



**Impervious Cover Reduction Action Plan  
for  
Evesham Township, Burlington County, New Jersey**

*Prepared for Evesham Township by the  
Rutgers Cooperative Extension Water Resources Program*

August 10, 2016



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## **Introduction**

Located in Burlington County in southern New Jersey, Evesham Township covers approximately 29.6 square miles. Figures 1 and 2 illustrate that Evesham Township is dominated by urban land uses. A total of 42.4% of the municipality's land use is classified as urban. Of the urban land in Evesham Township, medium density residential is the dominant land use (Figure 3).

The New Jersey Department of Environmental Protection's (NJDEP) 2012 land use/land cover geographical information system (GIS) data layer categorizes Evesham Township into many unique land use areas, assigning a percent impervious cover for each delineated area. These impervious cover values were used to estimate the impervious coverage for Evesham Township. Based upon the 2012 NJDEP land use/land cover data, approximately 15.5% of Evesham Township has impervious cover. This level of impervious cover suggests that the streams Evesham Township are likely impacted streams.<sup>1</sup>

## **Methodology**

Evesham Township contains portions of eight subwatersheds (Figure 4). For this impervious cover reduction action plan, projects have been identified in each of these watersheds. Initially, aerial imagery was used to identify potential project sites that contain extensive impervious cover. Field visits were then conducted at each of these potential project sites to determine if a viable option exists to reduce impervious cover or to disconnect impervious surfaces from draining directly to the local waterway or storm sewer system. During the site visit, appropriate green infrastructure practices for the site were determined. Sites that already had stormwater management practices in place were not considered.

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<sup>1</sup> 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

# Subwatersheds of Evesham Township

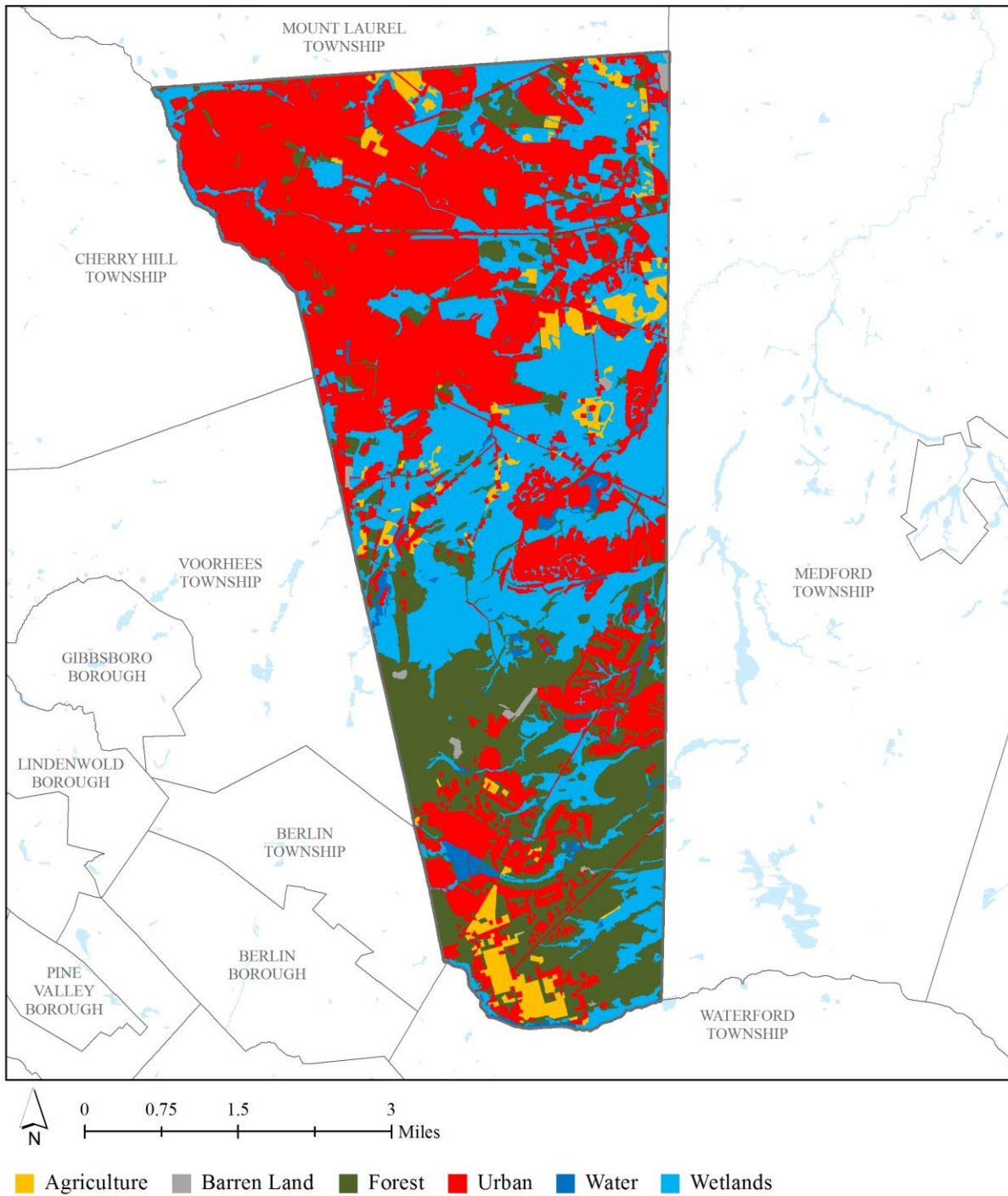


Figure 1: Map illustrating the land use in Evesham Township

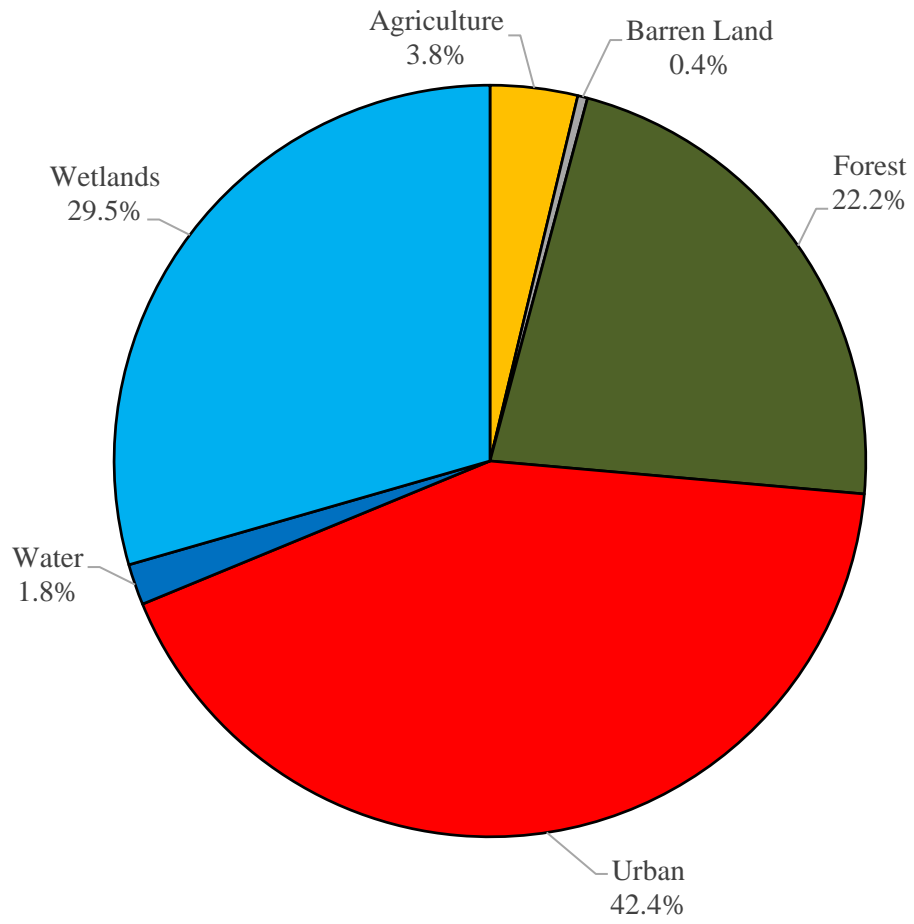


Figure 2: Pie chart illustrating the land use in Evesham Township

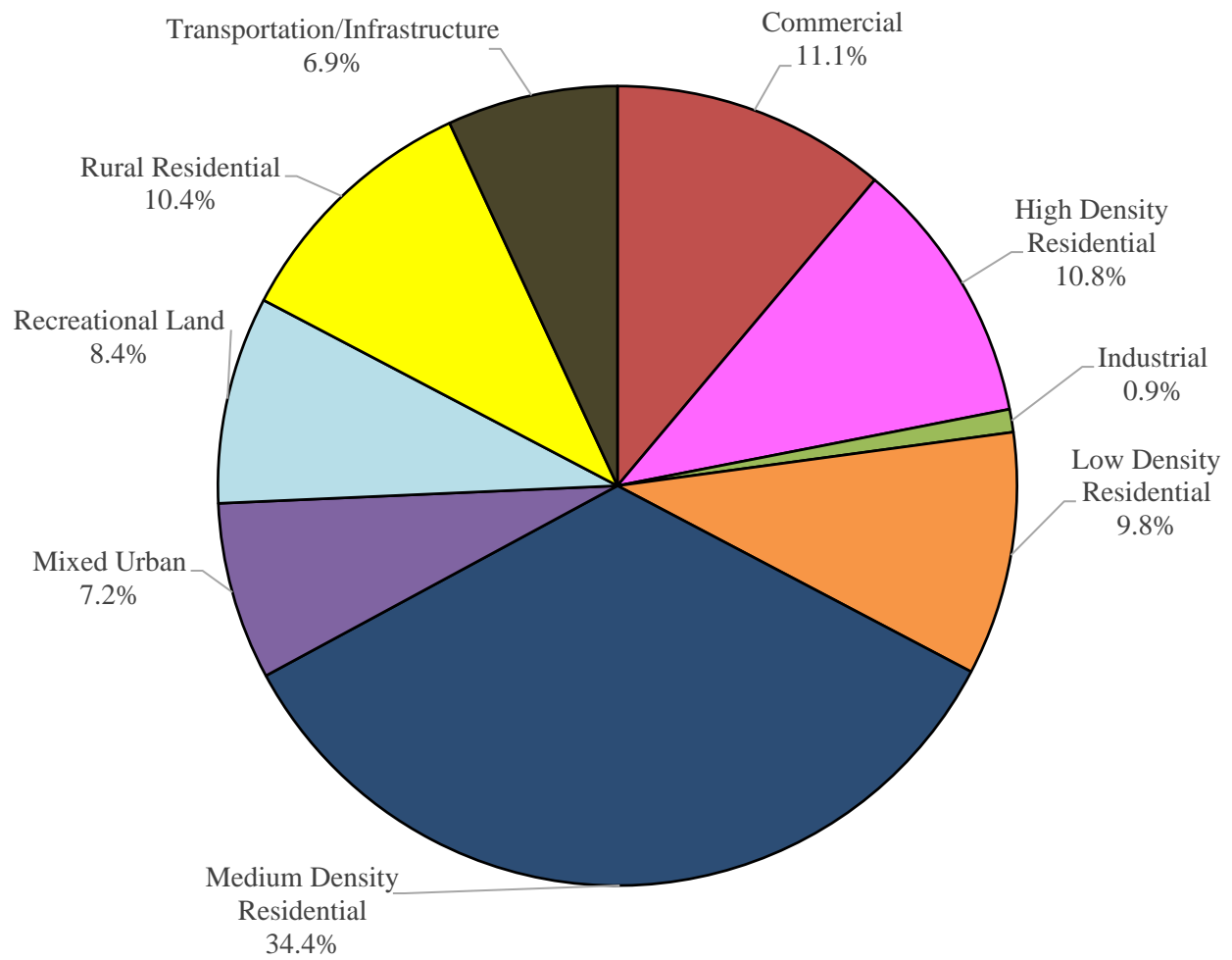


Figure 3: Pie chart illustrating the various types of urban land use in Evesham Township

### Subwatersheds of Evesham Township

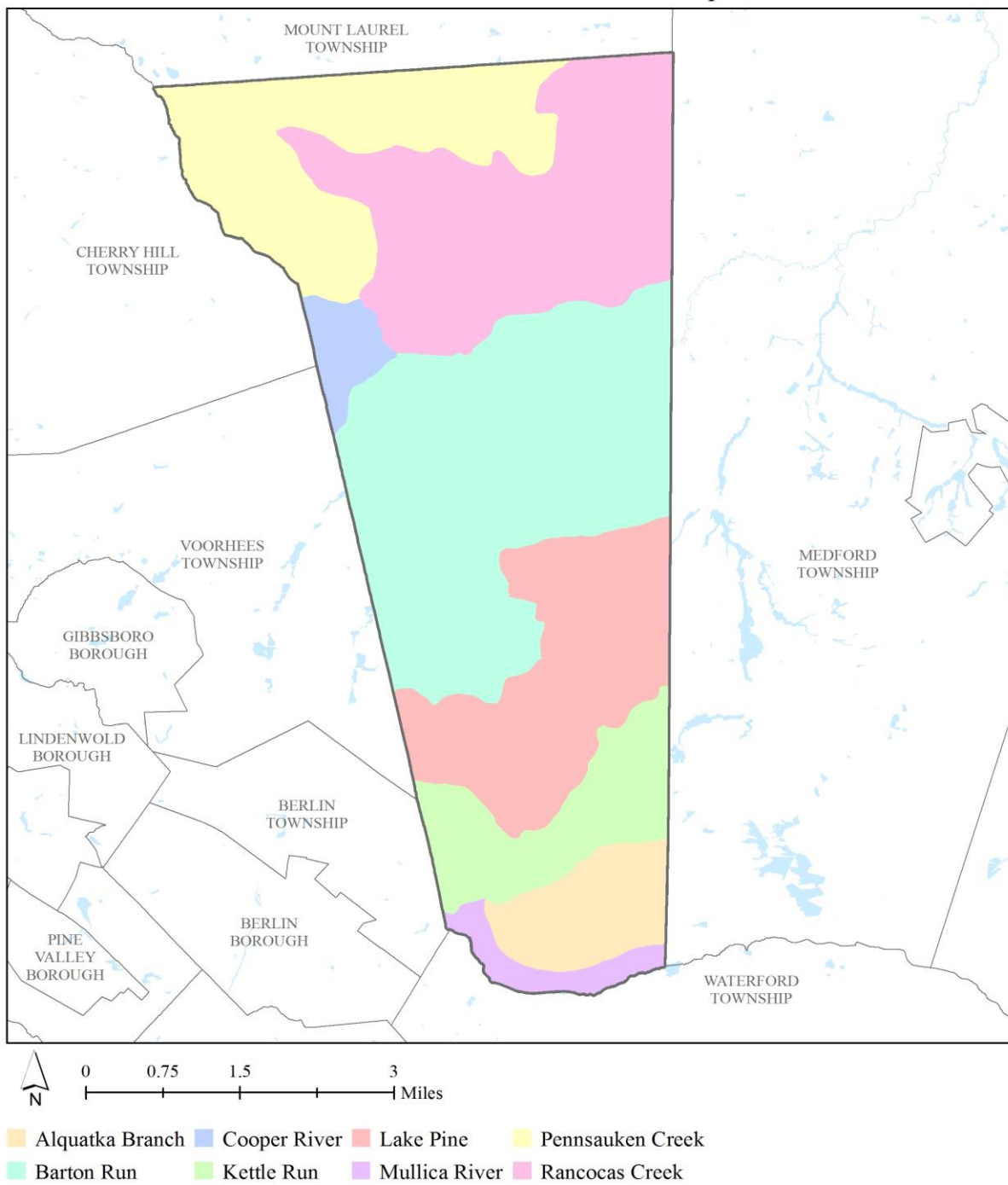


Figure 4: Map of the subwatersheds in Evesham Township

For each potential project site, specific aerial loading coefficients for commercial land use were used to determine the annual runoff loads for total phosphorus (TP), total nitrogen (TN), and total suspended solids (TSS) from impervious surfaces (Table 1). These are the same aerial loading coefficients that NJDEP uses in developing total maximum daily loads (TMDLs) for impaired waterways of the state. The percentage of impervious cover for each site was extracted from the 2012 NJDEP land use/land cover database. For impervious areas, runoff volumes were determined for the water quality design storm (1.25 inches of rain over two-hours) and for the annual rainfall total of 44 inches.

Preliminary soil assessments were conducted for each potential project site identified in Evesham Township using the United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey, which utilizes regional and statewide soil data to predict soil types in an area. Several key soil parameters were examined (e.g., natural drainage class, saturated hydraulic conductivity of the most limiting soil layer ( $K_{sat}$ ), depth to water table, and hydrologic soil group) to evaluate the suitability of each site's soil for green infrastructure practices. In cases where multiple soil types were encountered, the key soil parameters were examined for each soil type expected at a site.

For each potential project site, drainage areas were determined for each of the green infrastructure practices proposed at the site. These green infrastructure practices were designed to manage the 2-year design storm, enabling these practices to capture 95% of the annual rainfall. Runoff volumes were calculated for each proposed green infrastructure practice. The reduction in TSS loading was calculated for each drainage area for each proposed green infrastructure practice using the aerial loading coefficients in Table 1. The maximum volume reduction in stormwater runoff for each green infrastructure practice for a storm was determined by calculating the volume of runoff captured from the 2-year design storm. For each green infrastructure practice, peak discharge reduction potential was determined through hydrologic modeling in HydroCAD. For each green infrastructure practice, a cost estimate is provided. These costs are based upon the square footage of the green infrastructure practice and the real cost of green infrastructure practice implementation in New Jersey.



Table 1: Aerial Loading Coefficients<sup>2</sup>

<b>Land Cover</b>	<b>TP load (lbs/acre/yr)</b>	<b>TN load (lbs/acre/yr)</b>	<b>TSS load (lbs/acre/yr)</b>
High, Medium Density Residential	1.4	15	140
Low Density, Rural Residential	0.6	5	100
Commercial	2.1	22	200
Industrial	1.5	16	200
Urban, Mixed Urban, Other Urban	1.0	10	120
Agriculture	1.3	10	300
Forest, Water, Wetlands	0.1	3	40
Barrenland/Transitional Area	0.5	5	60

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<sup>2</sup> New Jersey Department of Environmental Protection (NJDEP), Stormwater Best Management Practice Manual, 2004.

## **Green Infrastructure Practices**

Green infrastructure is an approach to stormwater management that is cost-effective, sustainable, and environmentally friendly. Green infrastructure projects capture, filter, absorb, and reuse stormwater to maintain or mimic natural systems and to treat runoff as a resource. As a general principal, green infrastructure practices use soil and vegetation to recycle stormwater runoff through infiltration and evapotranspiration. When used as components of a stormwater management system, green infrastructure practices such as bioretention, green roofs, porous pavement, rain gardens, and vegetated swales can produce a variety of environmental benefits. In addition to effectively retaining and infiltrating rainfall, these practices can simultaneously help filter air pollutants, reduce energy demands, mitigate urban heat islands, and sequester carbon while also providing communities with aesthetic and natural resource benefits<sup>3</sup>. A wide range of green infrastructure practices have been evaluated for the potential project sites Evesham Township. Each practice is discussed below.

### ***Disconnected downspouts***

This is often referred to as simple disconnection. A downspout is simply disconnected, prevented from draining directly to the roadway or storm sewer system, and directed to discharge water to a pervious area (i.e., lawn).



### ***Pervious pavements***

There are several types of permeable pavement systems including porous asphalt, pervious concrete, permeable pavers, and grass pavers. These surfaces are hard and support vehicle traffic but also allow water to infiltrate through the surface. They have an underlying stone layer to store stormwater runoff and allow it to slowly seep into the ground.



<sup>3</sup> United States Environmental Protection Agency (USEPA), 2013. Watershed Assessment, Tracking, and Environmental Results, New Jersey Water Quality Assessment Report.  
[http://ofmpub.epa.gov/waters10/attains\\_state.control?p\\_state=NJ](http://ofmpub.epa.gov/waters10/attains_state.control?p_state=NJ)

### ***Bioretention systems/rain gardens***

These are landscaped features that are designed to capture, treat, and infiltrate stormwater runoff. These systems can easily be incorporated into existing landscapes, improving aesthetics and creating wildlife habitat while managing stormwater runoff. Bioretention systems also can be used in soils that do not quickly infiltrate by incorporating an underdrain into the system.



### ***Downspout planter boxes***

These are wooden boxes with plants installed at the base of a downspout that provide an opportunity to beneficially reuse rooftop runoff.



### ***Rainwater harvesting systems (cistern or rain barrel)***

These systems capture rainwater, mainly from rooftops, in cisterns or rain barrels. The water can then be used for watering gardens, washing vehicles, or for other non-potable uses.



### ***Bioswale***

Bioswales are landscape features that convey stormwater from one location to another while removing pollutants and providing water an opportunity to infiltrate.



### ***Stormwater planters***

Stormwater planters are vegetated structures that are built into the sidewalk to intercept stormwater runoff from the roadway or sidewalk. Many of these planters are designed to allow the water to infiltrate into the ground while others are designed simply to filter the water and convey it back into the stormwater sewer system.



### ***Tree filter boxes***

These are pre-manufactured concrete boxes that contain a special soil mix and are planted with a tree or shrub. They filter stormwater runoff but provide little storage capacity. They are typically designed to quickly filter stormwater and then discharge it to the local sewer system.



### **Potential Project Sites**

Attachment 1 contains information on potential project sites where green infrastructure practices could be installed. The recommended green infrastructure practices and the drainage area that the green infrastructure practice can treat are identified for each potential project site. For each practice, the recharge potential, TSS removal potential, maximum volume reduction potential per storm, and the peak reduction potential are provided. This information is also provided so that proposed development projects that cannot satisfy the New Jersey stormwater management requirements for major development can use one of the identified projects to offset a stormwater management deficit.<sup>4</sup>

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<sup>4</sup> New Jersey Administrative Code, N.J.A.C. 7:8, Stormwater Management, Statutory Authority: N.J.S.A. 12:5-3, 13:1D-1 et seq., 13:9A-1 et seq., 13:19-1 et seq., 40:55D-93 to 99, 58:4-1 et seq., 58:10A-1 et seq., 58:11A-1 et seq. and 58:16A-50 et seq., *Date last amended: April 19, 2010.*

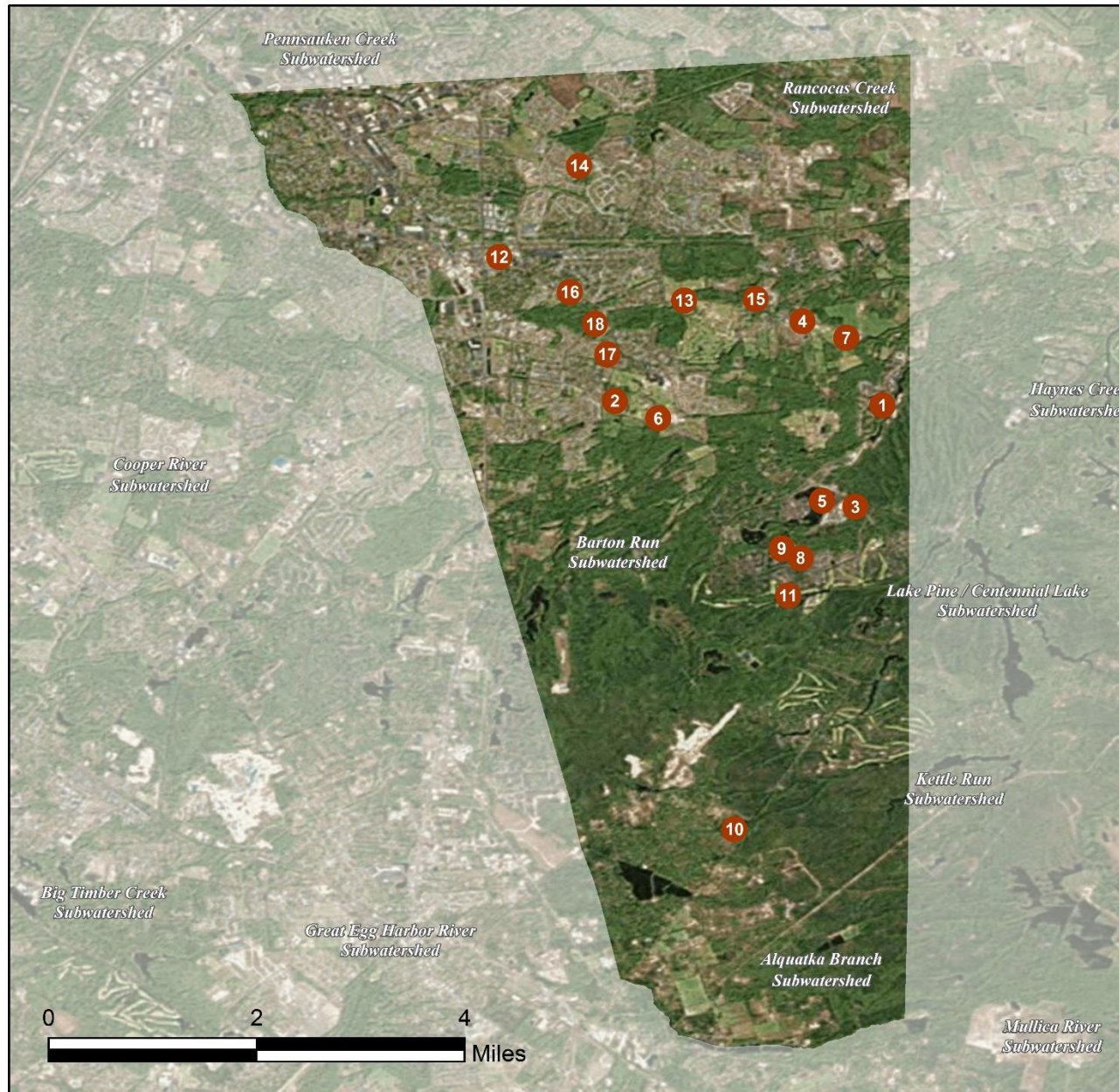
## **Conclusion**

This impervious cover reduction action plan is meant to provide the municipality with a blueprint for implementing green infrastructure practices that will reduce the impact of stormwater runoff from impervious surfaces. These projects can be implemented by a wide variety of people such as boy scouts, girl scouts, school groups, faith-based groups, social groups, watershed groups, and other community groups.

Additionally, development projects that are in need of providing off-site compensation for stormwater impacts can use the projects in this plan as a starting point. The municipality can quickly convert this impervious cover reduction action plan into a stormwater mitigation plan and incorporate it into the municipal stormwater control ordinance.

**a. Green Infrastructure Sites**

## EVESHAM TOWNSHIP: GREEN INFRASTRUCTURE SITES



### SITES WITHIN THE BARTON RUN SUBWATERSHED:

1. Barton Run Swim Club
2. Cherokee High School
3. Evesham Fire/Rescue 223/227
4. Evesham Township Municipal Court
5. King's Grant Community Room
6. Marlton Elementary School
7. Memorial Park
8. Richard L. Rice Elementary School
9. Villa Royal Association

### SITES WITHIN THE LAKE PINE SUBWATERSHED:

10. Kettle Run Fire/Rescue 225/228
11. Links Golf Course

### SITES WITHIN THE PENNSAUKEN CREEK SUBWATERSHED:

12. Evesham Fire/Rescue 221/229

### SITES WITHIN THE RANCOCAS CREEK SUBWATERSHED:

13. Christ Presbyterian Church
14. Frances S. DeMasi Elementary School
15. Marlton Assembly of God
16. Marlton Post Office
17. Robert B. Jaggard Elementary School
18. St. Joan of Arc Parish and School

## **b. Proposed Green Infrastructure Concepts**



# BARTON RUN SWIM CLUB



**Subwatershed:** Barton Run

**Site Area:** 169,977 sq. ft.

**Address:** 100 Lakeside Drive  
Marlton, NJ 08053

**Block and Lot:** Block 44.3, Lot 16



Stormwater is currently directed to an existing catch basin. Installing rain gardens in the parking lot islands can capture, treat, and infiltrate stormwater runoff from the parking lot. Replacing parking spaces with porous pavement can capture and infiltrate runoff from the other side of 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"
30	51,770	2.5	26.1	237.7	0.040	1.42

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 systems	0.288	48	21,834	0.82	2,765	\$13,825
Pervious pavement	0.352	59	26,651	1.00	2,410	\$60,250

# GREEN INFRASTRUCTURE RECOMMENDATIONS



## Barton Run Swim Club

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



# CHEROKEE HIGH SCHOOL



**Subwatershed:** Barton Run

**Site Area:** 4,117,543 sq. ft.

**Address:** 120 Tomlinson Mill Road  
Marlton, NJ 08053

**Block and Lot:** Block 39, Lots 1, 2, 20.1,  
2.02, 2.03, 5

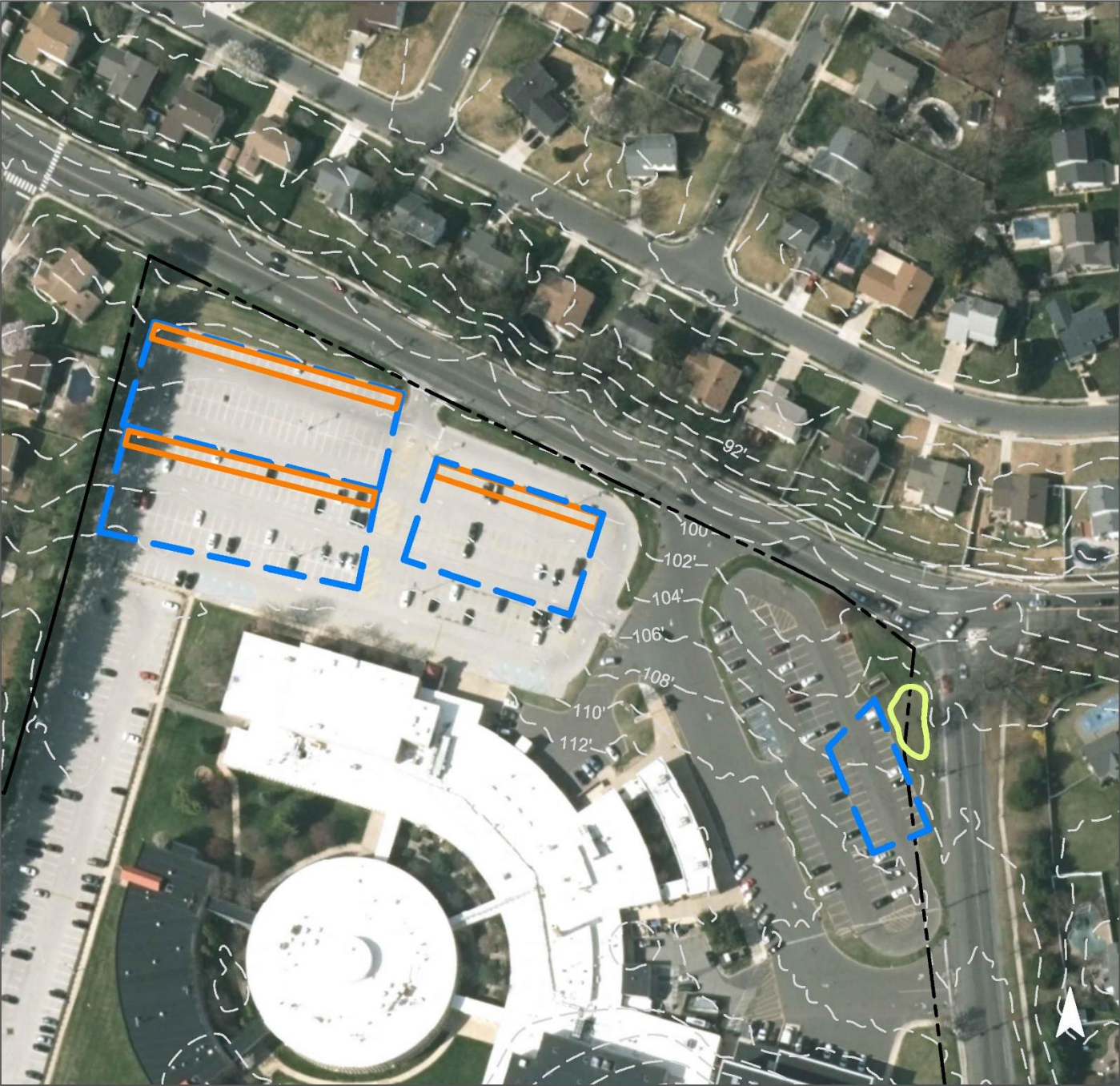


Stormwater is currently directed to existing catch basins. Parking spots on the north side of the parking lot can be replaced with porous asphalt to capture and infiltrate stormwater. A rain garden adjacent to the school sign can capture, treat, and infiltrate additional stormwater runoff from the parking 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"
26	1,064,222	51.3	537.5	4,886.2	0.829	29.19

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	0.183	31	13,973	0.52	1,755	\$8,775
Pervious pavement	1.773	297	134,311	5.04	12,150	\$303,750

# GREEN INFRASTRUCTURE RECOMMENDATIONS



## Cherokee High School

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



# EVESHAM FIRE/RESCUE 223/227



**Subwatershed:** Barton Run

**Site Area:** 181,773 sq. ft.

**Address:** 150 Merchants Way  
Marlton, NJ 08053

**Block and Lot:** Block 51.65, Lot 1, 2, 3



Stormwater is currently directed to an existing detention basin. A cistern can be placed adjacent to the southwest corner of the main building and the water can be used to clean vehicles. 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"
36	65,165	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
Rainwater harvesting	0.035	6	2,633	0.10	1,040 (gal)	\$2,080

# GREEN INFRASTRUCTURE RECOMMENDATIONS



**Evesham Fire/Rescue  
223/227**

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



# EVESHAM TOWNSHIP MUNICIPAL COURT



**Subwatershed:** Barton Run

**Site Area:** 837,068 sq. ft.

**Address:** 984 Tuckerton Road  
Marlton, NJ 08053

**Block and Lot:** Block 45, Lot 1



Stormwater currently collects on the east side of the parking lot. Parking spots on that side of the lot can be replaced with porous asphalt to capture and infiltrate stormwater 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"
23	192,702	9.3	97.3	884.8	0.150	5.29

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	0.662	111	50,191	1.88	4,540	\$113,500

# GREEN INFRASTRUCTURE RECOMMENDATIONS



## Evesham Township Municipal Court

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





# KING'S GRANT COMMUNITY ROOM



**Subwatershed:** Barton Run

**Site Area:** 322,664 sq. ft.

**Address:** 50 Landings Drive  
Marlton, NJ 08053

**Block and Lot:** Block 51.63, 51.32,  
Lot 1, 25



Stormwater is currently directed to existing catch basins. Parking spots adjacent to and across from the main building can be replaced with porous asphalt 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"
37	117,923	5.7	59.6	541.4	0.092	3.23

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
Pervious pavement	0.260	44	19,702	0.74	1,780	\$44,500

# GREEN INFRASTRUCTURE RECOMMENDATIONS



## King's Grant Community Room

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



# MARLTON ELEMENTARY SCHOOL



**Subwatershed:** Barton Run

**Site Area:** 2,037,458 sq. ft.

**Address:** 190 Tomlinson Mill Road  
Evesham, NJ 08053

**Block and Lot:** Block 39, Lot 1.01, 1.02



Stormwater is currently directed to existing catch basins. Parking spots by the north and west buildings can be replaced with porous asphalt to capture and infiltrate stormwater runoff from the parking lot. Rain gardens adjacent to the building can capture, treat, and infiltrate roof runoff before it reaches the existing catch basin. 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	526,875	25.4	266.1	2,419.1	0.411	14.45

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 systems	0.516	86	39,068	1.47	4,950	\$24,750
Pervious pavement	0.651	109	49,331	1.85	4,465	\$111,625

# GREEN INFRASTRUCTURE RECOMMENDATIONS



**Marlton Elementary School**

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



# MEMORIAL PARK



**Subwatershed:** Barton Run

**Site Area:** 2,830,013 sq. ft.

**Address:** 1004 Tuckerton Road  
Marlton, NJ 08053

**Block and Lot:** Block 44, Lot 1.010



A cistern can be placed adjacent to the south building to capture roof runoff, which can then be used to water an existing community garden south of the building. A rain garden adjacent to the building can capture, treat, and infiltrate additional 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"
16	439,434	21.2	221.9	2,017.6	0.342	12.05

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 system	0.380	64	39,068	1.47	2,780	\$13,900
Rainwater harvesting	0.105	18	25,582	0.96	3,000 (gal)	\$6,000

# GREEN INFRASTRUCTURE RECOMMENDATIONS



## Memorial Park

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



# RICHARD L. RICE ELEMENTARY SCHOOL



**Subwatershed:** Barton Run

**Site Area:** 970,087 sq. ft.

**Address:** 50 Crown Royal Parkway  
Marlton, NJ 08053

**Block and Lot:** Block 51, Lot 3



Stormwater is currently directed to existing catch basins. The basketball court and parking spots on the west side of the parking lot can be replaced with porous asphalt to capture and infiltrate stormwater. Rain gardens adjacent to the building can 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"
19	185,719	9.0	93.8	852.7	0.145	5.09

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	0.346	58	26,195	0.98	3,320	\$16,600
Pervious pavement	0.256	43	19,366	0.73	3,990	\$99,750

# GREEN INFRASTRUCTURE RECOMMENDATIONS



**Richard L. Rice  
Elementary School**

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





# VILLA ROYAL ASSOCIATION



**Subwatershed:** Barton Run

**Site Area:** 1,546,169 sq. ft.

**Address:** 5 Crown Royal Parkway  
Marlton, NJ 08053

**Block and Lot:** Block 51.05, Lot 1



Stormwater currently stands in a low ditch in a parking lot island. Parking spots to the north of the island can be replaced with porous asphalt to capture and infiltrate stormwater. Installing a rain garden in the island can capture, treat, and infiltrate the stormwater runoff, eliminating the standing water. 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"
55	856,021	41.3	432.3	3,930.3	0.667	23.48

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	0.259	43	19,590	0.74	2,480	\$12,400
Pervious pavement	0.189	32	14,332	0.45	1,300	\$32,500

# GREEN INFRASTRUCTURE RECOMMENDATIONS



## Villa Royal Association

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



# KETTLE RUN FIRE/RESCUE 225/228



**Subwatershed:** Lake Pine  
**Site Area:** 94,922 sq. ft.  
**Address:** 498 Hopewell Road  
Marlton, NJ 08053  
**Block and Lot:** Block 66.01, Lot 3, 4



Stormwater is currently directed to an existing detention basin. Cisterns adjacent to the building can harvest roof runoff to be used for washing department vehicles. Installing a rain garden on the east side of the building can capture, treat, and infiltrate roof additional 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"
45	42,532	2.1	21.5	195.3	0.033	1.17

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	0.071	12	5,348	0.20	680	\$3,400
Rainwater harvesting	0.094	16	7,099	0.27	2,800 (gal)	\$5,600

# GREEN INFRASTRUCTURE RECOMMENDATIONS



**Kettle Run Fire/Rescue  
225/228**

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



# LINKS GOLF COURSE



**Subwatershed:** Lake Pine  
**Site Area:** 7,219,920 sq. ft.  
**Address:** 100 Majestic Way  
Marlton, NJ 08053  
**Block and Lot:** Block 52.12, Lot 1

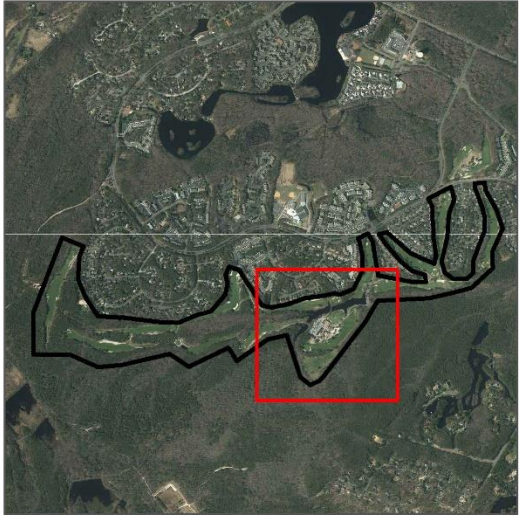


Stormwater currently drains from impervious surfaces. Parking spaces can be replaced with porous asphalt to capture and infiltrate stormwater. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.





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"
2	142,527	6.9	72.0	654.4	0.111	3.91

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	0.236	40	17,907	0.67	1,620	\$40,500

# GREEN INFRASTRUCTURE RECOMMENDATIONS



## Links Golf Course

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



# EVESHAM FIRE/RESCUE 221/229



**Subwatershed:** Pennsauken Creek  
**Site Area:** 72,280 sq. ft.  
**Address:** 26 East Main Street  
Marlton, NJ 08053  
**Block and Lot:** Block 4.05, Lot 10

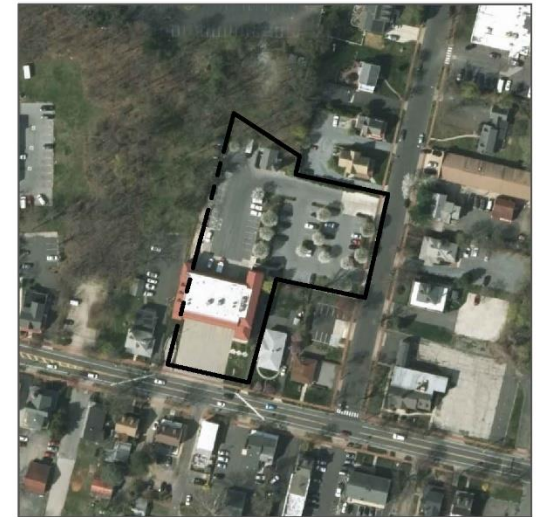
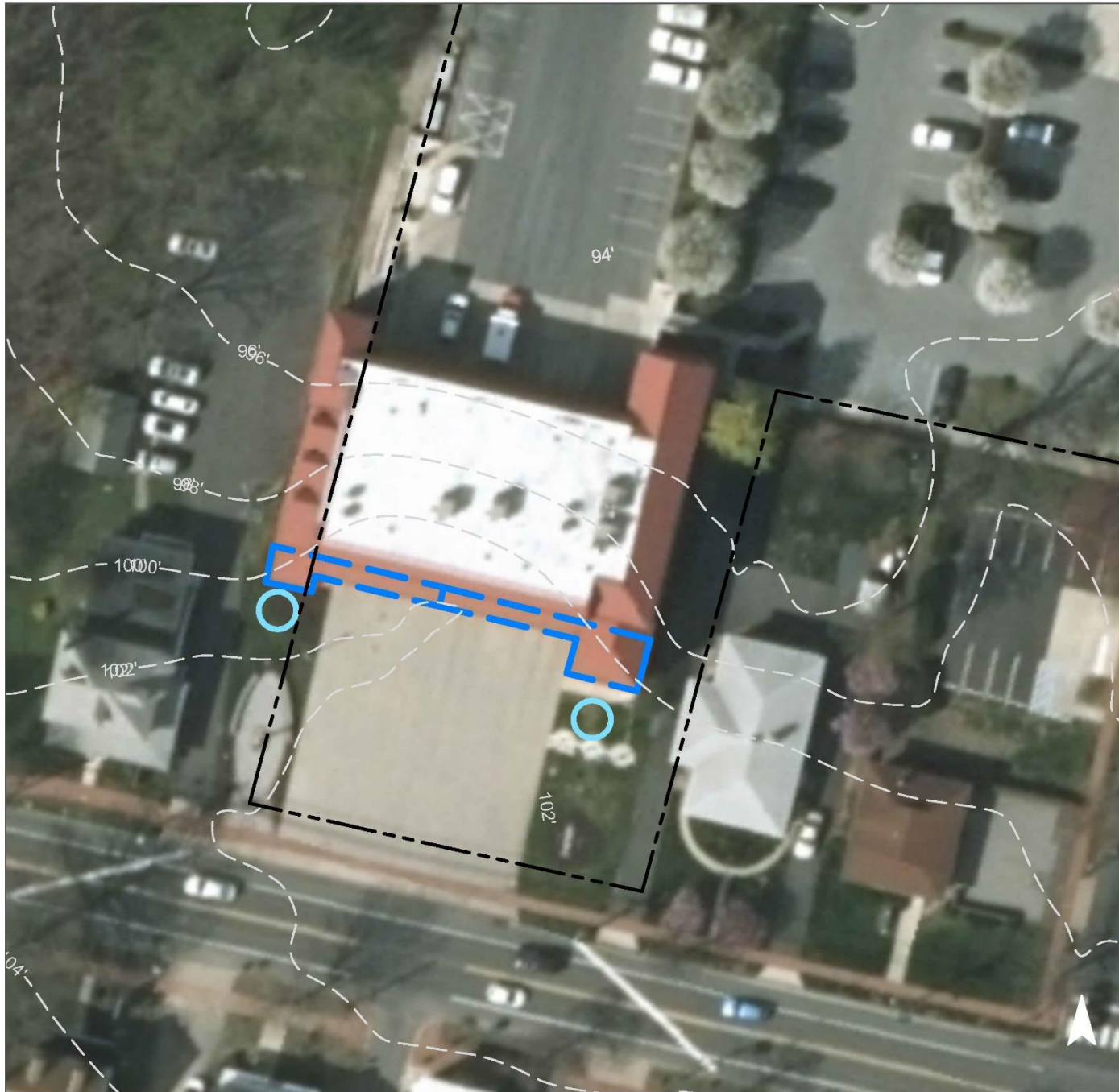


Stormwater is currently directed to connected downspouts. Rainwater can be harvested by installing a cistern adjacent to the building for cleaning department vehicles. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.





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"
84	60,542	2.9	30.6	278.0	0.047	1.66

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
Rainwater harvesting	0.029	5	2,192	0.08	865 (gal)	\$1,730

# GREEN INFRASTRUCTURE RECOMMENDATIONS



## Evesham Fire/Rescue 221/229

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





# CHRIST PRESBYTERIAN CHURCH



**Subwatershed:** Rancocas Creek

**Site Area:** 138,625 sq. ft.

**Address:** 515 East Main Street  
Marlton, NJ 08053

**Block and Lot:** Block 29, Lot 3.02



Stormwater currently drains towards the road. Rain gardens adjacent to the building, near the road, and in the northwest corner of the property can capture, treat, and infiltrate stormwater 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"
19	26,385	1.3	13.3	121.1	0.021	0.72

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	0.112	19	8,467	0.32	2,090	\$10,450

# GREEN INFRASTRUCTURE RECOMMENDATIONS



## Christ Presbyterian Church

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



# FRANCES S. DEMASI ELEMENTARY SCHOOL



**Subwatershed:** Rancocas Creek

**Site Area:** 1,029,541 sq. ft.

**Address:** 199 Evesboro Medford Road  
Marlton, NJ 08053

**Block and Lot:** Block 13.68, Lot 8

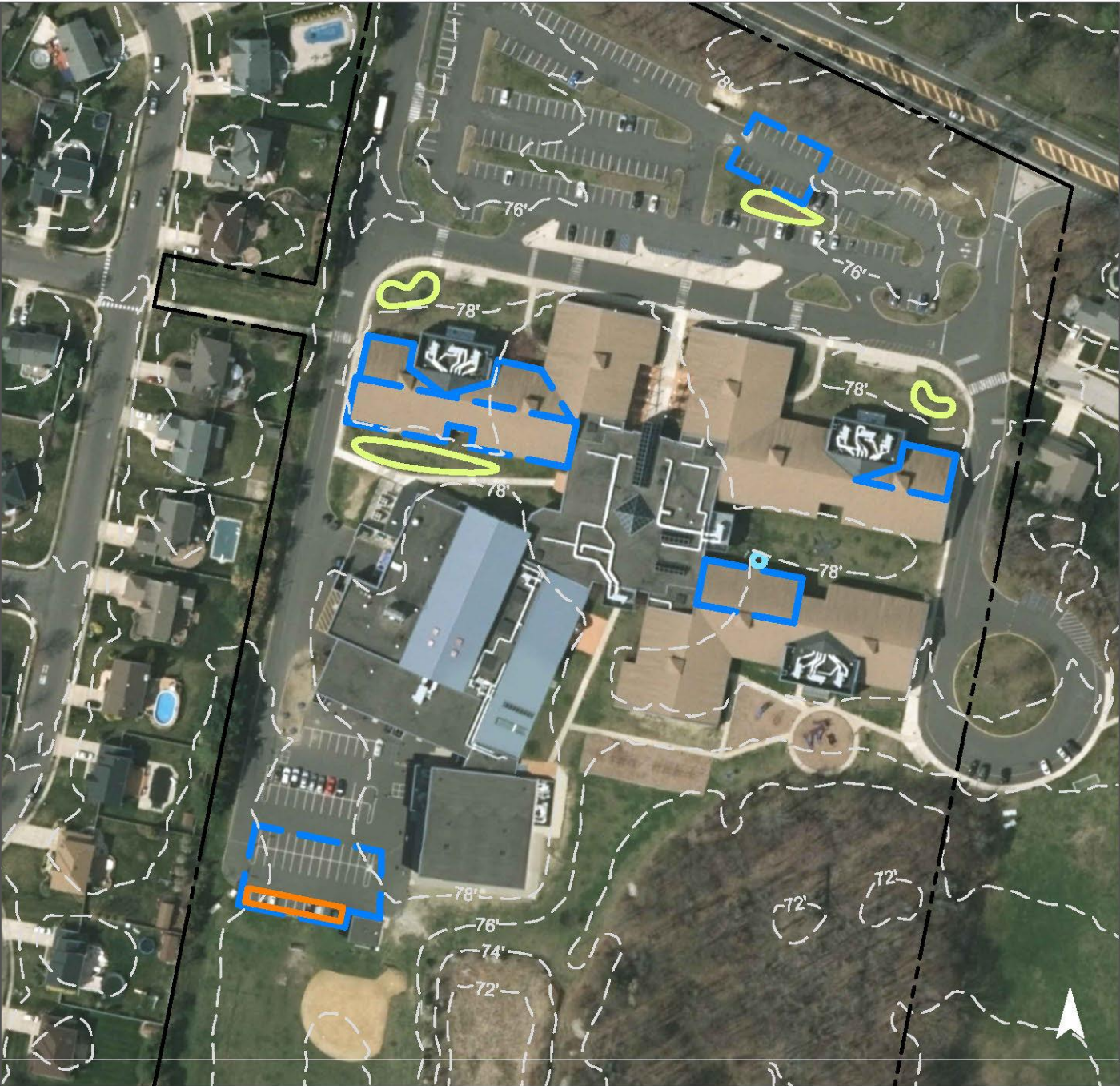


Stormwater is currently directed to existing catch basins. Parking spots in the parking lot south of the school can be replaced with porous asphalt to capture and infiltrate stormwater. Installing rain gardens adjacent to the building and parking lot can capture, treat, and infiltrate runoff. Rain water can be harvested in one of the school's courtyards to be used to water an existing garden. 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"
41	422,244	20.4	213.3	1,938.7	0.329	11.58

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	0.581	97	18,595	0.70	5,575	\$27,875
Pervious pavement	0.260	44	17,683	0.74	1,780	\$44,500
Rainwater harvesting	0.002	0	8,497	0.32	50-80 (gal)	\$250- \$310

# GREEN INFRASTRUCTURE RECOMMENDATIONS



**Frances S. DeMasi Middle School**

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



# MARLTON ASSEMBLY OF GOD



**Subwatershed:** Rancocas Creek

**Site Area:** 496,420 sq. ft.

**Address:** 625 East Main Street  
Marlton, NJ 08053

**Block and Lot:** Block 19, Lot 1.01

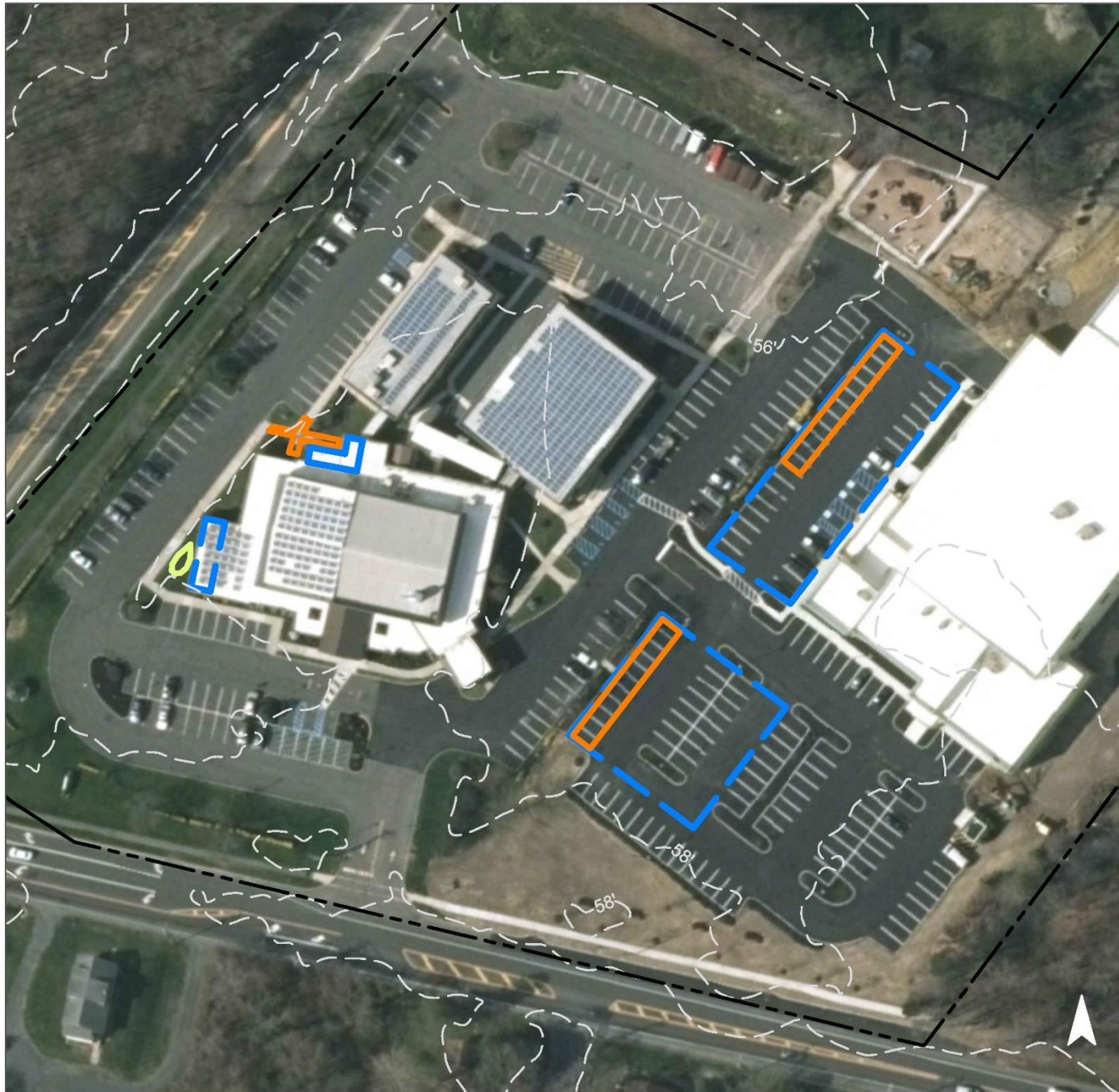


Stormwater is currently directed to existing detention basins as well as existing catch basins. Parking spots can be replaced with porous asphalt to capture and infiltrate stormwater. A rain garden adjacent to the west building can capture, treat, and infiltrate roof runoff. The sidewalk near the west entrance of the west building can be replaced with porous pavement to 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	204,017	9.8	103.0	936.7	0.159	5.60

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
Bioretention system	0.014	2	1,040	0.04	130	\$650
Pervious pavement	0.556	93	51,792	1.94	4,030	\$100,750

# GREEN INFRASTRUCTURE RECOMMENDATIONS



## Marlon Assembly of God

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



# MARLTON POST OFFICE



**Subwatershed:** Rancocas Creek

**Site Area:** 84,072 sq. ft.

**Address:** 123 East Main Street  
Marlton, NJ 08053

**Block and Lot:** Block 26, Lot 7.02

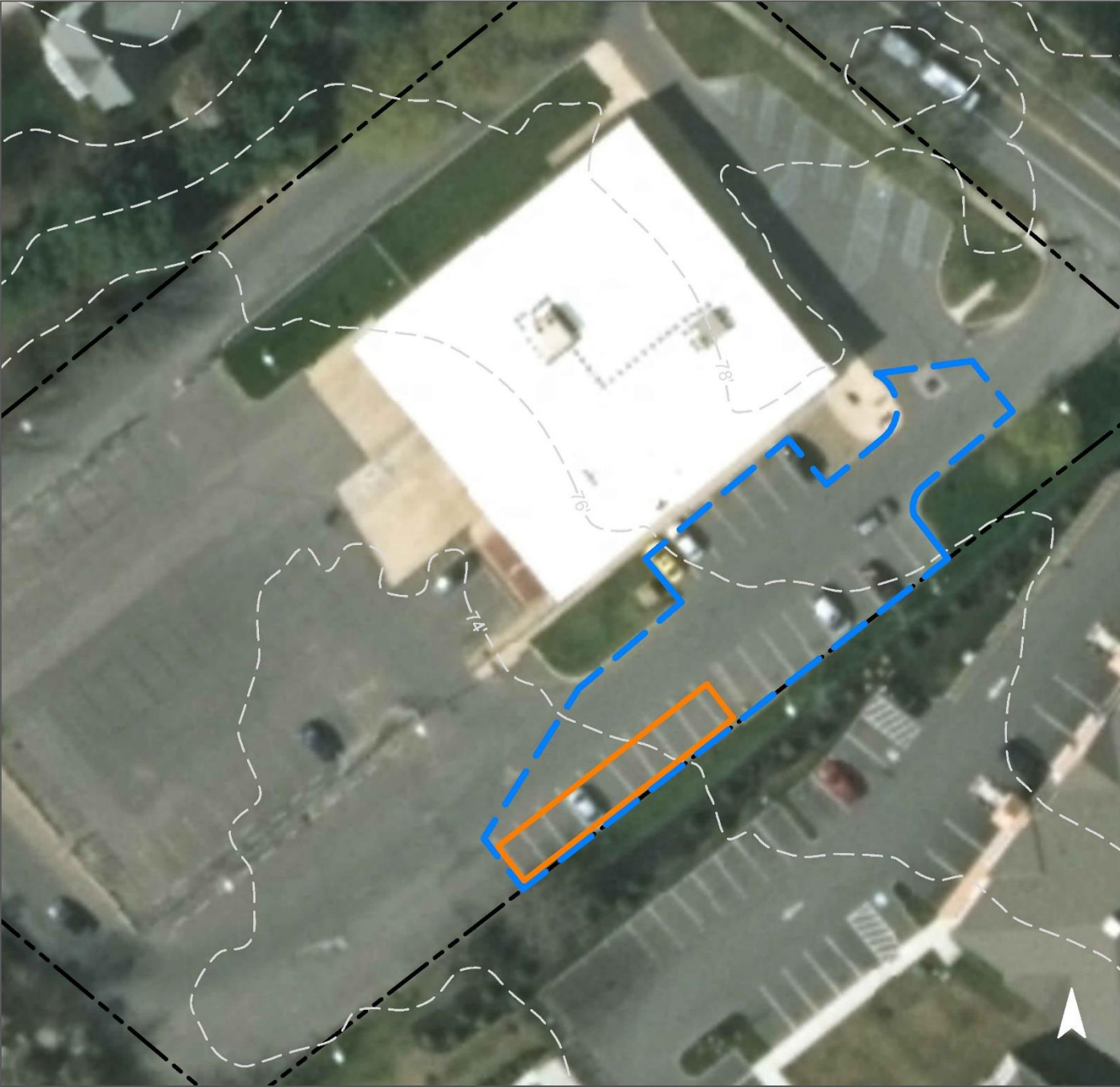


Stormwater is currently directed to existing catch basins. Parking spaces on the southeast side of the parking lot can be replaced with porous asphalt to infiltrate stormwater. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for 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"
85	71,114	3.4	35.9	326.5	0.055	1.95

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	0.236	40	17,907	0.67	1,620	\$40,500

# GREEN INFRASTRUCTURE RECOMMENDATIONS



**Marlton Post Office**

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





# ROBERT B. JAGGARD ELEMENTARY SCHOOL



**Subwatershed:** Rancocas Creek

**Site Area:** 446,988 sq. ft.

**Address:** 2 Wescott Road  
Marlton, NJ 08053

**Block and Lot:** Block 32.12, Lot 26



Stormwater is currently directed to an existing catch basin. Parking spots on the north side of the parking lot, as well as the basketball court can be replaced with porous asphalt to capture and infiltrate stormwater. Rain gardens adjacent to the building can 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"
61	273,419	13.2	138.1	1,255.4	0.213	7.50

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	0.175	29	13,225	0.50	1,675	\$8,375
Pervious pavement	0.701	117	53,123	1.99	6,575	\$164,375

# GREEN INFRASTRUCTURE RECOMMENDATIONS



**Robert B. Jaggard  
Elementary School**

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



# ST. JOAN OF ARC PARISH AND SCHOOL



**Subwatershed:** Rancocas Creek

**Site Area:** 495,192 sq. ft.

**Address:** 100 Willow Bend Road  
Marlton, NJ 08053

**Block and Lot:** Block 32, Lot 2



Stormwater is currently directed to an existing detention basin. Parking spots can be replaced with porous asphalt to capture and infiltrate stormwater. Installing rain gardens adjacent to the north and southeast building can capture, treat, and infiltrate roof runoff. Stone pavers on the north side of the southeast building can be replaced with a porous pavement to capture 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"
53	263,046	12.7	132.9	1,207.7	0.205	7.21

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 systems	0.047	8	3,583	0.13	455	\$2,275
Pervious pavement	0.933	156	70,686	2.56	6,670	\$166,750

# GREEN INFRASTRUCTURE RECOMMENDATIONS



## St. Joan of Arc Parish and School

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



**c. Summary of Existing Conditions**

**Summary of Existing Conditions**

Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	Existing Annual Loads			I.C. %	I.C. Area (ac)	I.C. Area (SF)	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)
<b>BARTON RUN SUBWATERSHED</b>	<b>298.73</b>	<b>13,012,751</b>			<b>168.7</b>	<b>1,767.6</b>	<b>16,069.0</b>		<b>80.35</b>	<b>3,499,829</b>	<b>2.727</b>	<b>95.99</b>
<b>Barton Run Swim Club</b>												
<b>Total Site Info</b>	3.90	169,977	44.3	16	2.5	26.1	237.7	30	1.19	51,770	0.040	1.42
<b>Cherokee High School</b>												
<b>Total Site Info</b>	94.53	4,117,543	39	1, 2, 20.1, 2.02, 2.03, 5	51.3	537.5	4,886.2	26	24.43	1,064,222	0.829	29.19
<b>Evesham Fire/Rescue 223/227</b>												
<b>Total Site Info</b>	4.17	181,773	51.65	1,2,3	3.1	32.9	299.2	36	1.50	65,165	0.051	1.79
<b>Evesham Township Municipal Court</b>												
<b>Total Site Info</b>	19.22	837,068	45	1	9.3	97.3	884.8	23	4.42	192,702	0.150	5.29
<b>King's Grant Community Room</b>												
<b>Total Site Info</b>	7.41	322,664	51.63, 51.32	1, 25	5.7	59.6	541.4	37	2.71	117,923	0.092	3.23
<b>Marlton Elementary School</b>												
<b>Total Site Info</b>	46.77	2,037,458	39	1.01, 1.02	25.4	266.1	2,419.1	26	12.10	526,875	0.411	14.45
<b>Memorial Park</b>												
<b>Total Site Info</b>	64.97	2,830,013	44	1.010	21.2	221.9	2,017.6	16	10.09	439,434	0.342	12.05
<b>Richard L. Rice Elementary School</b>												
<b>Total Site Info</b>	22.27	970,087	51	3	9.0	93.8	852.7	19	4.26	185,719	0.145	5.09
<b>Villa Royal Association</b>												
<b>Total Site Info</b>	35.50	1,546,169	51.05	1	41.3	432.3	3,930.3	55	19.65	856,021	0.667	23.48
<b>LAKE PINE SUBWATERSHED</b>	<b>167.93</b>	<b>7,314,842</b>			<b>8.9</b>	<b>93.5</b>	<b>849.7</b>		<b>4.25</b>	<b>185,059</b>	<b>0.144</b>	<b>5.08</b>
<b>Kettle Run Fire/Rescue 225/228</b>												
<b>Total Site Info</b>	2.18	94,922	66.01	3,4	2.1	21.5	195.3	45	0.98	42,532	0.033	1.17
<b>Links Golf Course</b>												
<b>Total Site Info</b>	165.75	7,219,920	52.12	1	6.9	72.0	654.4	2	3.27	142,527	0.111	3.91

**Summary of Existing Conditions**

Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	Existing Annual Loads			I.C. %	I.C. Area (ac)	I.C. Area (SF)	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)
					<b>PENNSAUKEN CREEK SUBWATERSHED</b>	<b>1.66</b>	<b>72,280</b>					
<b>Evesham Fire/Rescue 221/229</b>												
<b>Total Site Info</b>	1.66	72,280	4.05	10	2.9	30.6	278.0	84	1.39	60,542	0.047	1.66
<b>RANCOCAS CREEK SUBWATERSHED</b>	<b>61.77</b>	<b>2,690,838</b>			<b>60.8</b>	<b>636.5</b>	<b>5,786.2</b>	<b>28.93</b>	<b>1,260,225</b>	<b>0.982</b>	<b>34.56</b>	
<b>Christ Presbyterian Church</b>												
<b>Total Site Info</b>	3.18	138,625	29	3.02	1.3	13.3	121.1	19	0.61	26,385	0.021	0.72
<b>Frances S. DeMasi Middle School</b>												
<b>Total Site Info</b>	23.64	1,029,541	13.68	8	20.4	213.3	1,938.7	41	9.69	422,244	0.329	11.58

#### **d. 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 (SF)	Unit Cost (\$)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									
<b>BARTON RUN SUBWATERSHED</b>	<b>226,490</b>	<b>5.20</b>	<b>5.901</b>	<b>988</b>	<b>475,174</b>	<b>17.75</b>	<b>50,315</b>			<b>\$803,955</b>	<b>1.7%</b>
<b>1 Barton Run Swim Club</b>											
Bioretention systems	11,060	0.25	0.288	48	21,834	0.82	2,765	5	SF	\$13,825	21.4%
Pervious pavement	13,500	0.31	0.352	59	26,651	1.00	2,410	25	SF	\$60,250	26.1%
<b>Total Site Info</b>	<b>11,060</b>	<b>0.25</b>	<b>0.288</b>	<b>48</b>	<b>21,834</b>	<b>0.82</b>	<b>2,765</b>			<b>\$13,825</b>	<b>21.4%</b>
<b>2 Cherokee High School</b>											
Bioretention system	7,010	0.16	0.183	31	13,973	0.52	1,755	5	SF	\$8,775	0.7%
Pervious pavement	68,040	1.56	1.773	297	134,311	5.04	12,150	25	SF	\$303,750	6.4%
<b>Total Site Info</b>	<b>75,050</b>	<b>1.72</b>	<b>1.955</b>	<b>327</b>	<b>148,284</b>	<b>5.56</b>	<b>13,905</b>			<b>\$312,525</b>	<b>7.1%</b>
<b>3 Evesham Fire/Rescue 223/227</b>											
Rainwater harvesting	1,335	0.03	0.035	6	2,633	0.10	1,040	2	gal	\$2,080	2.0%
<b>Total Site Info</b>	<b>1,335</b>	<b>0.03</b>	<b>0.035</b>	<b>6</b>	<b>2,633</b>	<b>0.10</b>	<b>1,040</b>			<b>\$2,080</b>	<b>2.0%</b>
<b>4 Evesham Township Municipal Court</b>											
Pervious pavement	25,425	0.58	0.662	111	50,191	1.88	4,540	25	SF	\$113,500	13.2%
<b>Total Site Info</b>	<b>25,425</b>	<b>0.58</b>	<b>0.662</b>	<b>111</b>	<b>50,191</b>	<b>1.88</b>	<b>4,540</b>			<b>\$113,500</b>	<b>13.2%</b>
<b>5 King's Grant Community Room</b>											
Pervious pavement	9,980	0.23	0.260	44	19,702	0.74	1,780	25	SF	\$44,500	8.5%
<b>Total Site Info</b>	<b>9,980</b>	<b>0.23</b>	<b>0.260</b>	<b>44</b>	<b>19,702</b>	<b>0.74</b>	<b>1,780</b>			<b>\$44,500</b>	<b>8.5%</b>
<b>6 Marlton Elementary School</b>											
Bioretention systems	19,790	0.45	0.516	86	39,068	1.47	4,950	5	SF	\$24,750	3.8%
Pervious pavement	24,990	0.57	0.651	109	49,331	1.85	4,465	25	SF	\$111,625	4.7%
<b>Total Site Info</b>	<b>44,780</b>	<b>1.03</b>	<b>1.167</b>	<b>195</b>	<b>88,399</b>	<b>3.32</b>	<b>9,415</b>			<b>\$136,375</b>	<b>8.5%</b>
<b>7 Memorial Park</b>											
Bioretention system	14,575	0.33	0.380	64	39,068	1.47	2,780	5	SF	\$13,900	3.3%
Rainwater harvesting	4,020	0.09	0.105	18	25,582	0.96	3,000	2	gal	\$6,000	0.9%
<b>Total Site Info</b>	<b>18,595</b>	<b>0.43</b>	<b>0.484</b>	<b>81</b>	<b>64,650</b>	<b>2.43</b>	<b>5,780</b>			<b>\$19,900</b>	<b>4.2%</b>

**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 (SF)	Unit Cost (\$)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									
<b>8 Richard L. Rice Elementary School</b>											
Bioretention systems	13,270	0.30	0.346	58	26,195	0.98	3,320	5	SF	\$16,600	7.1%
Pervious pavement	9,810	0.23	0.256	43	19,366	0.73	3,990	25	SF	\$99,750	5.3%
<b>Total Site Info</b>	<b>23,080</b>	<b>0.53</b>	<b>0.601</b>	<b>101</b>	<b>45,561</b>	<b>1.71</b>	<b>7,310</b>			<b>\$116,350</b>	<b>12.4%</b>
<b>9 Villa Royal Association</b>											
Bioretention system	9,925	0.23	0.259	43	19,590	0.74	2,480	5	SF	\$12,400	1.2%
Pervious pavement	7,260	0.17	0.189	32	14,332	0.45	1,300	25	SF	\$32,500	0.8%
<b>Total Site Info</b>	<b>17,185</b>	<b>0.39</b>	<b>0.448</b>	<b>75</b>	<b>33,922</b>	<b>1.19</b>	<b>3,780</b>			<b>\$44,900</b>	<b>2.0%</b>
<b>LAKE PINE SUBWATERSHED</b>	<b>15,375</b>	<b>0.35</b>	<b>0.401</b>	<b>67</b>	<b>30,354</b>	<b>1.14</b>	<b>5,100</b>			<b>\$49,500</b>	<b>0.2%</b>
<b>10 Kettle Run Fire/Rescue 225/228</b>											
Bioretention system	2,710	0.06	0.071	12	5,348	0.20	680	5	SF	\$3,400	6.4%
Rainwater harvesting	3,595	0.08	0.094	16	7,099	0.27	2,800	2	gal	\$5,600	8.5%
<b>Total Site Info</b>	<b>6,305</b>	<b>0.14</b>	<b>0.164</b>	<b>28</b>	<b>12,447</b>	<b>0.47</b>	<b>3,480</b>			<b>\$9,000</b>	<b>14.8%</b>
<b>11 Links Golf Course</b>											
Pervious pavement	9,070	0.21	0.236	40	17,907	0.67	1,620	25	SF	\$40,500	6.4%
<b>Total Site Info</b>	<b>9,070</b>	<b>0.21</b>	<b>0.236</b>	<b>40</b>	<b>17,907</b>	<b>0.67</b>	<b>1,620</b>			<b>\$40,500</b>	<b>6.4%</b>
<b>PENNSAUKEN CREEK SUBWATERSHED</b>	<b>1,110</b>	<b>0.03</b>	<b>0.029</b>	<b>5</b>	<b>2,192</b>	<b>0.08</b>	<b>865</b>			<b>\$1,730</b>	<b>1.8%</b>
<b>12 Evesham Fire/Rescue 221/229</b>											
Rainwater harvesting	1,110	0.03	0.029	5	2,192	0.08	865	2	gal	\$1,730	1.8%
<b>Total Site Info</b>	<b>1,110</b>	<b>0.03</b>	<b>0.029</b>	<b>5</b>	<b>2,192</b>	<b>0.08</b>	<b>865</b>			<b>\$1,730</b>	<b>1.8%</b>
<b>RANOCAS CREEK SUBWATERSHED</b>	<b>143,050</b>	<b>3.28</b>	<b>3.617</b>	<b>605</b>	<b>264,598</b>	<b>9.91</b>	<b>30,600</b>			<b>\$20,900</b>	<b>5.3%</b>
<b>13 Christ Presbyterian Church</b>											
Bioretention systems	4,290	0.10	0.112	19	8,467	0.32	2,090	5	SF	\$10,450	16.3%
<b>Total Site Info</b>	<b>4,290</b>	<b>0.10</b>	<b>0.112</b>	<b>19</b>	<b>8,467</b>	<b>0.32</b>	<b>2,090</b>			<b>\$10,450</b>	<b>16.3%</b>

**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 (SF)	Unit Cost (\$)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									

**14 Frances S. DeMasi Middle School**

Bioretention systems	22,305	0.51	0.581	97	18,595	0.70	5,575	5	SF	\$27,875	5.3%
Pervious pavement	9,980	0.23	0.260	44	17,683	0.74	1,780	25	SF	\$44,500	2.4%
Rainwater harvesting	4,305	0.10	0.002	0	8,497	0.32	50-80	1	barrel	\$250-310	0.2%
<b>Total Site Info</b>	<b>36,590</b>	<b>0.84</b>	<b>0.843</b>	<b>141</b>	<b>44,775</b>	<b>1.76</b>	<b>7,355</b>			<b>\$72,375</b>	<b>7.8%</b>