37	15C	KLOCKNER RD	GUERRAZZI DONALD M & SHARI A	VACANT LAND	1.84
1999	52	15C	KLOCKNER RD	UNIVERSITY HEIGHTS AT HAMILTON CORP	VACANT LAND	2.16
2011	24	15C	KUSER RD	ANGELICO ANTHONY N & SALVATRICE	VACANT LAND	3.45
2011	38	15C	KUSER RD	KINGMAN ALLEN B & ELLYN R	TAX FORECLOSURE	0.30
2011	56	15C	KLOCKNER RD	TWP OF HAMILTON	TLF DEED # 144320	1.18
2011	57	15C	GEORGE DYE RD	DEVITA RONALD A & JOANN A	TLF#144320-144764	0.57
2011	58	15C	GEORGE DYE RD	DEVITA RONALD A & JOANN A	VACANT LAND	2.09
2025	7	15C	HAMILTON AVE	TWP OF HAMILTON	FLOOD CONTROL	0.33
2026	5	15C	TUTTLE AVE	KOPEC DENNIS R ETUX	VACANT LAND	0.07
2048	49	15C	LIBERTY ST	DONADO DIMAS	VACANT LAND	0.08
2051	1	15C	E FRANKLIN ST	HOMEDELL LAND CO	MONUMENTS	0.02
2077	1	15C	535 E FRANKLIN ST	TWP OF HAMILTON	ADMINISTRATIVE BLDG.	1.93
2098	5	15C	IRVING CT	ENRIQUEZ FLORINDA,ORTIZ MICHAEL G S	VACANT LAND	0.07
2099	1	15C	E HOWELL ST	TWP OF HAMILTON	VACANT LAND	0.05
2102	23	15C	320 SCULLY AVE	SALEH AHMED & SHERIFA	ADMIN BLDG	1.30
2102	64	15C	CEDAR LA	ARMBRUSTER PETER	VACANT LAND	0.08
2102	67	15C	CEDAR LA	STATE OF NJ DEPT OF CORRECTIONS	PRISON CEMETERY	1.82
2125	9	15C	SYLVAN AVE	LAMPMAN JOHN M JR & MAUREEN B	DETENSION BASIN	0.29
2151	4.01	15C	150 MIAMI AVE	JOYCE ROBERT D	GARAGE	0.86
2151	4.02	15C	S OLDEN AVENUE	TWP OF HAMILTON	MAINTENANCE BLDG.	0.69
2152	1	15C	TAMPA AVE	TWP OF HAMILTON	GARAGE	2.34
2153	1	15C	ORLANDO AVE	INDUSTRY COURT C/O FAIGLE REALTY CO	VACANT LAND	0.69
2153	14	15C	TAMPA AVE	INDUSTRY COURT C/O FAIGLE REALTY CO	GARAGE	0.69
2154	4	15C	801 KUSER RD	PAPIEZ MICHAEL & REIN JOETTE	#147970 FIRE HOUSE	7.45
2154	12.01	15C	KUSER RD	PSEG SERVICES CORP - 6TH FLOOR	#187678-VACANT LAND	26.66
2154	51	15C	2300 SYLVAN AVE	PSEG SERVICES CORP - 6TH FLOOR	DOG POUND	1.21
2154	52	15C	240 TAMPA AVE	TWP OF HAMILTON	ADMINISTRATION BLDG	2.34
2154	53	15C	TAMPA AVE	PSEG SERVICES CORP - 6TH FLOOR	VACANT LAND	0.75
2154	54	15C	MIAMI AVE	TWP OF HAMILTON	VACANT LAND	0.95
2154	55	15C	MIAMI AVE	SC HOLDINGS INC	VACANT LAND	0.03
2154	119	15C	NEWKIRK AVENUE	TWP OF HAMILTON	VACANT LAND	0.10
2154	150	15C	390-400 NEWKIRK AVE	DESANTIS EILEEN,SPECIAL NEEDS TRUST	PARK	22.14
2156	29.01	15C	PERILLI DR	PSEG-SERVICES CORP, ATT: GENTILE D	DETENSION BASIN	0.57
2158	105	15C	PERILLI DRIVE	TWP OF HAMILTON	VACANT LAND	0.29
2163	3.01	15C	2 JUSTICE SAMUEL A ALITO	TWP OF HAMILTON	DEED# 188945	7.16
2163	3.02	15C	WH-MER RD	ZINGERMAN CORNELIUS	#183221 VACANT LAND	110.17
2163	5	15C	5 JUSTICE SAMUEL A ALITO	TCS AT KUSER, LLC	GOLF CENTER	70.96
2163	6	15C	1 JUSTICE SAMUEL A ALITO	TWP OF HAMILTON	LIBRARY	8.42
2163	7	15C	1270 WH-MER RD	MILLER J D,ZADWORNEY J & PARTON J	POLICE STATION	9.64
2163	8	15C	JUSTICE SAMUEL A ALITO JR	TWP OF HAMILTON	VACANT LAND	0.74
2163	10	15C	1298 KUSER RD	TWP OF HAMILTON	VACANT LAND	0.57
2164	1	15C	CYPRESS LA	STATE OF NJ DEPT OF TRANS	HIGHWAYS	0.47
2165	1	15C	CYPRESS LA	STATE OF NJ DEPT OF TRANS	HIGHWAYS	0.29
2166	1	15C	CYPRESS LA	STATE OF NJ DEPT OF TRANS	HIGHWAYS	0.33
2169	1.26	15C	JONI AVE	TWP OF HAMILTON	DETENTION BASIN	1.68
2169	1.27	15C	JONI AVE	TWP OF HAMILTON	OPEN SPACE	15.49
2169	2	15C	2200-2210 KLOCKNER RD	BURROWS NICHOLAS H	PARK	311.64
2169	265	15C	KUSER RD	TWP OF HAMILTON	VACANT LAND	84.68
2169	546	15C	KUSER RD	TWP OF HAMILTON	VACANT LAND	13.97
2169.04	606	15C	WH-HAM SQ RD	NOVAK MICHAEL J & FAITH ANN	VACANT LAND	1.45
2173	1.04	15C	CONNOR COURT	TWP OF HAMILTON	VACANT LAND	0.81
2173	23	15C	YDV-HAM SQ RD	SUCH LORRAINE ETVIR	PUMPING STATION	7.06
2175	1	15C	LALOR ST	CITY OF TRENTON C/O CITY HALL	VACANT LAND	0.09
2176	1	15C	HENRY ST	CITY OF TRENTON C/O CITY HALL	VACANT LAND	0.03
2176	4	15C	HENRY ST	HEWITT ST SQ,LLC C/O MERCER MGMT	VACANT LAND	0.02

Property Class 15 Parcels

Block	Lot	Property Class	Property Address	Owner	Facility Type	Area (acres)
2180	34	15C	HEWITT AVE	TRIGUEROS OSBALDO M & THELMA E	PLAYGROUND	0.49
2181	53	15C	HIGH ST	TWP OF HAMILTON	PUMPING STATION	0.06
2187	3	15C	220 BUNTING AVE	DAYTON HOUSES LLC	PLAYGROUND	10.88
2187	4	15C	100 BUNTING AVE	TWP OF HAMILTON	BABE RUTH LEAGUE PA	8.58
2187	6	15C	400 BUNTING AVE	TWP OF HAMILTON	VACANT LAND	4.48
2196	3	15C	LALOR ST	MARROQUIN SANTOS & HELEN	VACANT LAND	0.01
2218	1	15C	ANNABELLE AVE	COUNTY OF MERCER	VACANT LAND	0.29
2218	32	15C	NEW CEDAR LA	COUNTY OF MERCER	VACANT LAND	0.13
2218	33	15C	NEW CEDAR LA	COUNTY OF MERCER	TAX FORECLOSURE	0.24
2220	14	15C	1638 BROAD ST	B & R WEISE REALTY, LLC	PARKING AREA	0.30
2221	15	15C	GENESEE ST	TWP OF HAMILTON	PARKING AREA	0.14
2232	2	15C	CEDAR LA	TWP OF HAMILTON	VACANT LAND	0.06
2261	8	15C	WILFRED AVE	TWP OF HAMILTON	VACANT LAND-#118950	0.06
2261	10	15C	169 WILFRED AVE	MIRANDA JOSE	RECREATION CENTER	1.10
2261	21	15C	PARKINSON AVE	MIRANDA JOSE	VACANT LAND	0.06
2263	11	15C	BERG AVE	TWP OF HAMILTON	TAX FORECLOSURE	0.06
2264	23	15C	BERG AVE	MORALES EFRAIN J FERNANDEZ	VACANT LAND	0.12
2264	27	15C	BERG AVE	SPATOLA RICK C	VACANT LAND	0.03
2300	1	15C	BROAD ST	TWP OF HAMILTON	PARKING	0.29
2302	1	15C	13 RENNIE ST	THE COMMISSIONERS OF FIRE DIST. #3	#191824-FIRE HOUSE	0.95
2319	1	15C	S CLINTON AVE	GARCIA RODOLFO J & PRISHILA	VACANT LAND	0.11
2327	1	15C	BORDEN AVE	TWP OF HAMILTON	#140278 VACANT LAND	0.84
2327	21	15C	HUNT AVE	TWP OF HAMILTON	VACANT LAND	0.42
2328	11	15C	BORDEN AVE	BORDEN HAMILTON, LLC C/O R DIXON	VACANT LAND	0.06
2328	19	15C	122 BORDEN AVE	TWP OF HAMILTON	RESIDENCE	0.06
2328	21	15C	BORDEN AVE	MARTIN CONSUELO & GONZALES ADOLFO	VACANT LAND	0.06
2329	2	15C	CLOVER AVE	EQUITY TRUST COMPANY CUSTODIAN FBO	VACANT LAND	0.06
2330	9	15C	210 CLOVER AVE	MARRERO MANUEL	#190390-RESIDENCE	0.11
2335	13	15C	MCLELLAN AVE	KAROUSATOS GEORGE, RUDOLPH PATRICIA	PLAYGROUND	0.03
2355	41	15C	610 HUNT AVE	COWINS STEFFON	TAX FORECLOSURE	0.06
2359	10	15C	PARK AVE	EARL KRISTEN E & RIETZL THOMAS	PARK	0.23
2362	1	15C	310 ROWAN AVE	PABERS MARK F	SCHOOLS	0.98
2370	1	15C	WESTCOTT AVE	COUNTY OF MERCER	VACANT LAND	0.49
2370	2	15C	157 WESTCOTT AVE	COUNTY OF MERCER	BIRD SANCTUARY	0.46
2370	3	15C	WEDGE DR	COUNTY OF MERCER	VACANT LAND	0.34
2379	32	15C	655 PITMAN AVE	PSEG SERVICES CORP - 6TH FLOOR	PARK	28.83
2379	36	15C	FIELD AVE	TWP OF HAMILTON	VACANT LAND	0.26
2380	4	15C	FIELD AVE	TWP OF HAMILTON	VACANT LAND	0.24
2380	8	15C	736 BERG AVE	TWP OF HAMILTON	VACANT LAND	0.06
2394	1	15C	SAMDIN BLVD	TWP OF HAMILTON	VACANT LAND	0.01
2403	1	15C	IRVINGTON PL	TWP OF HAMILTON	VACANT LAND	0.01
2405	3	15C	LALOR ST	GANKIEWICZ JOSEPH & LORRAINE M	VACANT LAND	124.02
2405	5	15C	RANDALL AVE	COUNTY OF MERCER	CANAL	0.09
2405	6	15C	RANDALL AVE	COUNTY OF MERCER	VACANT LAND	55.33
2405	7	15C	ROWAN AVE	ABBOTT TURNER T & SUZANNE L	VACANT LAND	57.89
2405	9	15C	INDEPENDENCE AVE	COUNTY OF MERCER	VACANT LAND	5.08
2406	2	15C	151 WESTCOTT AVE	COUNTY OF MERCER	HISTORIC SITES	118.06
2406	3	15C	INDEPENDENCE AVE	WOLDIN MARGARET	VACANT LAND	16.04
2406	7	15C	INDEPENDENCE AVE	COUNTY OF MERCER	VACANT LAND	6.61
2408	36	15C	INDEPENDENCE AVE	MEEKS HARRY & FRANCES	VACANT LAND	1.31
2408	43	15C	BRAFMAN DRIVE	TWP OF HAMILTON	TAX FORECLOSURE	2.00
2414	25	15C	MEREDITH ROAD	GABRELL STEPHEN & TERRI	DRAINAGE	0.57
2445.01	11	15C	ANDOVER WAY	BEVINS NICHOLAS & MARIA L	VACANT LAND	1.47
2450	14	15C	HARCOURT DR	HERNANDEZ GERMAN	VACANT LAND	0.05
2460	4	15C	SUNSET BLVD	BRUTTON RODNEY & LENORE	HIGHWAYS	0.05
2461	12	15C	HOBSON AVE	SINGH SUDESH	HIGHWAYS	0.16
2472	17	15C	ARENA DR	TWP OF HAMILTON	TAX FORECLOSURE	0.10
2474	52	15C	KNAPP AVE	WINDING BROOK ASSOCIATES, LLC	VACANT LAND	0.20
2477	1	15C	111 EMELINE AVE	TWP OF HAMILTON	#131164-RESIDENCE	4.53
2479	27	15C	ALFRED AVE	TAYLOR SHAWN	TAX FORECLOSURE	0.05
2480	7	15C	25 RUSKIN AVE	ANDERSON FITZROYE & YOLANDA S	VOLUNTEER FIRE CO	0.10
2480	9	15C	61 RUSKIN AVE	DE COU HOSE CO	FIRE HOUSE	0.68
2492	26	15C	ARENA DR	MEARA SEAN & MARY ELLEN	VACANT LAND	0.02
2506	2	15C	LAMBERTON RD	STATE OF NJ DEPT OF TRANSPORTATION	VACANT LAND	2.11
2506	3	15C	LAMBERTON RD	STATE OF NJ DEPT OF TRANSPORTATION	VACANT LAND	2.09
2506	4	15C	LAMBERTON RD	THE STATE OF N J, DEPT OF TRANS.	VACANT LAND	2.84
2506	5	15C	LAMBERTON RD	STATE OF NJ DEPT OF TRANS	VACANT LAND	10.15
2506	15	15C	LAMBERTON RD	STATE OF NJ DEPT OF TRANS	HIGHWAY	29.38
2506	19	15C	LAMBERTON RD	STATE OF NJ DEPT OF TRANS	#178995-VACANT LAND	6.50

Property Class 15 Parcels

Block	Lot	Property Class	Property Address	Owner	Facility Type	Area (acres)
2506	23	15C	LALOR ST	STATE OF NJ DEPT OF TRANS	VACANT LAND	30.70
2506	30	15C	LAMBERTON RD	CNV, LLC C/O HART ROCK GROUP	VACANT LAND	0.11
2507	4	15C	ROUTE 29/I295	COUNTY OF MERCER	VACANT	26.32
2508	1	15C	LAMBERTON RD	STATE OF NJ DEPT OF ENV PROTECTION	CANAL	4.85
2509	3	15C	DUCK ISLAND/I295	STATE OF N J DEPT OF TRANSPORTN	VAC LAND	4.88
2509	4	15C	LAMBERTON RD	STATE OF N J DEPT OF TRANSPORTN	VACANT LAND	5.60
2511	1	15C	LAMBERTON RD	COUNTY OF MERCER	VACANT LAND	1.34
2511	2	15C	DUCK ISLAND/I295	TWP OF HAMILTON	VACANT	1.02
2511	4	15C	DUCK ISLAND/I295	TWP OF HAMILTON	VACANT	12.92
2511	5	15C	BROAD ST	TWP OF HAMILTON	VACANT LAND	12.67
2512	1	15C	DUCK ISLAND/I295	STATE OF N J DEPT OF ENVIRN PROTECN	VACANT	1.14
2513	1	15C	LAMBERTON RD	STATE OF NJ DEPT OF ENV PROTECTION	VACANT LAND	7.72
2515	1	15C	WH-BORDENTOWN RD	TWP OF HAMILTON	VACANT LAND	21.63
2515	2	15C	DUCK ISLAND/I295	TWP OF HAMILTON	VACANT	2.04
2516	1	15C	I295	TWP OF HAMILTON	SEWAGE	13.07
2517	1	15C	HOBSON AVE	TWP OF HAMILTON	SEWAGE	115.79
2518	1	15C	DUCK ISLAND/I295	TWP OF HAMILTON	SEWARGE	10.10
2519	1	15C	I295/CROSSWICKS CREEK	TWP OF HAMILTON	SEWARGE	96.79
2519	2	15C	I295	TWP OF HAMILTON	VACANT	0.62
2520	1	15C	300 HOBSON AVE	STATE OF N J DEPT OF TRANSPORTN	SEWAGE DISPOSAL	146.15
2520	2	15C	I295/I195	STATE OF N J DEPT OF TRANSPORTN	VACANT LAND	8.65
2524	7	15C	19 LOCUST AVE WEST	IRVIN JOAN M	VOLUNTEER FIRE CO	0.88
2548	8	15C	SHARPS LANE	HAM TWP-BD OF ED C/O N ZDANOWICZ	DETENTION BASIN	0.67
2556	46	15C	BROAD ST	CHELL RAMONA L	TAX FORECLOSURE	1.42
2559	1	15C	BROAD ST	TWP OF HAMILTON	PUMPING STATION	0.09
2565	19	15C	TANTUM DR	TWP OF HAMILTON	VACANT LAND	0.08
2575	10	15C	335 SHARPS LANE	HAYES MARGARET J & PEREZ PATRICIA	REFRESHMENT STAND	9.70
2575	47.06	15C	DARK LEAF DR	HUTCHINSON ALBERT E	VACANT LAND	0.38
2575	94	15C	ENGLEWOOD BLVD	BLACKMER RUSSELL M III	VACANT LAND-#118609	0.91
2575	160	15C	KUSER RD	TWP OF HAMILTON	TAX FORECLOSURE	0.14
2575	193	15C	HANSEN AVE	TWP OF HAMILTON	VACANT LAND	0.13
2581	1	15C	KERR DR	BRISANDE, LLC	PUMPING STATION	0.76
2594	16	15C	2779 KUSER RD	KNF NEUBERGER, INC	MAINTENANCE BLDG	7.93
2597	11	15C	11 MARLEN DR	DENHOLTZ 3 AAA DR LLC C/O DENHOLTZ	DETENTION BASIN	1.24
2604	8	15C	MIDDLETON DR	MAHON THOMAS P & ROSEMARIE A	VACANT LAND	0.08
2605	37	15C	BROAD ST	STATE OF NJ DEPT OF TRANS	VACANT LAND	0.12
2605	51	15C	MIDDLETON DR	HARGRAVES THOMAS R & JANE M	RIGHT OF WAY	2.60
2605	52	15C	BROAD ST	STATE OF NJ DEPT OF TRANS	HIGHWAY	3.82
2606	14	15C	BROAD ST	TWP OF HAMILTON	LAKE	29.11
2606	19	15C	DOVER RD	OZDONSKI WILLIAM & OZDONSKI PAIGE	VACANT LAND	0.05
2606	20	15C	DOVER RD	OZDONSKI WILLIAM & OZDONSKI PAIGE	VACANT LAND	0.15
2606	69	15C	OVINGTON DR	TWP OF HAMILTON	VACANT LAND	0.10
2606	96	15C	PLEASANT DR	KLEIN GREGORY S	PARK	11.59
2606.03	127	15C	APOLLO DR	SANCHEZ LUIS & MUNZON LIGIA	VACANT LAND	4.86
2606.03	165	15C	MAITLAND RD	KIEFER RUDY	VACANT LAND	2.89
2607	13	15C	YDV-HAM SQ RD	TWP OF HAMILTON	VACANT LAND	2.32
2610	29	15C	680 STATE HWY 130	BORROMEO ADELE	POST OFFICE	29.71
2610	33	15C	STATE HWY 130	TWP OF HAMILTON	VACANT LAND	0.15
2612	5.06	15C	1400 NEGRON DR	HORIZON CTR,LLC C/O MACK-CALI	ADMINISTRATIVE BLDG.	38.99
2612.01	1	15C	STATE HWY 130	NJ DEPT OF TRANSPORTATION	AM LEGION BLDG	1.27
2613	1.1	15C	110 EDGEBROOK RD	JDN REAL ESTATE C/O PROPERTY TAX	GRAFTON HOUSE	14.11
2614	26	15C	SODEN DR	BRECHT DAVID J & FRANCO KRISTIN M	VACANT LAND	15.15
2614	27	15C	MAE DR	CIVITELLO THOMAS,SFRAMELI STEFANIE	TAX FORECLOSURE	16.39
2614	72	15C	MAE DR	CIVITELLO THOMAS,SFRAMELI STEFANIE	RIGHT OF WAY	0.13
2614	86	15C	BROAD ST	KROSCWITZ JOHN II & SYLVIA	VACANT LAND	36.31
2614	130	15C	55 FISHER PLACE	HARRIS RONALD,LINDA & GUZZO JOANN	PARK	18.54
2614	133	15C	FISHER PL	YARDVILLE SWIM CLUB	#190390-POOL	1.49
2618	12	15C	AMSTERDAM RD	TWP OF HAMILTON	TAX FORECLOSURE	0.06
2619	4	15C	BEAUMONT RD	MCADEN B A,SHEEHAN J L & LAUX M J	VACANT LAND	0.09
2620	6	15C	COLERIDGE AVE	TWP OF HAMILTON	VACANT LAND	0.05
2620	34	15C	BEAUMONT RD	TWP OF HAMILTON	VACANT LAND	0.05
2656	6	15C	ARGONNE AVE	URAM THOMAS D & ROBIN LYNNE	VACANT LAND	2.41
2661	1	15C	50 MAIN ST	TWP OF HAMILTON	VACANT LAND	1.15
2661	3	15C	74 MAIN ST	TWP OF HAMILTON	WAREHOUSE	2.40
2661	42	15C	55 YDV-GROVEVILLE RD	TWP OF HAMILTON	#54521-PUMP STATION	3.74
2663	13	15C	392 CHURCH ST	FRANCKOWIAK THOMAS E	COMMUNITY CENTER	1.11
2663	18	15C	YDV-GROVEVILLE RD	YARDVILLE SUPPLY CO	VACANT LAND	2.57
2664	1	15C	GROVLE-YARDVLL RD & 130	TWP OF HAMILTON	VACANT LAND	0.60
2682	52	15C	MURRAY AVE	MANNO DEBRA J & HILLMANN PATRICIA J	VACANT LAND	0.23

Property Class 15 Parcels

Block	Lot	Property Class	Property Address	Owner	Facility Type	Area (acres)
2683	7	15C	MURRAY AVE	MATRIX HAMILTON ROUTE 130 DEV LLC	VACANT LAND	2.07
2683	45	15C	VILLA AVE	MATRIX HAMILTON ROUTE 130 DEV LLC	VACANT LAND	2.07
2690	37	15C	GROVE-ALLENTOWN RD	RANALLI MARK & LISA M	178705 VAC LAND	13.37
2690	67	15C	BROAD ST	TWP OF HAMILTON	VACANT LAND	0.06
2690	71	15C	BROAD ST	NOWAK TREVOR A	VACANT LAND	0.06
2690	72	15C	BROAD ST	WOODWARD PROPERTIES 277 LLC	TAX FORECLOSURE	9.34
2712	1	15C	YDV-ALLENTOWN RD	FAITH BAPTIST CHURCH OF HAMILTON	VACANT LAND	0.22
2712	11.05	15C	CULLEN WAY	SCHEPS PAUL & HEATHER	DRAINAGE	5.02
2712	13	15C	VILLAGE DR	TWP OF HAMILTON	VACANT LAND	3.50
2712	14	15C	YDV-ALLENTOWN RD	TWP OF HAMILTON	VACANT LAND	0.11
2712	20	15C	VILLAGE DR	SCHEPS PAUL & HEATHER	VACANT LAND	2.50
2712	25	15C	BEAR COURT	TWP OF HAMILTON	VACANT LAND	2.36
2712	34	15C	74 VILLAGE DR	TWP OF HAMILTON	VACANT LAND	0.63
2712	35	15C	72 VILLAGE DR	TWP OF HAMILTON	VACANT LAND	0.88
2712	36	15C	70 VILLAGE DR	TWP OF HAMILTON	VACANT LAND	0.87
2712	138.03	15C	CROSS-HAM SQ ROAD	KACZOR CARL JR	VACANT LAND	1.36
2712	157	15C	4105 CROSS-HAM SQ RD	TWP OF HAMILTON	173149 VAC LAND	21.95
2712	160	15C	4201 CROSS-HAM SQ RD	FAITH BAPTIST CHURCH OF HAMILTON	#191826-FIRE HOUSE	7.43
2713	20	15C	4130 CROSS-HAM SQ RD	TWP OF HAMILTON	#171323 VACANT LAND	59.59
2713	29	15C	CROSS-HAM SQ RD	BORSOS ANDREW S & MYRA	#166684-178920	27.33
2713	41	15C	YDV-ALLENTOWN RD	BIRD H KENNETH & JUNE D	HIGHWAY	1.87
2714	22	15C	MERRICK RD	GADSBY MEGAN L & SIMON P	VACANT LAND	16.89
2714	27	15C	MERRICK RD	NJ TURNPIKE AUTHORITY C/O HOST	HIGHWAY	18.48
2714	29	15C	MERRICK RD	NJ TURNPIKE AUTHORITY C/O HOST	HIGHWAY	2.66
2714	30.02	15C	UNCLE PETES RD	NJ TURNPIKE AUTHORITY C/O HOST	165171 FARMLAND	55.94
2715	7	15C	EDGEBROOK RD	TWP OF HAMILTON	VACANT LAND	3.63
2715	9	15C	EDGEBROOK RD	PRINCETON RESEARCH LANDS INC	VACANT LAND	0.99
2716	1.02	15C	MAIN ST	MUSHINSKI LYLE EDWARD	VACANT LAND	4.48
2716	2	15C	MAIN ST	B G BLACK FOREST, LLC C/O	VACANT LAND	0.05
2716	14	15C	ALLEN ST	AFFRIME JOSHUA N & COLLEEN M	VACANT LAND	15.84
2716	86	15C	MAIN ST	SMITH CARLEN	VACANT LAND	0.20
2716	170	15C	KRISTOPHER DRIVE	RIMILI DAVID J & SUSAN A	VACANT LAND	0.28
2716.02	8	15C	CORNFLOWER RD	QUINN CATHLEEN M	VACANT LAND	0.91
2716.05	1	15C	TEA ROSE LANE	HERRERA DANIEL F & GISELLE D	VACANT LAND	0.18
2724	14.18	15C	JIMARIE COURT	MCCAGG J R II C/O JRM CONSTRUCTION	WATER SHED	0.93
2724	31.15	15C	GROVE-ALLENTOWN RD	MCCAGG J R II C/O JRM CONSTRUCTION	VACANT LAND	2.09
2724	33	15C	ALESSIO TERRACE	WILDER CHRISTOPHER & HEATHER	DRAINAGE	31.24
2724	61.06	15C	TERRY CT	HOMYAK EDWARD & KATHERINE M	DETENTION BASIN	0.27
2725	1	15C	4654 CROSS-HAM SQ RD	NEW JERSEY TURNPIKE AUTHORITY	RESIDENCE	0.55
2725	2	15C	4646 CROSS-HAM SQ RD	N J TURNPIKE AUTHORITY C/O LAW DEPT	RESIDENCE	0.71
2725	3	15C	4630 CROSS-HAM SQ RD	N J TURNPIKE AUTHORITY C/O LAW DEPT	RESIDENCE	1.23
2725	8	15C	CROSS-HAM SQ RD	BENNETT WILLIAM	RESIDENCE	8.63
2726	4	15C	5715 BROAD ST	PSEG SERVICES CORP - 6TH FLOOR	DEED# 98044 TRNPIKE	0.51
2726	20	15C	CHURCH ST	DIMOPOULOS DANNY & HANSEN JACOB	VACANT LAND	1.36
2727	3	15C	CHURCH ST	POLHEMUS ADAM & KRISTIN	ROADS	0.05
2729	1	15C	CROSS-HAM SQ RD	NJ TURNPIKE AUTHORITY	ROAD	0.56
2729	2	15C	CROSS-HAM SQ RD	NJ TURNPIKE AUTHORITY	#164162-TURNPIKE	1.01
2729	3	15C	CROSS-HAM SQ RD	NJ TURNPIKE AUTHORITY	ROAD	0.94
2730	1	15C	OLD YORK RD	COUNTY OF MERCER	VACANT LAND	5.83
2730	2	15C	15 OLD YORK ROAD	COUNTY OF MERCER	VACANT LAND	0.79
2730	9.02	15C	SAWMILL ROAD	BARBALACCI MICHAEL	OPEN SPACE PRESERV	50.36
2730	14.04	15C	SAWMILL ROAD	TRENTON FOREST HOLDING ASSOC	VACANT LAND	20.94
2730	15.02	15C	SAWMILL ROAD	COUNTY OF MERCER - DIV OF PLANNING	VACANT LAND	8.63
2730	18	15C	IRON BRIDGE RD	COUNTY OF MERCER - DIV OF PLANNING	FARMLAND-#125216	133.19
2731	1	15C	5905 BROAD ST	TALLEY ERIC & NORMA JEAN	VACANT LAND	0.87
2731	2	15C	5915 BROAD ST	TALLEY ERIC & NORMA JEAN	VACANT LAND	0.52
2731	3	15C	5925 BROAD ST	COUNTY OF MERCER	VACANT LAND	0.52
2731	4	15C	BROAD ST	COUNTY OF MERCER	VACANT LAND	4.35
2731	5	15C	10 OLD YORK RD	COUNTY OF MERCER	VACANT LAND	0.65
2732	1	15C	4754 CROSS-HAM SQ RD	COUNTY OF MERCER	RIGHT OF WAY	6.18
2732	3.01	15C	CROSS-HAM SQ RD	COUNTY OF MERCER	VACANT LAND	32.65
2732	38	15C	NALBONE CT	GAROFALO DOMINIC J & JOANNE M	VACANT LAND	7.09
2733	3	15C	MERRICK RD	CONSTANCE ALAN J & SUZANNE M	HIGHWAYS	19.80
2733	4.01	15C	185 MERRICK RD	NWE JERSEY TURNPIKE AUTHORITY	HIGHWAY	6.56
2735	59	15C	DRIALO DR	PRETTYMAN THOMAS J JR & DONNA M	VACANT LAND	4.14
2735	60	15C	YDV-ALLENTOWN RD	ASHE KEVIN M & MASITTI CHRISTINA M	VACANT LAND	2.26
2738	1.02	15C	YDV-ALLENTOWN RD	LEAKE BRIDGET D	VACANT LAND	12.30
2738	2.02	15C	YDV-ALLENTOWN RD	ELLIS W SCOTT	VACANT LAND (140760)	6.57
2738	7	15C	HIDDEN HOLLOW DRIVE	BENCIVENGO NEIL & SUSAN	VACANT LAND	9.59

Property Class 15 Parcels

Block	Lot	Property Class	Property Address	Owner	Facility Type	Area (acres)
2738	23.09	15C	WEATHERSFIELD DR	MYDLOWSKI EUGENE & SAKSA CATHERINE	VACANT LAND	29.33
2739	5.11	15C	OLD YORK ROAD	DEPCON INC.	VACANT LAND	38.36
2739	39	15C	OLD POST LA	TWP OF HAMILTON	VACANT LAND	5.03
2739	87.01	15C	IRON BRIDGE ROAD	TWP OF HAMILTON	DETENTION BASIN	2.13
2739	87.07	15C	OAKWOOD COURT	TWP OF HAMILTON	VACANT LAND	3.97
2739	87.11	15C	JEREMY PLACE	TWP OF HAMILTON	DETENTION BASIN	70.05
2743	6.02	15C	SAWMILL RD	GARDEN STATE NURSERY, LLC	VACANT LAND	14.67
2743	14	15C	ROSEWOOD TERRACE	GARDEN STATE NURSERY, LLC	VACANT LAND	2.89
2743	22.02	15C	EXTONVILLE RD	GARDEN STATE NURSERY, LLC	#166611-VAC LAND	21.42
2743	31.02	15C	EXTONVILLE RD	SANGER ROBERT A & TINA L	VACANT LAND	22.27
2743	36	15C	9 IRON BRIDGE RD	GARDEN STATE NURSERY, LLC	VACANT LAND	30.01
2743	47	15C	AQUA TERR	TOMENCHOK ROBERT E & JOANN A	VACANT LAND #115146	6.42
2743.01	55	15C	AQUA TERR	TWP OF HAMILTON	VACANT LAND	0.11
2745	1	15C	EXTON-ALLENTOWN RD	VEISZ RICHARD P	#166605-VAC LAND	5.18
2745	3.03	15C	EXTONVILLE RD	STATE OF NJ DEPT OF ENV PROTECTION	VACANT LAND	7.60
2746	4	15C	EXTON-ALLENTOWN RD	KALABUS ROMAN & IRINA	DEED# 181509	1.93
2746	6	15C	ELLISDALE RD	NAGY JOHN S & KATHY L	FARMLAND PRESERV	31.18
2747	1	15C	MAPLE SHADE AVE EAST	TWP OF HAMILTON	VACANT LAND	0.10
1509	12	15D	116 YOUNGS RD	SANDYCK PAUL H JR & CAROLYN E	OFFICE BLDG.	0.34
1509	18	15D	92 YOUNGS RD	NJ SPORTS ASSOCIATES,LLC	#163163 CHURCH	2.05
1549	32	15D	101 SAINT CLAIR AVE	WESLEY MISSION CHAP C/O REV. BLANEY	CHURCH	0.14
1622	7	15D	MER-EDINBURG RD	ST MARK UN.METH.CH C/O BRD OF TRUST	CHURCH	4.75
1622	8	15D	465 PAXSON AVE	TWP OF HAMILTON	CHURCH & PARSONAGE	6.52
1656	58	15D	746 KLOCKNER AVE	NABOSSE WESLER & CASSANDRA J	CHURCH	3.27
1660	6	15D	41 STEINERT AVE	DELUCA JOHN	CHURCH OFFICE	0.20
1666	80	15D	3710 E STATE ST	MAZUR JEFFREY A & JANET V	CHURCH	11.88
1672	8	15D	380 MER-EDINBURG RD	KNUTSON THOMAS R & MARYANNE E	CHURCH	2.50
1682	23	15D	2590 NOTTINGHAM WAY	LANDMARK PROPERTY MANAGEMENT, INC	HEALTH CENTER	0.42
1685	7	15D	3715 E STATE ST	STANTON CELINDA E	CHURCH	0.07
1685	37	15D	162 SHERIDAN RD	GRACE ST PAUL'S RECTORY	PARSONAGE	0.09
1736	14	15D	150-162 JOHNSTON AVE	ANNA ALPHONSE & ANNA DIEUSEUL	CHURCH-#168792	0.14
1757	25	15D	2044 GREENWOOD AVE	TWP OF HAMILTON	CHURCH-#129874	0.12
1779	49	15D	1200 KLOCKNER RD	KLON ANTHONY E & JENNIFER A	CHURCH	10.52
1787	2	15D	15 STATE HWY 33	CONENNA LISA & IPPOLITO MICHAEL JR	THRIFT STORE	0.49
1824	17	15D	945 STATE HWY 33	O'MARA BRIAN J & KATIE K	PARK	7.00
1830	20	15D	3550 NOTTINGHAM WAY	ANDRUSIEWICZ RAYMOND & LISA	CHURCH	0.90
1830	50	15D	NOTTINGHAM WAY	PILONE WILLIAM	SCHOOL	0.29
1830	51	15D	3562 NOTTINGHAM WAY	FIRST PRES CH OF HAM SQ % REV HAWES	SCHOOL	0.37
1830	52	15D	NOTTINGHAM WAY	ANDRUSIEWICZ RAYMOND & LISA	PARKING AREA	0.40
1835	1	15D	3541 NOTTINGHAM WAY	LESKO RONALD C & JUDY	PARSONAGE & CEMETER	1.83
1839	87	15D	3752 NOTTINGHAM WAY	HUNT KENNETH R & LUCIA M	CHURCH-#184675	3.60
1841	174	15D	MARIO DR	DIQUINZIO JAMES & JEAN	VACANT LAND	0.08
1841	180	15D	5 MARIO DR	THE CHURCH OF ST GREGORY THE GREAT	#162801-RECTORY	0.18
1841	181	15D	MARIO DR	THE CHURCH OF ST GREGORY THE GREAT	#162802-VACANT LAND	0.22
1841	183	15D	4620 NOTTINGHAM WAY	ST GREGORY THE GREAT	CHURCH	8.06
1859	21	15D	9 SHAWNEE DR	FORMOLO LEONARD C/O TERRY BOWER	PARSONAGE	0.19
1922	9	15D	1670 WH-MER ROAD	HAMILTON PLAZA ASSOC LTD PARTNERS	#171084-RECREATION	3.36
1924	16	15D	1934 KLOCKNER RD	SEVEN HUNDRED BOSTON CORP/ADVANTAGE	#168177-CHURCH	3.04
1952	24	15D	4315 NOTTINGHAM WAY	LUTHERAN CH OF THE RESURRECTION	CHURCH	2.15
1952	36	15D	1930 STATE HWY 33	LUTHERAN CH OF THE RESURRECTION	CHURCH	1.54
1961	186.8	15D	2279 STATE HWY 33	GOLDEN CREST CORP CENTER CONDOS C/O	DEED# 186234 CLINIC	0.03
2017	15	15D	626 S OLDEN AVE	CARA MIA PROPERTIES, LLC	CHURCH	3.26
2017	40	15D	MOFFATT AVE	MCNEILL-LITTLE TONEKA & LITTLE B M	VACANT LAND	0.12
2017	51	15D	AUSTIN AVE	HENRY JOHN F, TRUST	PARKING	0.01
2017	52	15D	AUSTIN AVE	HENRY JOHN F, TRUST	PARKING AREA	0.14
2017	64	15D	S OLDEN AVE	HENRY JOHN F, TRUST	PARKING AREA	0.08
2017	65	15D	S OLDEN AVE	ST ANTHONYS CHURCH	PARKING AREA	0.08
2035	11	15D	LIBERTY ST	MATLOCK LASHONNA N	#188666-PARKING AREA	0.06
2035	13	15D	LIBERTY ST	CHAMBERS UNITED METHODIST CHURCH	#188666-PARKING AREA	0.06
2035	15	15D	1627 LIBERTY ST	CHAMBERS UNITED METHODIST CHURCH	#188666-CHURCH	0.06
2045	14	15D	WESLEY AVE	PARR THOMAS R & DARLENE	PARKING AREA	0.06
2045	16	15D	WESLEY AVE	TRENTON CHURCH OF CHRIST	PARKING AREA	0.06
2045	17	15D	2329 LIBERTY ST	TRENTON CHURCH OF CHRIST	CHURCH	0.12
2045	18	15D	2331 LIBERTY ST	TRENTON CHURCH OF CHRIST	FAMILY LIFE CENTER	0.13
2068	14	15D	151 E FRANKLIN ST	CENTRO CRISTIANO CASA DE REFUGIO,	DEED# 172256-CHURCH	0.06
2122	10	15D	1330 CEDAR LA	ROUBA WALTER J JR	RESIDENCE	0.38
2154	1.01	15D	175 LEONARD AVE	THE DIOCESE OF TRENTON	SCHOOLS-#155753	18.18
2154	2	15D	KUSER RD	THE DIOCESE OF TRENTON	SCHOOL/ATHLETIC FLD	17.68
2169	10	15D	2999 KLOCKNER RD	2929 KLOCKNER ROAD,LLC	CHURCH-#112999	1.98

Property Class 15 Parcels

Block	Lot	Property Class	Property Address	Owner	Facility Type	Area (acres)
2176	22	15D	HEWITT AVE	HEWITT ST SQ,LLC C/O MERCER MGMT	VACANT LAND	0.65
2179	16	15D	1183 DEUTZ AVE	ANAVISCA MARVIN E	CHURCH	0.06
2179	20	15D	1195 DEUTZ AVE	VIGNOLA STEVEN V	CHURCH	1.87
2179	21	15D	HIGH ST	ST.JOSAPHATS UKCATH CH,REV LONCHYNA	PARSONAGE	0.08
2184	35	15D	1152 & 1152 REAR DEUTZ AV	VALYO THOMAS R & DONNA L	#170762-PARSONAGE	0.44
2198	1	15D	1599 BROAD ST	RIZZIELLO JOSEPH & SANDRA	CHURCH	0.59
2238	43.01	15D	41 RYAN AVE	ST MARYS CEMETERY	178868 CHURCH	0.81
2238	43.02	15D	81 RYAN AVE	ST MARYS CEMETERY	178896 CHURCH	0.40
2248	1.02	15D	1703 S BROAD	CHURCH OF THE HOLY ANGELS C/O	CHURCH #178837	0.20
2248	1.05	15D	52 LAFAYETTE AVE	CHURCH OF THE HOLY ANGELS C/O	RECREATION CENTER	0.31
2248	1.06	15D	1733 BROAD ST	CHURCH OF THE HOLY ANGELS C/O	#183295-RECTORY	0.06
2257	1	15D	1714 CHAMBERS ST	THE UNIFIED CHURCH OF GOD	#181655-656 CHURCH	0.04
2300	18	15D	1961 BROAD ST	DORRIAN BRIAN P & LINDA A	CHURCH	0.29
2307	3	15D	307 PARKINSON AVE	HOWARD JEFF H	CHURCH	0.06
2322	13	15D	445 PARKINSON AVE	ST PHILLIPS BAPTIST CHURCH	CHURCH-#119251	0.27
2323	24	15D	406 PARKINSON AVE	TRUE LIGHT DELIVERANCE TEMPLE	CHURCH	0.08
2346	28	15D	GRAND AVE	PORTER RONALD L & VERONICA G	PARKING AREA-#11925	0.31
2357	22	15D	554 RIDGE AVE	HOLLOWAY JACQUELINE	CHURCH	0.06
2378	4	15D	106 E PARK AVE	ST MATTHIAS CHURCH % REV R SIGNORE	PARKING AREA	0.14
2398	1	15D	2400 BROAD ST	LIGHT OF THE WORLD FAM. WORSHIP CH	DEED# 159594	0.43
2405	4	15D	477-479 JEREMIAH AVE	UKRAINIAN NAT HOME OF TRENTON	COMMUNITY CENTER	4.98
2423	24	15D	2630 BROAD ST	CARTAGENA GLORIA	DEED# 129866-CHURCH	0.78
2448	5	15D	2111 KUSER RD	RICHARDSON J B & SHALESTIK PATRICIA	CHURCH	2.73
2481	8	15D	87 PEARSON DR	TOMKO DAVID & TILGHMAN CYNTHIA	CHURCH	1.46
2481	24	15D	ZOAR AVE	PEARSON MEMORIAL UNITED METH CHURCH	PARKING	0.04
2481	42	15D	71 PEARSON DR	PEARSON MEMORIAL UNITED METH CHURCH	PARSONAGE	0.52
2493	7	15D	WHITE HORSE AVE	ST MARKS EVANG LUTHERAN CHURCH	VACANT LAND	0.32
2493	8	15D	WHITE HORSE AVE	ST MARKS EVANG LUTHERAN CHURCH	VACANT LAND	0.32
2493	10	15D	336 & 350 WHITE HORSE AVE	ST MARKS EVANG LUTHERAN CHURCH	CHURCH	0.20
2494	38	15D	416 WHITE HORSE AVE	PADILLA JORGE	CHURCH	0.43
2542	24	15D	HEMPSTEAD RD	ST RAPHAELS ROM CATH CHURCH	VACANT LAND	0.18
2542	30	15D	3500 BROAD ST	MARTINEZ MIGDALIA & DUQUE WILLIAM	CHURCH-SCHOOL	12.69
2542	32	15D	BROAD ST	SNOOK RAYMOND E III	VACANT LAND	1.34
2605	1	15D	3871 BROAD ST	STATE OF NJ DEPT OF TRANS	CHURCH	1.56
2661	24	15D	449 CHURCH ST	GROVEVILLE UNITED METH CHURCH	CHURCH-SUNDAY SCHO	0.59
2661	26	15D	447 CHURCH ST	GROVEVILLE UNITED METH CHURCH	PARK & PARSONAGE	0.11
2663	7	15D	430 CHURCH ST	DOLCI JOSEPH & MARYANNE	CHURCH	5.29
2665	4	15D	109 STATE HWY 156	REESE KATHLEEN & PASCUCCI EUGENE	SCHOOLS	1.74
2665	5	15D	119 STATE HWY 156	REESE KATHLEEN & PASCUCCI EUGENE	RABBI RESIDENCE	2.56
2668	15.01	15D	14 YDV-AlLENTOWN RD	MERLINO PROPERTIES LLC	CHURCH-#157502	0.91
2678	14	15D	196 STATE HWY 156	MAHONEY THOMAS E & JENNIFER	RESIDENCE	0.34
2690	12	15D	451-453 YDV-AlLENTOWN RD	VISITATION HOME, INC	CAMP	10.23
2690	13	15D	555 YDV-AlLENTOWN RD	HORNE JEFFREY T & PATRICIA J	CHURCH	11.85
2690	66	15D	4800 BROAD ST	BIRD KENNETH E	CHURCH DEED#116323	18.17
2724	82	15D	839 YDV-AlLENTOWN RD	BOYER DAVID & JENNIFER	CHURCH-SCHOOL	12.31
2739	9.01	15D	501 OLD YORK RD	SHRI PARAMHANS ADVAIT MAT	CHURCH/PARSONAGE	3.06
1505	11	15F	BASIN RD	PENN CEN.TRANS CO.-AMTRAK TAX & INS	VACANT LAND	5.92
1505.01	209	15F	1015 HALIFAX PL	EHLERS LINDA S	#189501 DISABLED VET	0.01
1519	26	15F	8 QUAKERBRIDGE PLAZA	NJ CONGRESS OF PARENTS,TEACHERS,INC	PTA OFFICE	0.02
1519	37	15F	8 QUAKERBRIDGE PLAZA	NJ CONGRESS OF PARENTS,TEACHERS,INC	PTA OFFICE	0.03
1582	13	15F	FOURTH AVE	DIAZ CINDY CHRIS	PARKING AREA	0.39
1583	27	15F	64 THIRD AVE	COLEMAN RICHARD E & DENISE L	CLUB HOUSE	0.05
1589	180	15F	18 FAIRGROUNDS RD	JOHNSON ART & EDUCATION FOUNDATION,	#148782-156149	18.10
1589	184	15F	80 SCULPTORS WAY	JOHNSON ART & EDUCATION FOUNDATION,	OFF/STOR.BLG-156546	6.84
1660	25	15F	77 CHRISTINE AVE	PSEG SERVICES CORP - 6TH FLOOR	VETERANS HOME	1.72
1660	26	15F	CHRISTINE AVE	DUGAN CONOR J & WILSON JAMIE	PARKING	1.57
1762	5	15F	1931 NOTTINGHAM WAY	MCGOWAN KATHLEEN P	180944-ADMIN OFFICE	0.61
1813	5	15F	BARBARA LEE DR	PALAD LINDA P & RAMON M	PARK	0.14
1819	20	15F	2333 WH-MER RD	MERCERVILLE PROF. PARK CONDOS C/O	CLUB HOUSE	0.07
1825	43	15F	235 LANDER DR	PIOTROWSKI N P & PIOTROWSKI R S	DISABLED VET #190659	0.03
1836	29	15F	3682 NOTTINGHAM WAY	GOTHIC LODGE #270	HALLS	0.30
1900	16	15F	HOBART AVE	CORDERO DORIS & JAIME-PAUL	PARKING AREA	0.06
1906	2	15F	411 HOBART AVE	COOK ATHLETIC ASSOCIATION	RECREATION CENTER	0.29
1922	19	15F	9 LAMONT AVE	LOCKWOOD WILLIAM E JR & JEANETTE	RESIDENCE	5.47
1922	25	15F	1655 KLOCKNER RD	POND RUN HOUSING,LP	RESIDENCE	3.74
1922	32	15F	1451 KLOCKNER RD	PSEG SERVICES CORP - 6TH FLOOR	MEETING HALL	2.25
1922	33	15F	KLOCKNER RD	HAMILTON TWP COLUMBUS HOME ASSOC	HIGHWAY	0.69
1961	186.09	15F	2271 STATE HWY 33	DEFCOL REALTY, LLC	#182345 ADMIN OFFICE	0.02
1961	186.1	15F	2271 STATE HWY 33	DEFCOL REALTY, LLC	#182345 ADMIN OFFICE	0.02

Property Class 15 Parcels

Block	Lot	Property Class	Property Address	Owner	Facility Type	Area (acres)
1961	186.11	15F	2271 STATE HWY 33	DEFCOL REALTY, LLC	#182345 ADMIN OFFICE	0.02
1961	186.12	15F	2271 STATE HWY 33	DEFCOL REALTY, LLC	ADULT DAY CARE	0.02
2142	12	15F	1490 S OLDEN AVE	HAMILTON TWP. POST 31 AMER. LEGION	CLUB HOUSE	0.29
2154	1.02	15F	LEONARD AVE	THE DIOCESE OF TRENTON	RESIDENCE	6.18
2154	3	15F	715 KUSER RD	TWP OF HAMILTON	PROJECT FREEDOM	9.78
2154	12.24	15F	87 SUNDANCE DRIVE	ESAU TAMMY M	DISABLED VET #182699	0.03
2163	33	15F	1540 KUSER RD	BHS, LLC	REGION OFFICE	0.03
2163	40	15F	1542 KUSER RD	CENTER CITY OFFICE PARK CONDO ASSN	OFFICE BLDG #189844	0.03
2163	41	15F	1542 KUSER RD	CENTER CITY OFFICE PARK CONDO ASSN	#189844-OFFICE BLDG	0.03
2163	44	15F	1580 KUSER RD	TWP OF HAMILTON	CLUB	4.87
2168	6.02	15F	1262 WH-HAM SQ RD	WHITEHORSE PARTNERS C/O	OFFICE BUILDING	0.05
2168	6.03	15F	1262 WH-HAM SQ RD	WHITEHORSE PARTNERS C/O	OFFICE BUILDING	0.05
2168	6.04	15F	1262 WH-HAM SQ RD	WHITEHORSE PARTNERS C/O	DEED# 157084 OFFICE	0.05
2169	7	15F	1 HAMILTON HEALTH PL	R W J @ HAMILTON C/O FINANCE DEPT	HOSPITAL	38.39
2169	8	15F	2575 KLOCKNER RD	R W J @ HAMILTON C/O FINANCE DEPT	CANCER HOSPITAL	12.72
2176	35	15F	HEWITT AVE	YARDVILLE PARTNERS, LLC	CONDOMINIUM COMMON	2.34
2296	13	15F	547 SCHILLER AVE	TRENTON DET MARINE CORPS LEAGUE INC	CLUB HOUSE	0.06
2297	25	15F	560 SCHILLER AVE	AMER LEGION POST 313 BR ST PK	CLUB HOUSE	0.06
2317	1	15F	10 RENNIE ST	QUADIAN LLC	175898-MASONIC LODGE	0.09
2317	8	15F	GENESEE ST	QUADIAN LLC	175898- PARKING AREA	0.11
2560	4	15F	66 LAKESIDE BLVD	JOHNSON FRANK E JR & JOAN H	WIDOW OF SERVICEMAN	0.14
2561	1	15F	127 LAKESIDE BLVD	LAKESIDE PRK SOCIAL & CIV.CTR	COMMUNITY CENTER	0.02
2561	5	15F	SPICER AVE	LAKESIDE PARK SOCIAL & CIVIC CTR	PARKING AREA	0.02
2614	136	15F	FISHER PL	YARDVILLE SWIM CLUB	CLUB HOUSE	4.61
2661	17	15F	200-204 MAIN ST	PINEDO VICTOR ORLANDO	CHURCH-#160399	3.97
2676	2	15F	127 STATE HWY 156	LARKIN RITA M ETVIR	CLUB HOUSE	0.48
2690	11.01	15F	417 YDV-AlLENTOWN RD	VISITATION HOME, INC	GROUP RESIDENCE	3.64
2730	15.01	15F	245 SAWMILL ROAD	COUNTY OF MERCER - DIV OF PLANNING	RECREATION CENTER	14.82
2732	9	15F	25 TATTLETOWN RD	SUSCHKE ERIC E	#177517-GROUP HOME	2.24
2732	46	15F	S BROAD ST	SAVE HAMILTON OPEN SPACE C/O LEAR	GREEN ACRES	13.29
2732	54	15F	CROSSWICKS-HAM SQ	SAVE HAMILTON OPEN SPACE C/O LEAR	GREEN ACRES	5.39
2735	4	15F	1242 YDV-AlLENTOWN RD	SANTAMARIA LEONARD A & THERESA A	SOCCER FIELD	22.20
2745	2.01	15F	231 EXTENVILLE RD	STATE OF NJ DEPT OF ENV PROTECTION	#161911-DISABLED VET	5.32
					Total Area (acres)	5074.78