

Washington Township

Introduction

Located in Morris County in New Jersey, Washington Township covers about 44.9 square miles. With a population of 18,197 (2020 United States Census), Washington Township consists of 30.6% of urban land uses by area. Of that urban land use, approximately 60.1% is comprised of rural residential properties (NJDEP Open Data). In addition to residential development, urban land use also includes land used for commercial, industrial, mixed urban, recreational, and transportation purposes. Natural lands (forests, wetlands, and water) make up approximately 52.5% of Washington Township

Washington Township contains portions of thirteen subwatersheds (Table 1). There are approximately 126.1 miles of rivers and streams within the municipality; these include tributaries to Beatty's Brook, Drakes Brook and its tributaries, Electric Brook and its tributaries, Frog Hollow Brook, tributaries to Hollow Brook, Lamington River and its tributaries, Mine Brook and its tributaries, Musconetcong River and its tributaries, North Branch Rockaway Creek and its tributaries, Rhinehart Brook and its tributaries, Schooley's Mountain Brook and its tributaries, South Branch Raritan River and its tributaries, Spruce Run and its tributaries, Stephensburg Brook and its tributaries, Stony Brook and its tributaries, Tanners Brook and its tributaries, Teetertown Brook and its tributaries, Trout Brook and its tributaries, Turtleback Brook and its tributaries, and several uncoded tributaries. Washington Township is within the New Jersey Department of Environmental Protection (NJDEP) Watershed Management Areas (WMA) 1 (Upper Delaware) and 8 (North and South Branch Raritan)

Table 1: Subwatersheds of Washington Township

Subwatershed	HUC14
Drakes Brook (below Eyland Avenue)	02030105010020
Raritan River South Branch (74d 44m 15s to Route 46)	02030105010040
Raritan River South Branch (Long Valley bridge to 74d 44m 15s)	02030105010050
Raritan River South Branch (Califon bridge to Long Valley)	02030105010060
Spruce Run (above Glen Gardner)	02030105020010
Lamington River (Furnace Road to Hillside Road)	02030105050030

Lamington River (Potterville gage to Furnace Road)	02030105050040
Rockaway Creek (above McCrea Mills)	02030105050080
Lamington River (Herzog Brook to Pottersville gage)	02030105050130
Mine Brook (Morris County)	02040105150090
Musconetcong River (Trout Brook to Saxton Falls)	02040105150100
Musconetcong River (Hances Brook through Trout Brook)	02040105160010
Musconetcong River (Changewater to Hances Brook)	02040105160020

The purpose of this report is to provide a comprehensive understanding of key, defining features within the subwatersheds throughout Washington Township. This involves gathering, organizing, and presenting information about existing conditions and infrastructure within each subwatershed. It 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 Washington Township's existing stormwater infrastructure were provided by the municipality and were manipulated, if necessary, for the specific purposes of this report.

Analysis by Municipality

An analysis was completed by municipality. Figure 1 shows Washington Township in relation to the study area. Figure 2 shows the portions of the thirteen HUC14s in Washington Township and highlights the HUC14s that are contained within the study area. Figure 3 illustrates the land use in Washington Township. A detailed land use analysis and nonpoint source loading analysis was completed for each HUC14 in Washington Township and is presented in Table 2. Figure 4 shows the impervious cover in Washington Township based upon NJDEP's 2015 impervious cover layer. An impervious cover analysis was completed for each HUC14 in Washington Township and is presented in Table 3.

For the area of the municipality in the study area, a stormwater facilities analysis was completed (see Figure 5). Two sources were used to identify stormwater facilities. The first data source was the New Jersey Hydrologic Modeling Database (SCS, 2024) that was prepared by the Soil Conservation Districts (SCD) and Rutgers University. The second data source was the NJDEP 2020 land use/land cover GIS Layer. Land use data uses a land use code (1499) to identify stormwater basins. Each stormwater basin was inspected (see Table 4). The detention basins in Table 4 (identified as type “D”) could benefit from naturalization (i.e., conversion from a detention basin to a bioretention basin). Detention basins that are already naturalized are identified as type “N”. The retention basins in Table 4 (identified as type “R”) could benefit from the addition of vegetative shoreline buffers. Retention basins that already have a vegetative shoreline buffer are listed as type “RB”. No retention basins without vegetative shoreline buffers were identified in Washington Township within the study area.

The Q-Farms in Washington Township have been identified (see Figure 6). Table 5 presents the data available for each Q-Farm parcel. Q-Farms are the parcels that have been qualified for farmland tax assessment. The Q-Farms in the study area of Washington Township have been identified (see Figure 7 and Table 6). It is important to note that the land use on a Q-Farm is often not all agriculture. Figure 8 illustrates the land use on the Q-Farms, which is summarized in Table 7. There are 4,723.4 acres of agricultural land use in Washington Township, of which, 3,729.3 acres lie within the study area for this Watershed Restoration and Protection Plan. There are 341 Q-Farms and portions of four Q-Farms in the study area portion of Washington Township, totaling 7,994.7 acres. Within the 341 Q-Farms and portions of four Q-Farms, there are approximately 3,161.6 acres of agricultural land use. Aerial photography (see Figure 9) was used to identify areas where riparian buffers may be able to be enhanced to further protect the waterways from agricultural impacts. Based upon the aerial photograph and site visits, recommendations for the agricultural lands in the study area in Washington Township are presented in Table 8.

The impervious cover analysis was used to calculate targets for areas of rooftops to be treated with rain gardens and length of roadways to be managed with bioswales. Seven HUC14s are in the study area (02030105010020, 02030105010040, 02030105010050, 02030105010060, 02030105050030, 02030105050040, 02030105050130). Within these seven HUC14s, there are 297.7 acres of building and 487.7 acres of roadway. The Watershed Restoration and Protection Plan recommends managing stormwater runoff from ¼ of 25% of the building rooftops. For the study area within Washington Township, approximately 37.2 acres of rooftop runoff would be managed with 7.44 acres of rain gardens. The plan also calls for the management of 10% of the roadways with bioswales. For the study area within Washington Township, approximately 48.8 acres of roadway would be managed or about fourteen miles of roadway.

Finally, the parcel data was used to identify parcels that are classified as Property Class 15. Property Class 15 parcels are tax-exempt, and include six subcategories:

15A – Public School Property

15B- Other School Property

15C- Public Property

15D- Church and Charitable Property

15E- Cemeteries and Graveyards

15F- Other Exempt

The Property Class 15 parcels for Washington Township are shown in Figure 10 and presented in Table 9. When the municipality develops their Watershed Improvement Plan to satisfy their Municipal Separate Storm Sewer System (MS4) permit, these are the first sites that are assessed for opportunities to install watershed improvement projects. This assessment was completed for the Property Class 15 parcels in the study area (see Figure 11). Available information for each parcel in the study area is presented in Table 10. Class 15E parcels were excluded from the assessment. Fifteen of these properties offer opportunities to be retrofitted with green infrastructure to help reduce pollutant loads. These properties are identified in Table 10 and represent watershed improvement projects that can be included in the municipality's Watershed Improvement Plan. Figure 12 shows parcels within the entire municipality that offer opportunities to be retrofitted with green infrastructure. These sites are included in the Impervious Cover Reduction Action Plan that was completed by the RCE Water Resources Program for the municipality.

Water Quality Classification

The New Jersey Department of Environmental Protection (NJDEP) Surface Water Quality Standards (SWQS) are regulations that govern the water quality goals and pollution limitations for surface waters in New Jersey. Surface waters are classified based on their designated uses, such as drinking water supply, aquatic life habitat, recreation, or shellfish harvesting. The SQWS are used to protect those uses and guide permitting, monitoring, and water quality restoration efforts.

Under the SWQS, freshwaters are classified as Fresh Water 1 (FW1), Fresh Water 2 (FW2), or Pinelands (PL). FW1 waters are nondegradation waters with unique ecological significance, in which man-made wastewater discharges are not permitted. FW2 waters are all other freshwaters except for Pinelands waters. FW2 waters are further classified based on their ability to support trout. Trout Production waters (TP) are designated for use by trout for spawning or nursery purposes during their first summer. Trout Maintenance waters (TM) are designated for the support of trout throughout the year. Non-trout waters (NT) are generally unsuitable for trout due to their physical, chemical, or biological characteristics. Pinelands waters – which may be either fresh or saline waters – are surface waters within the Pinelands Protection and Preservation areas.

Saline waters that are not PL are classified under the SWQS as either Saline Estuarine (SE) or Saline Coastal (SC). SE waters are further subcategorized based on their ability to support recreation, shellfish harvesting, and warm water fish species. SE1 waters have the highest protection within the SE category, and must support the maintenance, migration, and propagation of fish and aquatic life, as well as shellfish harvesting. SE2 waters must support the maintenance, migration, and propagation of fish and aquatic life but do not need to support shellfish harvesting. SE3 waters must support the migration of fish but do not need to support permanent aquatic biota populations or shellfish harvesting. Some coastal waters have dual classifications where the waters change from freshwater to saltwater as they drain into the estuary or ocean.

Finally, there are three antidegradation classifications assigned to all New Jersey surface waters. Outstanding National Resource Waters (ONRW) is the most protective classification and applies to all F1 and PL waters. No degradation is permitted in ONRW waters. Category One waters (C1) are protected from any measurable change to existing water quality because of their exceptional ecological significance, exceptional recreational significance, exceptional water supply significance, or exceptional fisheries resources. Category Two waters (C2) permit some measurable degradation in water quality, but the changes must be limited and justified. C2 is the default classification for all surface waters that are not categorized as F1, PL, or C1.

There are six classifications that apply to the streams in Washington Township. Figure 13 depicts the water quality classification of surface waters throughout Washington Township and Table 11 summarizes the total miles and percentage of each surface water quality classification in the municipality

Areas Prone to Flooding

An administrator from Washington Township has identified several locations throughout the municipality that are particularly susceptible to flooding during heavy rainfall or storm events. Spruce Lane has been observed to experience large volumes of runoff that come from Naughtright Road. East and West Mill Road have been reported to experience flooding from the intersection of Schooley's Mountain Road, heading west towards Middle Valley Road. The intersection of Naughtright Road and Bartley Road and the intersection of Bartley Road and Four Bridges Road also often have reports of flooding after heavy rainfall. Figure 14 shows the locations of the aforementioned areas of concern.

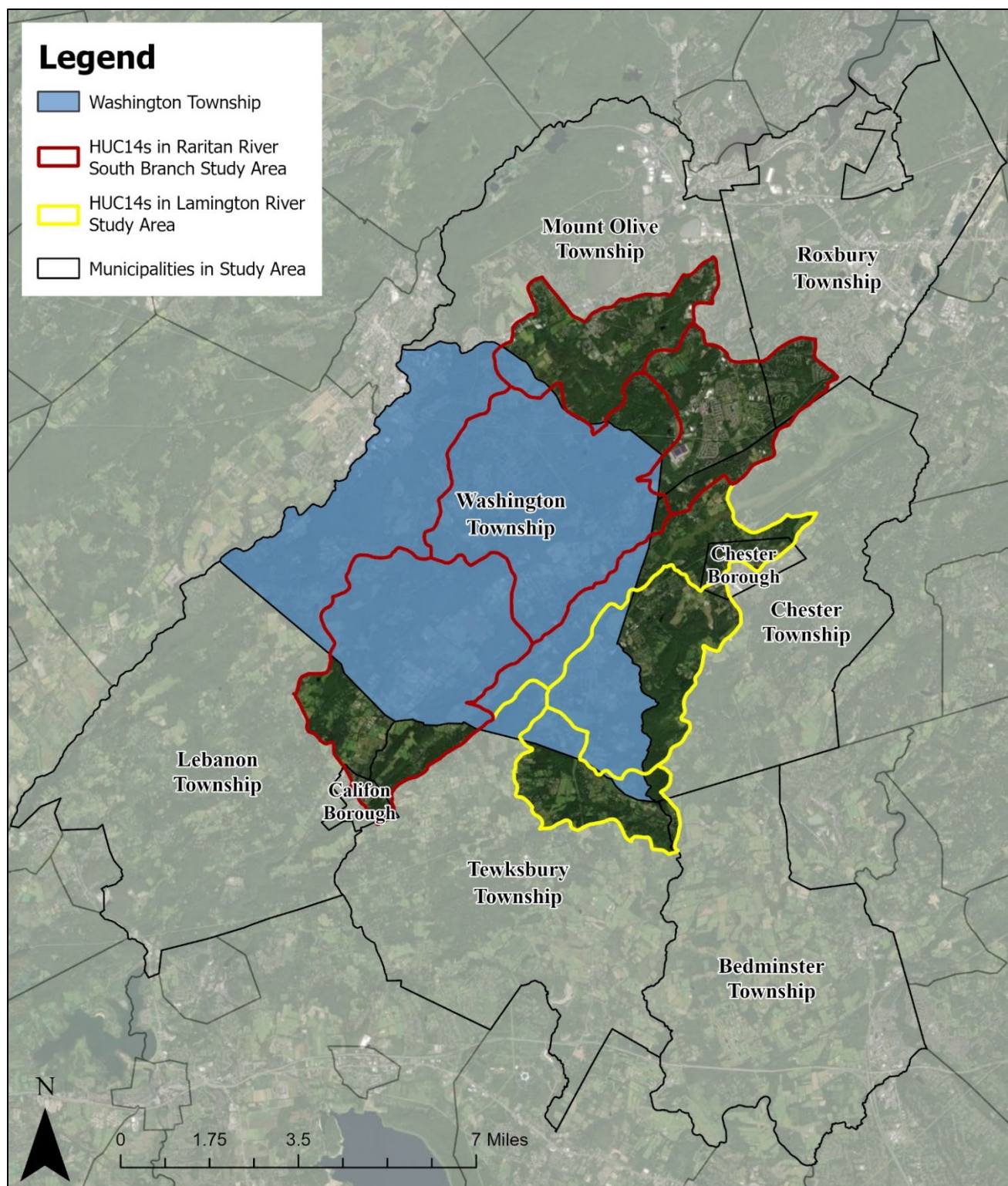


Figure 1: Municipalities in the Study Area

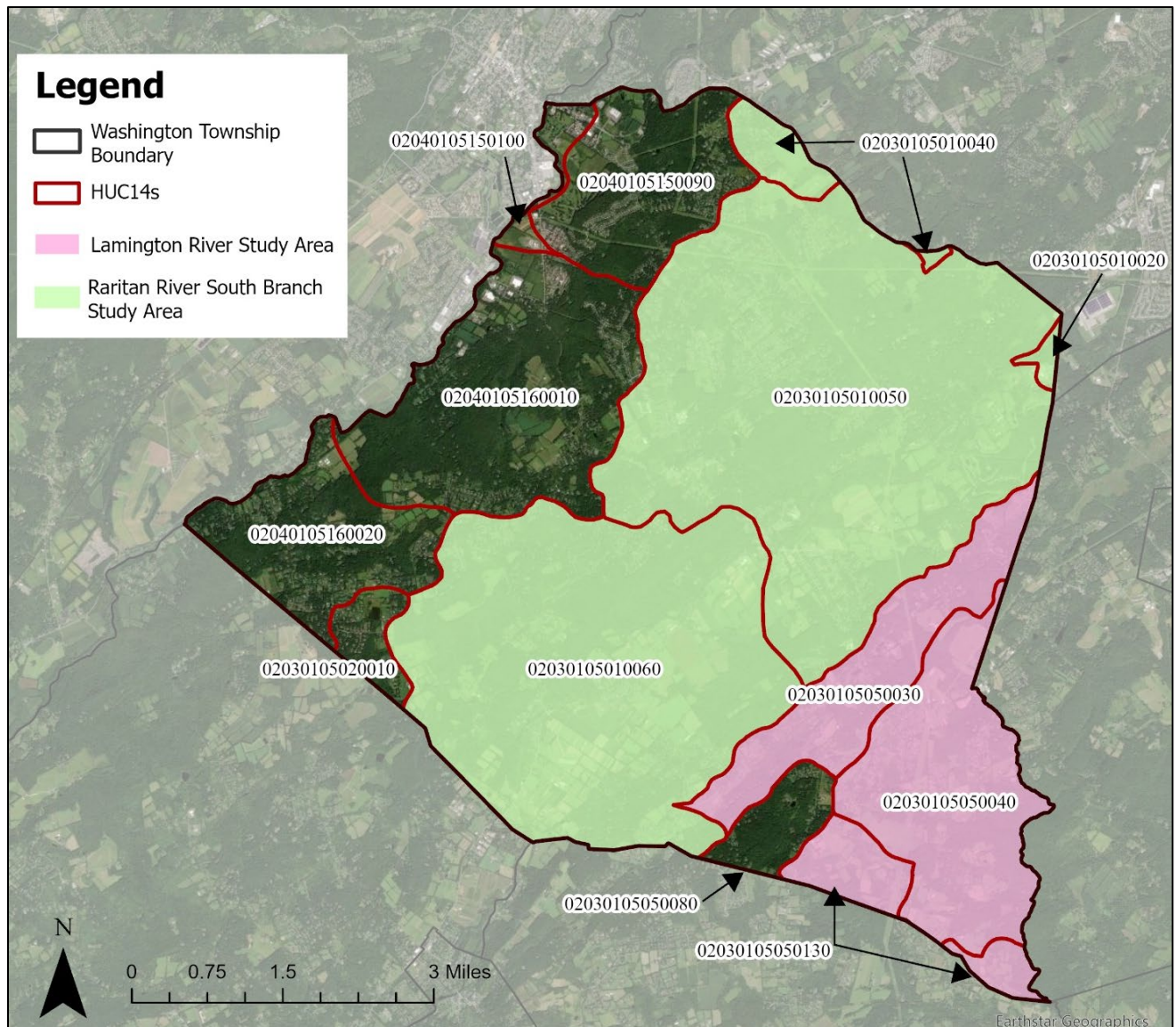


Figure 2: Portions of thirteen HUC14s are in Washington Township

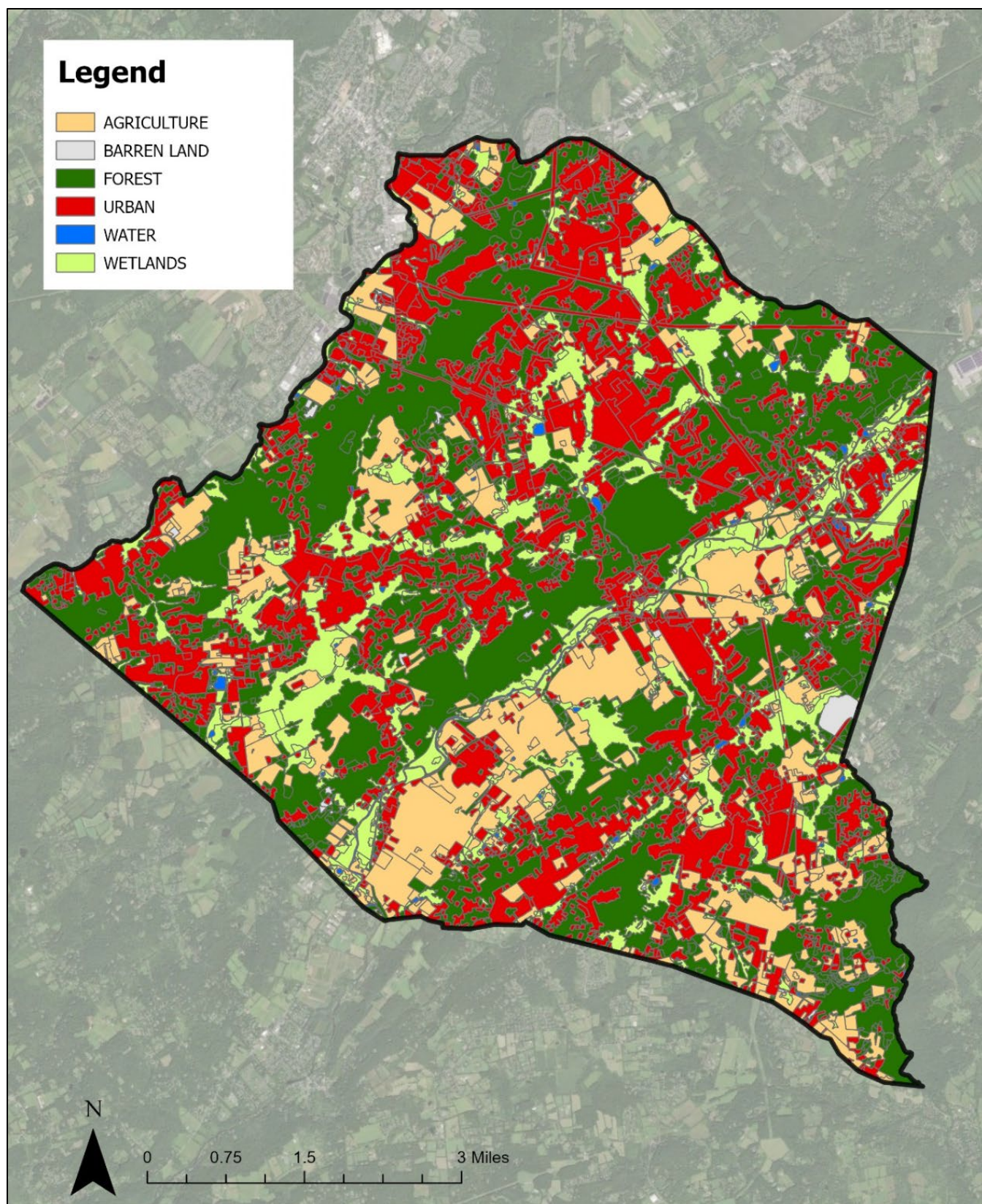


Figure 3: Land Use in Washington Township

Table 2: Land Use Analysis and Nonpoint Source Loading Analysis by HUC14 for Washington Township

Land Use Type	Area (acres)	TP Load (lbs/yr)	TN Load (lbs/yr)	TSS Load (lbs/yr)
02030105010020				
Agriculture	2.2	2.9	22.2	666.5
Barren Land	0.0	0.0	0.0	0.0
Forest	16.3	1.6	49.0	653.4
Urban	34.8	48.8	522.4	4,876.1
Water	3.3	0.3	9.8	131.0
Wetlands	25.1	2.5	75.2	1,002.7
TOTAL =	81.7	56.1	678.7	7,329.7
02030105010040				
Agriculture	111.4	144.8	1,113.6	33,409.5
Barren Land	0.0	0.0	0.0	0.0
Forest	87.8	8.8	263.4	3,511.6
Urban	147.4	206.3	2,210.5	20,631.2
Water	2.1	0.2	6.3	84.7
Wetlands	29.6	3.0	88.9	1,184.8
TOTAL =	378.3	363.0	3,682.7	58,821.7
02030105010050				
Agriculture	971.2	1,262.6	9,712.2	291,365.2
Barren Land	10.4	5.2	51.9	622.7
Forest	3,026.3	302.6	9,079.0	121,052.9
Urban	3,088.7	4,324.1	46,330.0	432,413.0
Water	85.8	8.6	257.3	3,431.2
Wetlands	1,576.1	157.6	4,728.2	63,042.3
TOTAL =	8,758.4	6,060.7	70,158.5	911,927.2
02030105010060				
Agriculture	1,633.6	2,123.7	16,335.9	490,075.8
Barren Land	15.1	7.5	75.3	903.8
Forest	2,379.6	238.0	7,138.9	95,185.0
Urban	1,421.1	1,989.5	21,316.1	198,950.0
Water	58.9	5.9	176.6	2,355.0
Wetlands	1,142.4	114.2	3,427.2	45,696.3
TOTAL =	6,650.6	4,478.8	48,470.0	833,166.0
02030105020010				
Agriculture	42.0	54.6	419.6	12,589.2
Barren Land	0.0	0.0	0.0	0.0
Forest	89.2	8.9	267.5	3,566.6
Urban	150.4	210.6	2,256.6	21,061.9
Water	10.4	1.0	31.3	418.0
Wetlands	60.5	6.1	181.6	2,421.7

TOTAL =	352.6	281.2	3,156.7	40,057.4
02030105050030				
Agriculture	168.5	219.0	1,684.9	50,545.9
Barren Land	3.3	1.6	16.3	195.2
Forest	641.9	64.2	1,925.8	25,678.0
Urban	596.4	834.9	8,945.6	83,492.0
Water	13.4	1.3	40.1	534.2
Wetlands	248.3	24.8	744.9	9,932.3
TOTAL =	1,671.7	1,145.9	13,357.5	170,377.6
02030105050040				
Agriculture	616.6	801.6	6,166.4	184,991.3
Barren Land	66.6	33.3	332.8	3,993.4
Forest	1,056.5	105.7	3,169.6	42,260.7
Urban	625.1	875.1	9,376.1	87,510.3
Water	16.1	1.6	48.2	642.6
Wetlands	202.7	20.3	608.0	8,106.3
TOTAL =	2,583.5	1,837.5	19,701.0	327,504.7
02030105050080				
Agriculture	25.5	33.2	255.0	7,651.2
Barren Land	1.6	0.8	7.9	94.5
Forest	253.4	25.3	760.2	10,136.1
Urban	145.1	203.1	2,176.0	20,309.0
Water	2.7	0.3	8.2	108.7
Wetlands	73.2	7.3	219.7	2,929.3
TOTAL =	501.5	270.0	3,426.9	41,228.9
02030105050130				
Agriculture	225.8	293.5	2,257.6	67,727.8
Barren Land	0.0	0.0	0.0	0.0
Forest	271.2	27.1	813.6	10,848.5
Urban	150.2	210.2	2,252.5	21,023.6
Water	2.7	0.3	8.2	109.4
Wetlands	23.5	2.4	70.5	940.7
TOTAL =	673.4	533.5	5,402.5	100,649.9
02040105150090				
Agriculture	142.3	185.0	1,423.2	42,696.5
Barren Land	1.3	0.6	6.3	75.5
Forest	751.3	75.1	2,254.0	30,052.7
Urban	782.5	1,095.5	11,737.1	109,546.1
Water	4.6	0.5	13.7	183.2
Wetlands	92.2	9.2	276.6	3,688.2
TOTAL =	1,774.2	1,365.9	15,710.9	186,242.3
02040105150100				
Agriculture	59.1	76.8	590.5	17,716.4

Barren Land	3.4	1.7	16.8	201.4
Forest	14.8	1.5	44.3	590.4
Urban	137.6	192.7	2,064.5	19,268.8
Water	7.9	0.8	23.6	314.4
Wetlands	17.1	1.7	51.3	684.5
TOTAL =	239.8	275.1	2,791.0	38,776.0
02040105160010				
Agriculture	521.4	677.9	5,214.3	156,430.0
Barren Land	11.4	5.7	57.2	685.9
Forest	1,644.3	164.4	4,932.8	65,770.6
Urban	874.8	1,224.7	13,121.8	122,470.3
Water	23.1	2.3	69.4	925.7
Wetlands	300.8	30.1	902.3	12,030.4
TOTAL =	3,375.8	2,105.1	24,297.8	358,313.0
02040105160020				
Agriculture	203.9	265.0	2,038.6	61,158.6
Barren Land	3.6	1.8	18.1	217.7
Forest	671.5	67.2	2,014.5	26,860.5
Urban	640.7	897.0	9,610.5	89,697.7
Water	9.9	1.0	29.8	396.9
Wetlands	155.3	15.5	466.0	6,213.0
TOTAL =	1,684.9	1,247.5	14,177.5	184,544.4
All HUCs				
Agriculture	4,723.4	6,140.4	47,234.1	1,417,024.0
Barren Land	116.5	58.3	582.5	6,990.2
Forest	10,904.2	1,090.4	32,712.5	436,167.1
Urban	8,794.6	12,312.5	131,919.6	1,231,249.9
Water	240.9	24.1	722.6	9,634.9
Wetlands	3,946.8	394.7	11,840.4	157,872.4
TOTAL =	28,726.4	20,020.4	225,011.9	3,258,938.5

Impervious Cover Analysis

NJDEP's Open Data impervious surface GIS data layer depicts surfaces throughout Washington Township that have been covered with materials that are highly resistant to infiltration by water, rendering them impervious. These surfaces include rooftops, roadways, sidewalks, and other paved areas. These impervious cover values were used to estimate the impervious coverage for Washington Township. Based upon the NJDEP impervious surface data, Washington Township has impervious cover totaling 7.8%. Table 3 shows impervious cover for each HUC14. The extent of the impervious cover in Washington Township is shown in Figure 4.

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 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, Washington Township’s impervious cover percentage would suggest that its waterways are primarily sensitive and most likely preventing degradation of the state’s surface water quality standards.

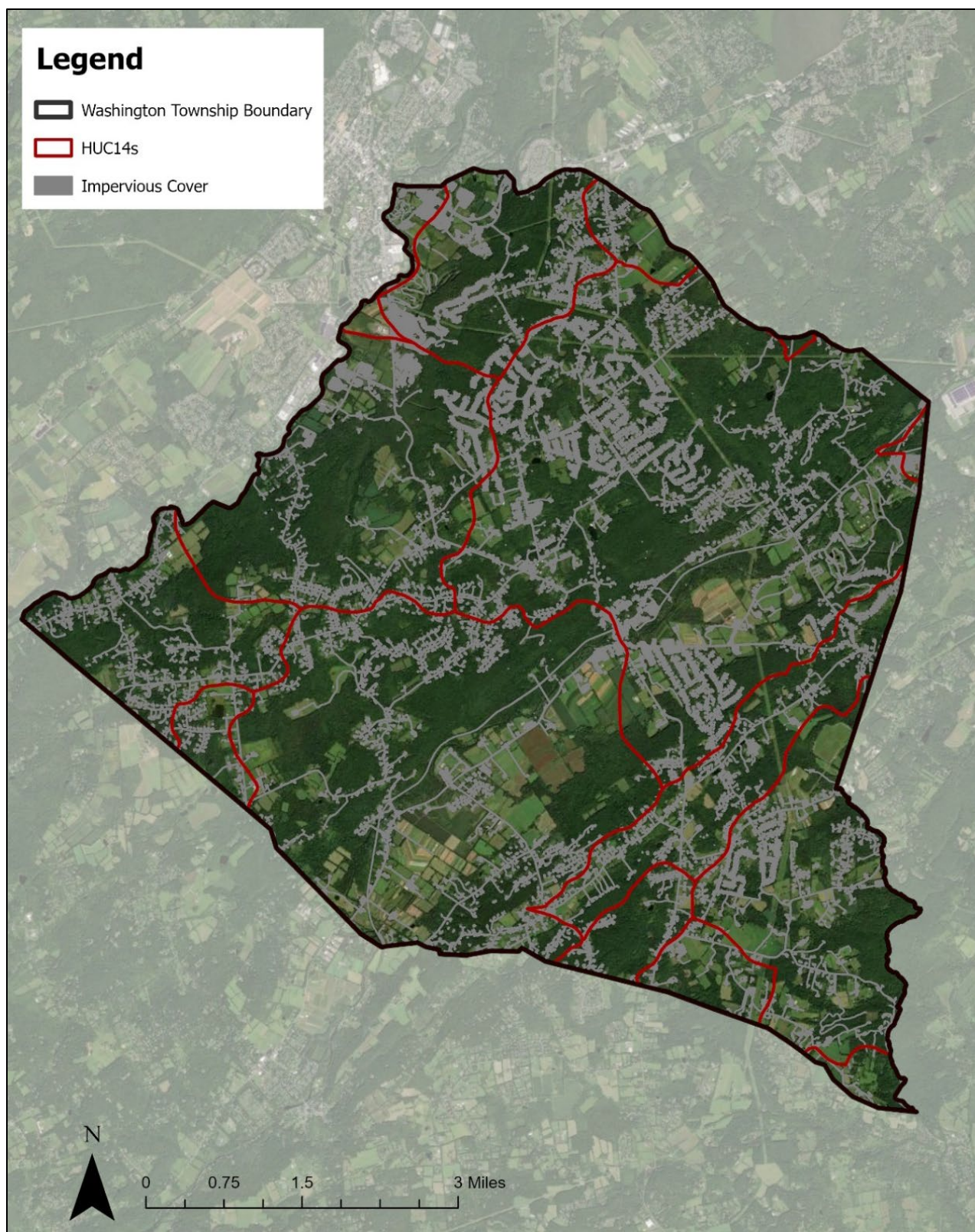


Figure 4: Impervious Cover in Washington Township

Table 3: Impervious Cover Analysis by HUC14 for Washington Township

Class	Area (acres)	HUC Impervious Cover (%)
02030105010020		
Building	3.62	
Other	9.68	
Road	1.11	
TOTAL =	14.4	17.6%
02030105010040		
Building	7.02	
Other	14.89	
Road	10.84	
TOTAL =	32.7	8.7%
02030105010050		
Building	154.76	
Other	369.41	
Road	272.81	
TOTAL =	797.0	9.1%
02030105010060		
Building	68.83	
Other	193.54	
Road	97.36	
TOTAL =	359.7	5.4%
02030105020010		
Building	6.83	
Other	12.48	
Road	9.82	
TOTAL =	29.1	8.3%
02030105050030		
Building	26.72	
Other	78.95	
Road	38.90	
TOTAL =	144.6	8.6%
02030105050040		
Building	30.47	
Other	88.75	
Road	52.45	
TOTAL =	171.7	6.6%
02030105050080		
Building	6.84	
Other	18.55	
Road	8.06	
TOTAL =	33.5	6.7%
02030105050130		
Building	6.24	
Other	22.89	
Road	14.28	
TOTAL =	43.4	6.4%

02040105150090		
Building	50.18	
Other	103.35	
Road	67.60	
TOTAL =	221.1	12.5%
02040105150100		
Building	7.07	
Other	25.19	
Road	13.25	
TOTAL =	45.5	19.0%
02040105160010		
Building	54.22	
Other	108.61	
Road	73.43	
TOTAL =	236.3	7.0%
02040105160020		
Building	24.30	
Other	55.71	
Road	37.23	
TOTAL =	117.2	7.0%
All HUCs		
Building	447.09	
Other	1,102.00	
Road	697.13	
TOTAL =	2,246.2	7.8%

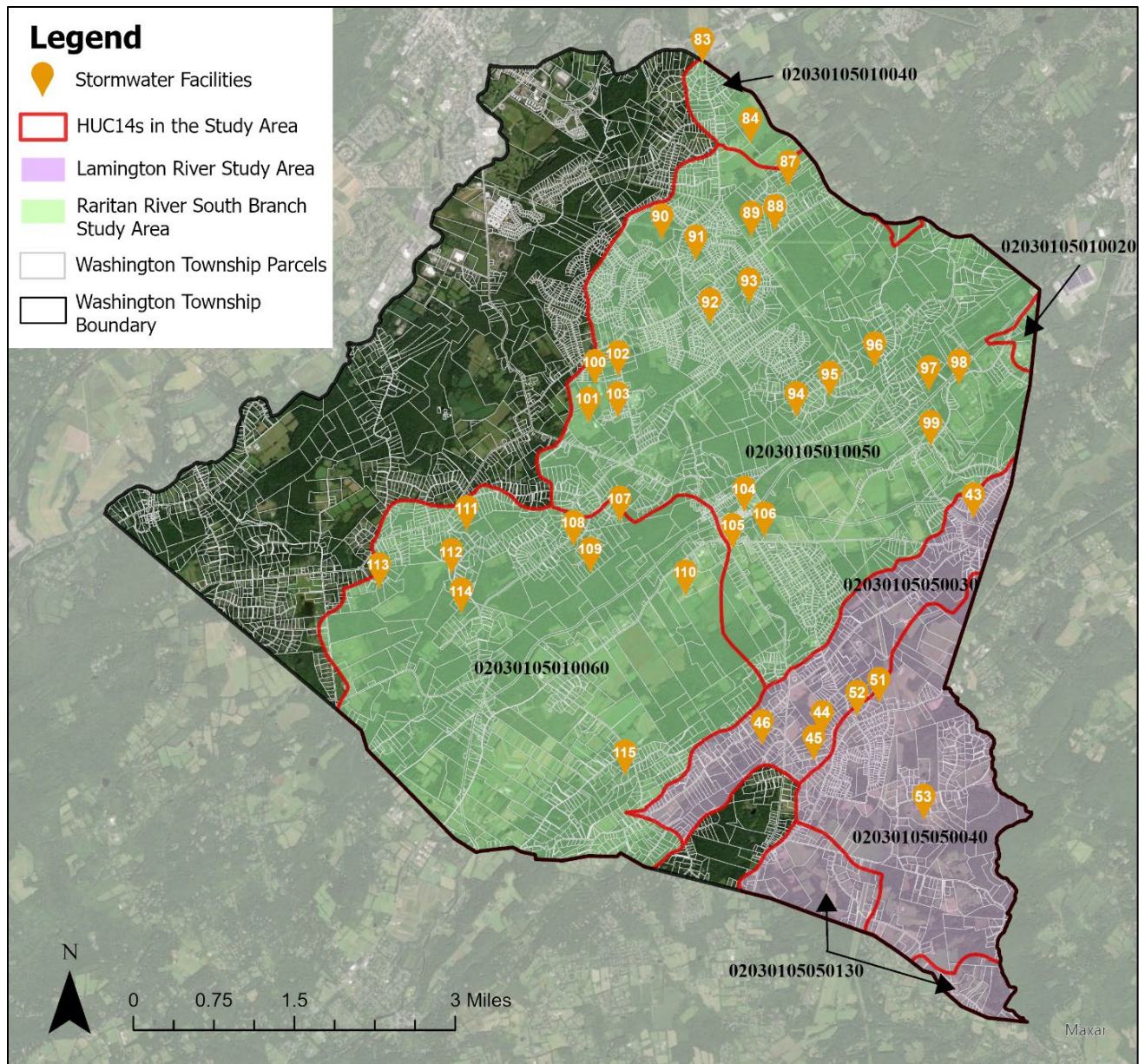


Figure 5: Stormwater Facilities in the Study Area of Washington Township

Table 4: Location of Stormwater Facilities in the Study Area of Washington Township

Lamington River Study Area		
<u>ID</u>	<u>Address</u>	<u>Type</u>
43	12 Ridgeline Dr	N
44	5 Jordan Ct	N
45	3 Ryan Ct	D
46	10 Wolfe Run Ct	RB
51	9 Liberty Hills Ct	N
52	3 Liberty Hills Ct	D
53	Hacklebarney Rd	N
Raritan River South Branch Study Area		
<u>ID</u>	<u>Address</u>	<u>Type</u>
83	41 Yorkshire Dr	D
84	Naughtright Rd	N
87	9 Bristol Ter	D
88	Bentley Way	N
89	5 Thomas Farm Ln	N
90	Spring Ln	I
91	10 Belrose Ct	N
92	Amherst Dr	N
93	26 Wellington Dr	D
94	20 Ranney Rd	N
95	38 Ranney Rd	N
96	16 Squire Hill Rd	N
97	14 Stony Brook Rd	N
98	209 Bartley Rd	D
99	Bartley/Chancellor	N
100	79 Rock Rd	D
101	79 Rock Rd	N
102	Briarwood Rd	N
103	Blackberry Pl	N
104	Fairview Ave/Welsh Farm	RB
105	Fairview Ave/Welsh Farm	RB
106	62 East Mill Rd	N
107	34 Harvest Ln	N
108	4 Rice Ln	N
109	10 Allyson Ct	N
110	W Mill Rd	D
111	1 Lenore Ct	N
112	7 Indian Run Rd	N
113	9 Stonebriar Dr	N
114	3 High Meadow Ln	N

115	3 Shenandoah Ct	N
-----	-----------------	---

“D” = Detention, “N” = Naturalized, “I” = Infiltration, “RB” = Retention with Buffer

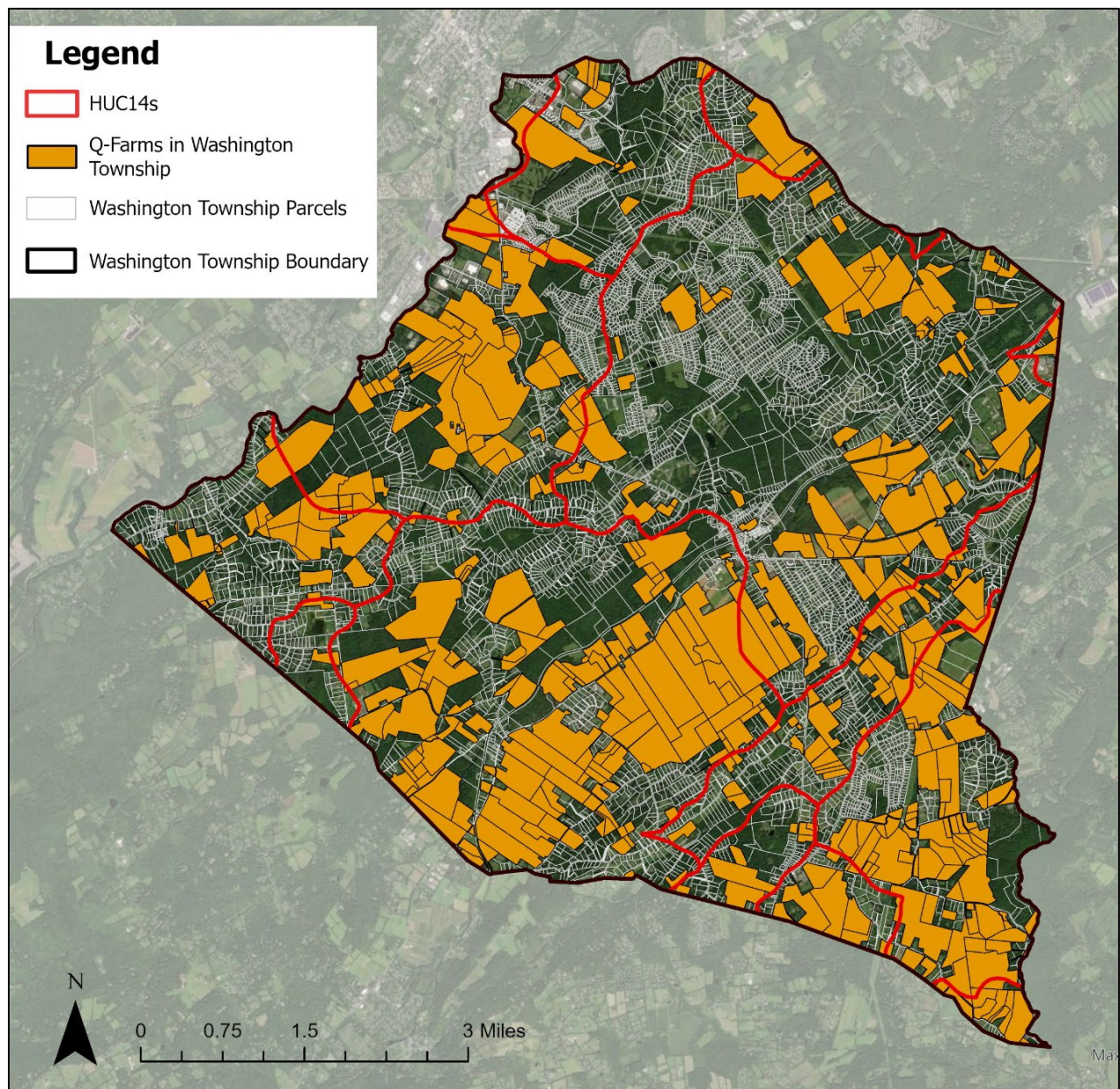


Figure 6: Q-Farm Parcels in Washington Township

Table 5: Q-Farm Parcels in Washington Township

Block	Lot	Q-Code	Prop Class	Location
*54	19	Q0030	3B	384 Penwell Road
*20	2	Q0132	3B	46 Fairmount Rd East
*20	7	Q0154	3B	355 Black River Rd
54	23.01	Q0156	3B	205 Old Turnpike Road
3	15	QFARM	3B	East Ave
3.10	3	QFARM	3B	Route 46
8	9.01	QFARM	3B	Route 46
8	6.04	QFARM	3B	Drakestown Rd
8	6.03	QFARM	3B	Drakestown Rd
8	6.02	QFARM	3B	51 Drakestown Rd
8	9.02	QFARM	3B	Route 46
9	25.02	QFARM	3B	Reservoir Rd
9	26	QFARM	3B	Reservoir Rd
9	14.01	QFARM	3B	Drakestown Rd
9	14	QFARM	3B	169 Drakestown Rd
11	28	QFARM	3B	Spring Ln
12	37.03	QFARM	3B	Naughtright Rd
12	4	QFARM	3B	Drakestown Rd
12	5.01	QFARM	3B	299 Drakestown Rd
12.01	53	QFARM	3B	Naughtright Rd
12.01	59	QFARM	3B	220 Flocktown Rd
12.01	52	QFARM	3B	Naughtright Rd
12.01	60.03	QFARM	3B	97 Heritage Ct
12.05	3	QFARM	3B	Bristol Ter
13	10.01	QFARM		498 Keltz Ln
13	11	QFARM		498 Keltz Ln
13	60	QFARM	3B	Flocktown Rd
13	63.01	QFARM	3B	Flocktown Rd
13	7	QFARM	3B	Fairview Ave
13	10	QFARM		Keltz Ln
13	1	QFARM	3B	Flocktown Rd
13	12	QFARM	3B	46 Jones Ln
13	12.01	QFARM	3B	Jones Ln
13	8	QFARM	3B	255 Keltz Ln
13	64	QFARM	3B	Flocktown Rd
14	9.02	QFARM	3B	8 Laketown Rd
14	9	QFARM	3B	10 Laketown Rd
14	9	QFARM	3B	10 Laketown Rd
14	11	QFARM	3B	Fairview Ave
14	4	QFARM	3B	Laketown Rd
14	6	QFARM	3B	14 Laketown Rd

14	8	QFARM	3B	14 Laketown Rd
14	7	QFARM	3B	14 Laketown Rd
14	5	QFARM	3B	Fairview Ave
14	2.01	QFARM	3B	145 N Four Bridges Rd
15	20.24	QFARM	3B	26 Naughtright Rd
15	13.01	QFARM	3B	2 Elizabeth Ln
15	25	QFARM	3B	14 Laketown Rd
15	4	QFARM	3B	59 N Four Bridges Rd
15	5	QFARM	3B	59 N Four Bridges Rd
16	14	QFARM	3B	250 Bartley Rd
16	21	QFARM	3B	98 N Four Bridges Rd
16	2	QFARM	3B	503 Drakestown Rd
16	20.03	QFARM	3B	98 N Four Bridges Rd
16	4	QFARM	3B	515 Drakestown Rd
16	22	QFARM	3B	98 N Four Bridges Rd
17	6	QFARM	3B	679 Bartley Rd
17	7	QFARM	3B	Bartley Rd
*17	31.01	QFARM	3B	20 Schoolhouse Ln
18	29	QFARM	3B	169 Bartley Rd
18	27.05	QFARM	3B	169 Bartley Rd
18	8.12	QFARM	3B	169 Bartley Rd
18	5	QFARM	3B	S Four Bridges Rd
18.01	19	QFARM	3B	Coleman's Rd
19	5	QFARM	3B	451 Schooleys Mtn Rd
19	7	QFARM	3B	430 Schooleys Mtn Rd
19	4	QFARM	3B	481 Schooleys Mountain Rd
19	3	QFARM	3B	481 Schooleys Mountain Rd
20	46	QFARM	3B	Schooleys Mtn Rd
20	50	QFARM	3B	Flocktown Rd
20	72	QFARM	3B	264 Heath Vlg
20	80	QFARM	3B	Whitehouse Rd
20	79	QFARM	3B	Knob Hill Rd
20	22	QFARM	3B	Flocktown Rd
20	46.01	QFARM	3B	Flocktown Rd
20	46.02	QFARM	3B	Flocktown Rd
20	80.01	QFARM	3B	1A Knob Hill Rd
20.09	19	QFARM	3B	Flocktown Rd
20.10	44	QFARM	3B	Flocktown Rd
21	2	QFARM	3B	Schooleys Mtn Rd
22	20	QFARM	3B	232 Schooleys Mtn Rd
22	28	QFARM	3B	Schooleys Mtn Rd
22	27	QFARM	3B	43 Flocktown Rd
22	28.02	QFARM	3B	43 Flocktown Rd
22	2.05	QFARM	3B	91 Rock Rd

22	27.01	QFARM	3B	Flocktown Rd
22	28.01	QFARM	3B	51 Flocktown Rd
25	66.01	QFARM	3B	214 Fairview Ave
25	53.09	QFARM		Schooleys Mountain Rd
27	9	QFARM	3B	Fairview Ave
28	17.03	QFARM	3B	94 E Mill Rd
28	16.01	QFARM	3B	98 E Mill Rd
28	17.02	QFARM	3B	74 E Mill Rd
28	18	QFARM	3B	74 E Mill Rd
28	14	QFARM	3B	98 E Mill Rd
28	11	QFARM	3B	Bartley Rd
28	63	QFARM	3B	195 Fairview Ave
28	4.01	QFARM	3B	Naughtright Rd
28	4	QFARM	3B	Naughtright Rd
28	15	QFARM	3B	Bartley Rd
28	16.02	QFARM	3B	Bartley Rd
28	16	QFARM	3B	98 E Mill Rd
28	63.01	QFARM	3B	195 Fairview Ave
29	10.13	QFARM	3B	14 Beaver Brook Dr
29	19	QFARM	3B	E Mill Rd
29	20	QFARM	3B	98 E Mill Rd
29	13	QFARM	3B	E Mill Rd
29	18	QFARM	3B	Bartley Rd
29	2	QFARM	3B	Coleman's Rd
29	18.01	QFARM	3B	E Mill Rd
30	40	QFARM	3B	Pleasant Grove Rd
30	34.01	QFARM	3B	Pleasant Grove Rd
30	34	QFARM	3B	Pleasant Grove Rd
30	52.01	QFARM	3B	Kings Hwy
30	35	QFARM	3B	Slikers Rd
30	38	QFARM	3B	Slikers Rd
30	23	QFARM	3B	Schooleys Mtn Rd
30	65.02	QFARM	3B	Kings Hwy
30	65.01	QFARM	3B	Kings Hwy
30	22	QFARM	3B	Schooleys Mtn Rd
30	71	QFARM	3B	5 Esna Dr
30	71.01	QFARM	3B	5 Esna Dr
30	71.03	QFARM	3B	5 Esna Dr
30	21	QFARM	3B	Esna Dr
30	34.03	QFARM	3B	Pleasant Grove Rd
30	61	QFARM	15F	Kings Hwy
30	60	QFARM	15F	Kings Hwy
30	71.04	QFARM	3B	7 Esna Dr
30	22.02	QFARM	3B	349 Schooleys Mtn Rd

30	66	QFARM	3B	Kings Hwy
30	22.03	QFARM	3B	349 Schooleys Mtn Rd
30.01	3	QFARM	3B	Pleasant Grove Rd
30.02	47.12	QFARM	3B	15 Cobblestone Ln Fl
31	14.08	QFARM	3B	62 Wehrli Rd
31	13.21	QFARM	3B	201 Schooleys Mtn Rd
31	13.23	QFARM	3B	Schooleys Mtn Rd
31	13	QFARM	3B	Schooleys Mtn Rd
32	5	QFARM	3B	180 W Springtown Rd
32.02	3	QFARM	3B	128 Zellers Rd
32.02	1	QFARM	3B	Zellers Rd
32.02	2	QFARM	3B	128 Zellers Rd
33	82.04	QFARM	3B	2 Zellers Rd
33	82.02	QFARM	3B	38 Middle Valley Rd
33	71.02	QFARM		W Mill Rd
33	83.12	QFARM	3B	48 Zellers Rd
33	83.13	QFARM	3B	Zellers Rd
33	66	QFARM	3B	186 W Mill Rd
33	61	QFARM	3B	144 W Mill Rd
33	71.03	QFARM	3B	274 W Mill Rd
33	71.05	QFARM	2	276 W Mill Rd
33	86	QFARM	3B	180 W Springtown Rd
33	51	QFARM	3B	W Mill Rd
33	59.02	QFARM	3B	21 James Trl
33	6.06	QFARM		Schooleys Mountain Rd
33	6.07	QFARM	3B	111 Schooleys Mtn Rd
33	1	QFARM	3B	Schooleys Mtn Rd
33	70	QFARM	3B	248 W Mill Rd
33	71	QFARM	3B	W Mill Rd
33	70.04	QFARM	3B	248 W Mill Rd
33	70.02	QFARM	3B	248 W Mill Rd
33	102	QFARM	3B	160 W Mill Rd
33	60	QFARM	3B	160 W Mill Rd
33	103	QFARM	3B	160 W Mill Rd
33	59.01	QFARM	3B	21 James Trl
33	59	QFARM	3B	21 James Trl
33	65	QFARM	3B	162 W Mill Rd
33	67	QFARM	3B	214 W Mill Rd
33	68	QFARM	3B	248 W Mill Rd
33	69	QFARM	3B	234 W Mill Rd
33	69.02	QFARM	3B	248 W Mill Rd
33	84	QFARM	3B	180 W Springtown Rd
34	35.04	QFARM	3B	100 Beacon Hill Rd
34	27	QFARM	3B	21 Sierra Dr

34	25.11	QFARM	3B	94 W Valley Brook Rd
34	23	QFARM	3B	76 W Valley Brook Rd
34	23.01	QFARM	3B	W Valley Brook Rd
34	23.02	QFARM	3B	W Valley Brook Rd
34	35	QFARM	3B	100 Beacon Hill Rd
34	8	QFARM	3B	18 W Valley Brook Rd
34	37.15	QFARM	3B	Winchester Dr
34	11.04	QFARM	3B	40 W Valley Brook Rd
34	13.01	QFARM	3B	24 Highland Ave
34	38	QFARM	3B	255 W Mill Rd
34	40	QFARM	3B	W Mill Rd
34	44	QFARM	3B	W Mill Rd
34	42	QFARM	3B	177 W Mill Rd
34	13.02	QFARM	3B	W Valley Brook Rd
34	28	QFARM	3B	W Mill Rd
34	15	QFARM	3B	W Valley Brook Rd
34	29	QFARM	3B	W Mill Rd
34	36	QFARM	3B	100 Beacon Hill Rd
34	37	QFARM	3B	Beacon Hill Rd
34	13.03	QFARM	3B	W Valley Brook Rd
34	13	QFARM	3B	99 W Mill Rd Bldg 22
34	11.01	QFARM	3B	W Valley Brook Rd
34	45	QFARM	3B	W Mill Rd
34	46.02	QFARM	3B	177 W Mill Rd
34	39	QFARM	3B	248 W Mill Rd
34	41	QFARM	3B	177 W Mill Rd
34	43	QFARM	3B	99 W Mill Rd
34	46.01	QFARM	3B	99 W Mill Rd
34	50	QFARM	3B	25 W Mill Rd
34	1.01	QFARM	3B	Fairmount Rd
34	46	QFARM	3B	99 W Mill Rd Bldg 22
34	50.01	QFARM	3B	W Mill Rd
34.01	3	QFARM	3B	152 Beacon Hill Rd
35	4	QFARM	3B	E Valley Brook Rd
35	8	QFARM	3B	Fairmount Rd
35	6	QFARM	3B	Fairmount Rd
36	25	QFARM	3B	66B Old Farmers Rd
36	24	QFARM	3B	86 E Valley Brook Rd
36	8	QFARM	3B	152 E Valley Brook Rd
36	12	QFARM	3B	138 E Valley Brook Rd
36	41	QFARM	3B	98 E Mill Rd
36	46	QFARM		E Mill Rd
36	21	QFARM	3B	E Valley Brook Rd
36	20	QFARM	3B	E Valley Brook Rd

36	19	QFARM	3B	E Valley Brook Rd
36	17	QFARM	3B	E Valley Brook Rd
36	44	QFARM	3B	E Mill Rd
36	43	QFARM	3B	115 E Mill Rd
36	4	QFARM	3B	168 E Valley Brook Rd
36	3	QFARM	3B	E Valley Brook Rd
36	53.03	QFARM	3B	193A E Mill Rd
37	26.03	QFARM	3B	193 Parker Rd
37	26.04	QFARM	3B	193 Parker Rd
37	34.17	QFARM	3B	14 Liberty Hills Ct
37	26	QFARM	3B	193 Parker Rd
37	30	QFARM	3B	245 Parker Rd
37	25	QFARM	3B	E Valley Brook Rd
37	17	QFARM	3B	E Valley Brook Rd
37	22	QFARM	3B	E Valley Brook Rd
37	16.02	QFARM	3B	Parker Rd
37	27	QFARM	3B	245 Parker Rd
37	28	QFARM	3B	E Valley Brook Rd
37	38	QFARM	3B	55 E Valley Brook Rd
37	29	QFARM	3B	116 Parker Rd
37	15.01	QFARM	3B	Parker Rd
37	23.02	QFARM	3B	E Valley Brook Rd
37	9	QFARM	3B	E Valley Brook Rd
37	4	QFARM	3B	E Valley Brook Rd
38	10	QFARM	3B	E Fox Hill Rd
38	11	QFARM	3B	E Fox Hill Rd
38	3.13	QFARM	3B	157 Parker Rd
38	2	QFARM	3B	83 Old Farmers Rd
38	10.01	QFARM	3B	E Fox Hill Rd
38	15.04	QFARM	3B	Fairmount Rd
38	9	QFARM	3B	50 E Fox Hill Rd
38	9.01	QFARM	3B	E Fox Hill Rd
39	5	QFARM	3B	10 W Fox Hill Rd
39	9	QFARM	3B	18 W Valley Brook Rd
40	6.01	QFARM	3B	316 Fairmount Rd
40	26	QFARM	3B	Fairmount Rd
40	25.01	QFARM	3B	316 Fairmount Rd
40	26.03	QFARM	3B	310 Fairmount Rd
41.01	29	QFARM	3B	13 Apgar Rd
42	13	QFARM		226 Old Farmers Rd
42	11.01	QFARM	3B	72 Hacklebarney Rd
42	3	QFARM	3B	210 Parker Rd
42	5	QFARM	3B	Parker Rd
42	14.03	QFARM	3B	50 Hacklebarney Rd

42	14.01	QFARM	3B	212 Old Farmers Rd
42	14.04	QFARM	3B	52 Hacklebarney Rd
42	12.11	QFARM	3B	9 Krista Ct
42	2.01	QFARM	3B	Parker Rd
42	11.02	QFARM	3B	74 Hacklebarney Rd
42	11.03	QFARM	3B	Hacklebarney Rd
42.03	1	QFARM	3B	116 Hacklebarney Rd
*42.03	23	QFARM	3B	128 Hacklebarney Rd
43	48.22	QFARM	3B	232 Pleasant Grove Rd
43	56	QFARM	3B	60 Stephensburg Rd
43	57	QFARM	3B	Stephensburg Rd
43	72	QFARM	3B	Fishers Mine Rd
43	68	QFARM	3B	Fishers Mine Rd
43	62.05	QFARM	3B	Stephensburg Rd
43	73	QFARM		Fisher Mine Rd
43	67	QFARM	3B	Fishers Mine Rd
43	47.09	QFARM	3B	55 Kings Hwy
43	75	QFARM	3B	Fishers Mine Rd
43	74.01	QFARM	3B	Fishers Mine Rd
43	101	QFARM	3B	15 Old Turnpike Rd
43	66	QFARM		Old Turnpike Rd
43	33.01	QFARM		Kings Hwy
43	33	QFARM	3B	Kings Hwy
43	84	QFARM	3B	86 River Rd
43	32	QFARM	3B	Kings Hwy
43	29	QFARM	3B	181 Kings Hwy
43	62.03	QFARM	3B	88 Stephensburg Rd
43	59	QFARM	3B	80 Stephensburg Rd
43	55.01	QFARM	3B	Stephensburg Rd
43	61	QFARM	3B	80 Stephensburg Rd
43	58	QFARM	3B	80 Stephensburg Rd
43	62	QFARM	3B	Stephensburg Rd
43	74	QFARM	3B	50 Fishers Mine Rd
43	30	QFARM	3B	167 Kings Hwy
43	48.29	QFARM		Kings Hwy
43	54	QFARM	3B	16 Fishers Mine Rd
46	6.01	QFARM	3B	Pleasant Grove Rd
46	3	QFARM	3B	50 N Mt Lebanon Rd
46	15	QFARM	3B	Old Turnpike Rd
46	1.04	QFARM	3B	4 Shannon Mtn Ln Fl
46	6	QFARM	3B	370 Pleasant Grove Rd
46	8	QFARM	3B	Pleasant Grove Rd
46	58	QFARM	3B	205 Old Turnpike Rd
46	7	QFARM	3B	Pleasant Grove Rd

46	2	QFARM	3B	50 N Mt Lebanon Rd
46	2.01	QFARM	3B	50 N Mt Lebanon Rd
47	25	QFARM	3B	N Mt Lebanon Rd
47	11	QFARM		Stephensburg Rd
50	23	QFARM	3B	67 Califon Road
50.02	17	QFARM	3B	Pleasant Grove Rd
51	22	QFARM	3B	210 Middle Valley Rd
51	6.16	QFARM	3B	15 High Meadow Ln
51	2	QFARM	3B	130 Zellers Rd
51	11	QFARM	3B	106 Middle Valley Rd
51	16	QFARM	3B	182 Middle Valley Rd
51	14	QFARM	3B	Middle Valley Rd
51	23.01	QFARM	3B	58 Califon Rd
51	23	QFARM	3B	58 Califon Rd
51	20	QFARM	3B	155 Middle Valley Rd
51	19	QFARM	3B	121 Middle Valley Rd
51	17	QFARM	3B	121 Middle Valley Rd
51	15	QFARM	3B	121 Middle Valley Rd
52	3	QFARM	3B	121 Middle Valley Rd
52	6	QFARM	3B	Middle Valley Rd
52	1	QFARM	3B	121 Middle Valley Rd
54	29	QFARM	3B	462 W Mill Rd
54	26	QFARM	3B	458 W Mill Rd
54	24	QFARM	3B	499 W Mill Rd
54	63	QFARM	3B	398 W Mill Rd
54	20	QFARM	3B	398 W Mill Rd
54	39	QFARM	3B	Sky Top Rd
54	30	QFARM	3B	Mallard Cove Rd
54	37	QFARM	3B	Sky Top Rd
54	40	QFARM	3B	Sky Top Rd
54	41	QFARM	3B	Sky Top Rd
54	52	QFARM	3B	16 Mallard Cove Rd
54	50	QFARM	3B	Middle Valley Rd
54	11.04	QFARM	3B	6 Mallard Cove Rd
54	31	QFARM	3B	30 Skytop Rd
54	30.01	QFARM	3B	Mallard Cove Rd
54	38	QFARM	3B	Sky Top Rd
54	42	QFARM	3B	Middle Valley Rd
55	14	QFARM	3B	447 W Mill Rd
55	15	QFARM	3B	352 W Valley Brook Rd
55	11	QFARM	3B	427 W Mill Rd
55	7	QFARM	3B	54 Turtleback Rd
55	9.09	QFARM	3B	86 Turtleback Rd
55	10	QFARM	3B	446 W Mill Rd

55	6.01	QFARM	3B	42 Turtleback Rd
55	9	QFARM	3B	72 Turtleback Rd
55	5.01	QFARM	3B	30 Turtleback Rd
55	4.12	QFARM	3B	Beacon Hill Rd
55	4.13	QFARM	3B	Beacon Hill Rd
55	4.15	QFARM	3B	Beacon Hill Rd
55	30	QFARM	3B	W Mill Rd
55	3	QFARM	3B	9 Elaine Ct
55	17	QFARM	3B	370 Vernoy Rd
55	15.01	QFARM	3B	447 W Mill Rd
55	10.03	QFARM	3B	Turtleback Rd
55	14.01	QFARM	3B	447 W Mill Rd
55	10.01	QFARM	3B	Turtleback Rd
55	6	QFARM	3B	Turtleback Rd
55	5.03	QFARM	3B	30 Turtleback Rd
55	8	QFARM	3B	Turtleback Rd
55	5.04	QFARM	3B	Turtleback Rd
55	20	QFARM	3B	W Mill Rd
55	4.07	QFARM	3B	Beacon Hill Rd
55	28	QFARM	3B	W Mill Rd
56	20	QFARM	3B	Turtleback Rd
56	6.01	QFARM	3B	W Valley Brook Rd
56	6	QFARM	3B	W Valley Brook Rd
56	26.06	QFARM	3B	55 Turtleback Rd
56	4.02	QFARM	3B	212 W Valley Brook Rd
56	4.03	QFARM	3B	212 W Valley Brook Rd
56	26	QFARM	3B	59 Turtleback Rd
56	26.05	QFARM	3B	49 Turtleback Rd
58	12	QFARM	3B	16 Coddington Ln
58	20	QFARM	3B	14 Tall Timber Dr
58	17	QFARM	3B	93 Frog Hollow Rd
59	47.10	QFARM	3B	12 Abedim Way
59	56	QFARM	3B	94 W Valley Brook Rd
59	60.07	QFARM	3B	93 W Valley Brook Rd
59	60	QFARM	3B	W Valley Brook Rd
59	40	QFARM	3B	Beacon Hill Rd
59	33	QFARM	3B	Fairmount Rd
59	13	QFARM	3B	Fairmount Rd
60	24	QFARM	3B	143 Pickle Rd
60	22.02	QFARM	3B	Pickle Rd
60	20.02	QFARM	3B	79 Pickle Rd
60	20	QFARM	3B	49 Pickle Rd
60	19	QFARM	3B	33 Pickle Rd
60	21.04	QFARM	3B	Pickle Rd

60	15.02	QFARM	3B	28 Black River Rd
60	2	QFARM	3B	390 Fairmount Rd
60	1	QFARM	3B	Parker Rd
60	15	QFARM	3B	Black River Rd
61	4.01	QFARM	3B	Hacklebarney Rd
61	6	QFARM	3B	Apgar Rd
61	21	QFARM	3B	Apgar Rd
61	20	QFARM	3B	Apgar Rd
61	5.01	QFARM	3B	Black River Rd
61	5.02	QFARM	3B	Black River Rd
61	5.03	QFARM	3B	Black River Rd
61	1	QFARM	3B	227 Old Farmers Rd
61	4	QFARM	3B	Hacklebarney Rd
61	1.04	QFARM	3B	13 Apgar Rd
61	1.03	QFARM	3B	13 Apgar Rd
61	19	QFARM	3B	13 Apgar Rd
62	15	QFARM	3B	Black River Rd
62	14	QFARM	3B	Black River Rd
62	12	QFARM	3B	180 Black River Rd
62	4	QFARM	3B	112 Black River Rd
62	1.10	QFARM	3B	10 Doolittle Ln
62	1.13	QFARM	3B	Doolittle Ln
62	1.16	QFARM		Doolittle Ln
62	1	QFARM	3B	Hacklebarney Rd
62	1.11	QFARM	3B	Doolittle Ln
62	1.12	QFARM	3B	6 Hacklebarney Rd
62	1.14	QFARM	3B	3 Doolittle Ln
62	1.15	QFARM	3B	89 Hacklebarney Rd
62	1.18	QFARM	3B	99 Hacklebarney Rd
62	18	QFARM	3B	270 Black River Rd
62	4.04	QFARM	3B	114 Black River Rd
62	3	QFARM	3B	19 Hacklebarney Rd
62	1.02	QFARM	3B	43 Hacklebarney Rd
62	1.17	QFARM	3B	Hacklebarney Rd
62	6	QFARM	3B	151 Hacklebarney Rd
63	22	QFARM	3B	Pickle Rd
63	14	QFARM	3B	Black River Rd
63	20.01	QFARM	3B	190 Pickle Rd
63	20	QFARM	3B	Pickle Rd
63	21	QFARM	3B	Pickle Rd
63	11	QFARM	3B	239 Black River Rd
63	8.01	QFARM	3B	185 Black River Rd
63	20.02	QFARM	3B	Pickle Rd
63	19.02	QFARM	3B	Pickle Rd

*63	18	QFARM	3B	Black River Rd
63	19	QFARM	3B	Pickle Rd
63	13	QFARM	3B	Black River Rd
63	12	QFARM	3B	Black River Rd
63	8.08	QFARM	3B	185 Black River Rd
63	8.07	QFARM	3B	185 Black River Rd
63	8.04	QFARM	3B	173 Black River Rd
63	8.02	QFARM	3B	Black River Rd
63	5.01	QFARM	3B	147 Black River Rd
63	5	QFARM	3B	131 Black River Rd
63	25.01	QFARM	3B	Pickle Rd
63	3	QFARM	3B	Pickle Rd
64	1	QFARM	3B	169 Pickle Rd

*Only a portion of Q-Farm is within the Washington Township boundary

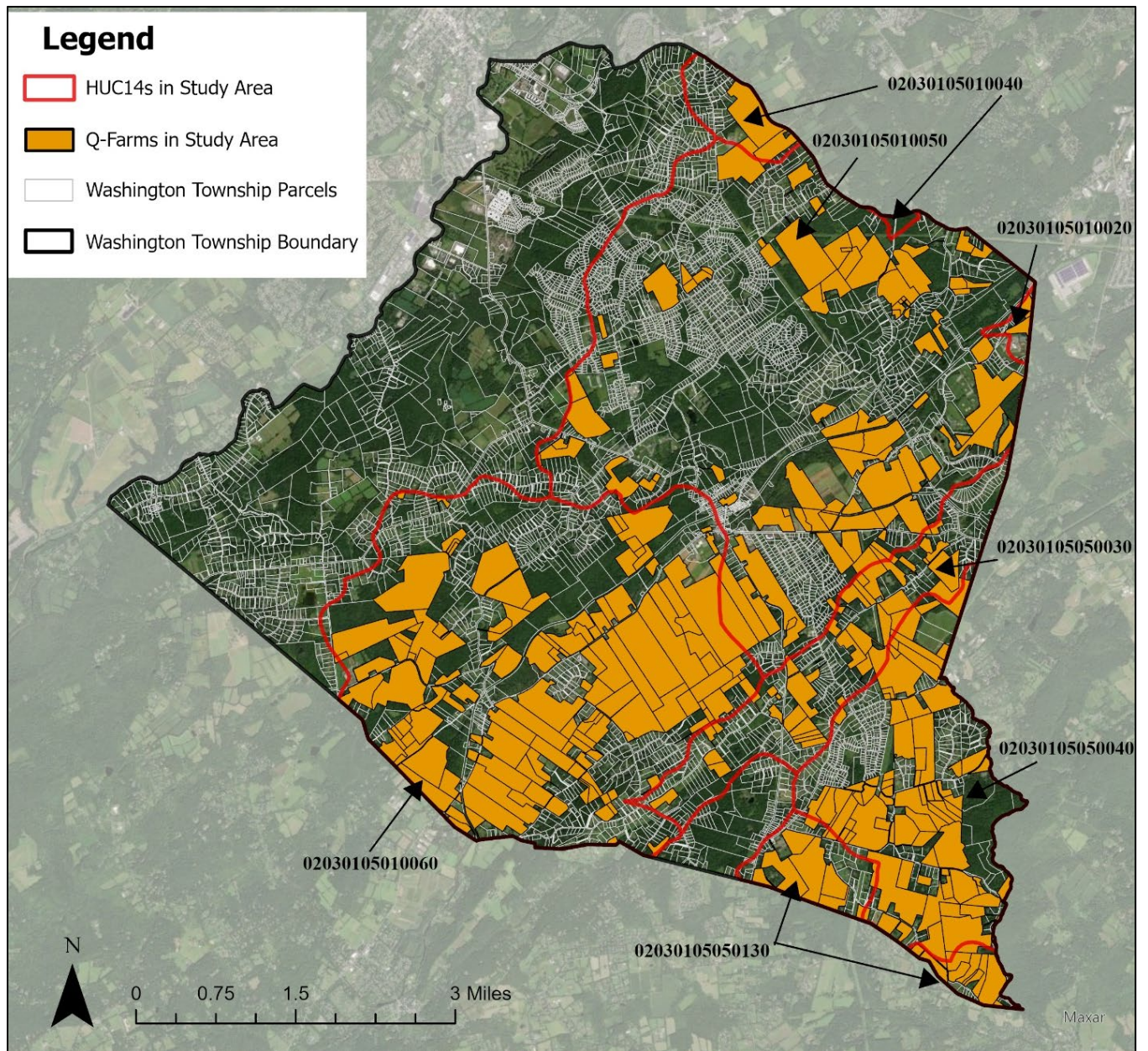


Figure 7: Q-Farm Parcels in the Study Area of Washington Township

Table 6: Q-Farm Parcels in the Study Area of Washington Township

Block	Lot	Q-Code	Prop Class	Location
20	2	Q0132	3B	46 Fairmount Rd East
20	7	Q0154	3B	355 Black River Rd
12	37.03	QFARM	3B	Naughtright Rd
12	4	QFARM	3B	Drakestown Rd
12	5.01	QFARM	3B	299 Drakestown Rd
12.01	53	QFARM	3B	Naughtright Rd
12.01	59	QFARM	3B	220 Flocktown Rd
12.01	52	QFARM	3B	Naughtright Rd
12.01	60.03	QFARM	3B	97 Heritage Ct
12.05	3	QFARM	3B	Bristol Ter
13	10.01	QFARM		498 Keltz Ln
13	11	QFARM		498 Keltz Ln
13	60	QFARM	3B	Flocktown Rd
13	63.01	QFARM	3B	Flocktown Rd
13	7	QFARM	3B	Fairview Ave
13	10	QFARM		Keltz Ln
13	1	QFARM	3B	Flocktown Rd
13	12	QFARM	3B	46 Jones Ln
13	12.01	QFARM	3B	Jones Ln
13	8	QFARM	3B	255 Keltz Ln
13	64	QFARM	3B	Flocktown Rd
14	9.02	QFARM	3B	8 Laketown Rd
14	9	QFARM	3B	10 Laketown Rd
14	11	QFARM	3B	Fairview Ave
14	4	QFARM	3B	Laketown Rd
14	6	QFARM	3B	14 Laketown Rd
14	8	QFARM	3B	14 Laketown Rd
14	7	QFARM	3B	14 Laketown Rd
14	5	QFARM	3B	Fairview Ave
14	2.01	QFARM	3B	145 N Four Bridges Rd
15	20.24	QFARM	3B	26 Naughtright Rd
15	13.01	QFARM	3B	2 Elizabeth Ln
15	25	QFARM	3B	14 Laketown Rd
15	4	QFARM	3B	59 N Four Bridges Rd
15	5	QFARM	3B	59 N Four Bridges Rd
16	14	QFARM	3B	250 Bartley Rd
16	21	QFARM	3B	98 N Four Bridges Rd
16	2	QFARM	3B	503 Drakestown Rd
16	20.03	QFARM	3B	98 N Four Bridges Rd
16	4	QFARM	3B	515 Drakestown Rd
16	22	QFARM	3B	98 N Four Bridges Rd

17	6	QFARM	3B	679 Bartley Rd
17	7	QFARM	3B	Bartley Rd
17	31.01	QFARM	3B	20 Schoolhouse Ln
18	29	QFARM	3B	169 Bartley Rd
18	27.05	QFARM	3B	169 Bartley Rd
18	8.12	QFARM	3B	169 Bartley Rd
18	5	QFARM	3B	S Four Bridges Rd
18.01	19	QFARM	3B	Coleman's Rd
20.09	19	QFARM	3B	Flocktown Rd
20.10	44	QFARM	3B	Flocktown Rd
22 ¹	28	QFARM	3B	Schooleys Mtn Rd
22 ¹	28.02	QFARM	3B	43 Flocktown Rd
22	2.05	QFARM	3B	91 Rock Rd
25	66.01	QFARM	3B	214 Fairview Ave
25	53.09	QFARM		Schooleys Mountain Rd
27	9	QFARM	3B	Fairview Ave
28	17.03	QFARM	3B	94 E Mill Rd
28	16.01	QFARM	3B	98 E Mill Rd
28	17.02	QFARM	3B	74 E Mill Rd
28	18	QFARM	3B	74 E Mill Rd
28	14	QFARM	3B	98 E Mill Rd
28	11	QFARM	3B	Bartley Rd
28	63	QFARM	3B	195 Fairview Ave
28	4.01	QFARM	3B	Naughtright Rd
28	4	QFARM	3B	Naughtright Rd
28	15	QFARM	3B	Bartley Rd
28	16.02	QFARM	3B	Bartley Rd
28	16	QFARM	3B	98 E Mill Rd
28	63.01	QFARM	3B	195 Fairview Ave
29	10.13	QFARM	3B	14 Beaver Brook Dr
29	19	QFARM	3B	E Mill Rd
29	20	QFARM	3B	98 E Mill Rd
29	13	QFARM	3B	E Mill Rd
29	18	QFARM	3B	Bartley Rd
29	2	QFARM	3B	Coleman's Rd
29	18.01	QFARM	3B	E Mill Rd
*30.02	47.12	QFARM	3B	15 Cobblestone Ln Fl
31	13.21	QFARM	3B	201 Schooleys Mtn Rd
31	13	QFARM	3B	Schooleys Mtn Rd
32	5	QFARM	3B	180 W Springtown Rd
32.02	3	QFARM	3B	128 Zellers Rd
32.02	1	QFARM	3B	Zellers Rd
32.02	2	QFARM	3B	128 Zellers Rd
33	82.04	QFARM	3B	2 Zellers Rd

33	82.02	QFARM	3B	38 Middle Valley Rd
33	71.02	QFARM		W Mill Rd
33	83.12	QFARM	3B	48 Zellers Rd
33	83.13	QFARM	3B	Zellers Rd
33	66	QFARM	3B	186 W Mill Rd
33	61	QFARM	3B	144 W Mill Rd
33	71.03	QFARM	3B	274 W Mill Rd
33	71.05	QFARM	2	276 W Mill Rd
33	86	QFARM	3B	180 W Springtown Rd
33	51	QFARM	3B	W Mill Rd
33	59.02	QFARM	3B	21 James Trl
33	59	QFARM	3B	21 James Trl
33	65	QFARM	3B	162 W Mill Rd
33	67	QFARM	3B	214 W Mill Rd
33	68	QFARM	3B	248 W Mill Rd
33	69	QFARM	3B	234 W Mill Rd
33	69.02	QFARM	3B	248 W Mill Rd
33	84	QFARM	3B	180 W Springtown Rd
34	35.04	QFARM	3B	100 Beacon Hill Rd
34	27	QFARM	3B	21 Sierra Dr
34	25.11	QFARM	3B	94 W Valley Brook Rd
34	23	QFARM	3B	76 W Valley Brook Rd
34	23.01	QFARM	3B	W Valley Brook Rd
34	23.02	QFARM	3B	W Valley Brook Rd
34	35	QFARM	3B	100 Beacon Hill Rd
34	8	QFARM	3B	18 W Valley Brook Rd
34	37.15	QFARM	3B	Winchester Dr
34	11.04	QFARM	3B	40 W Valley Brook Rd
34	13.01	QFARM	3B	24 Highland Ave
34	38	QFARM	3B	255 W Mill Rd
34	40	QFARM	3B	W Mill Rd
34	44	QFARM	3B	W Mill Rd
34	42	QFARM	3B	177 W Mill Rd
34	13.02	QFARM	3B	W Valley Brook Rd
34	28	QFARM	3B	W Mill Rd
34	15	QFARM	3B	W Valley Brook Rd
34	29	QFARM	3B	W Mill Rd
34	36	QFARM	3B	100 Beacon Hill Rd
34	37	QFARM	3B	Beacon Hill Rd
34	13.03	QFARM	3B	W Valley Brook Rd
34	13	QFARM	3B	99 W Mill Rd Bldg 22
34	11.01	QFARM	3B	W Valley Brook Rd
34	45	QFARM	3B	W Mill Rd
34	46.02	QFARM	3B	177 W Mill Rd

34	39	QFARM	3B	248 W Mill Rd
34	41	QFARM	3B	177 W Mill Rd
34	43	QFARM	3B	99 W Mill Rd
34	46.01	QFARM	3B	99 W Mill Rd
34	50	QFARM	3B	25 W Mill Rd
34	1.01	QFARM	3B	Fairmount Rd
34	46	QFARM	3B	99 W Mill Rd Bldg 22
34	50.01	QFARM	3B	W Mill Rd
34.01	3	QFARM	3B	152 Beacon Hill Rd
35	4	QFARM	3B	E Valley Brook Rd
35	8	QFARM	3B	Fairmount Rd
35	6	QFARM	3B	Fairmount Rd
36	25	QFARM	3B	66B Old Farmers Rd
36	24	QFARM	3B	86 E Valley Brook Rd
36	8	QFARM	3B	152 E Valley Brook Rd
36	12	QFARM	3B	138 E Valley Brook Rd
36	41	QFARM	3B	98 E Mill Rd
36	46	QFARM		E Mill Rd
36	21	QFARM	3B	E Valley Brook Rd
36	20	QFARM	3B	E Valley Brook Rd
36	19	QFARM	3B	E Valley Brook Rd
36	17	QFARM	3B	E Valley Brook Rd
36	44	QFARM	3B	E Mill Rd
36	43	QFARM	3B	115 E Mill Rd
36	4	QFARM	3B	168 E Valley Brook Rd
36	3	QFARM	3B	E Valley Brook Rd
36	53.03	QFARM	3B	193A E Mill Rd
37	26.03	QFARM	3B	193 Parker Rd
37	26.04	QFARM	3B	193 Parker Rd
37	34.17	QFARM	3B	14 Liberty Hills Ct
37	26	QFARM	3B	193 Parker Rd
37	30	QFARM	3B	245 Parker Rd
37	25	QFARM	3B	E Valley Brook Rd
37	17	QFARM	3B	E Valley Brook Rd
37	22	QFARM	3B	E Valley Brook Rd
37	16.02	QFARM	3B	Parker Rd
37	27	QFARM	3B	245 Parker Rd
37	28	QFARM	3B	E Valley Brook Rd
37	38	QFARM	3B	55 E Valley Brook Rd
37	29	QFARM	3B	116 Parker Rd
37	15.01	QFARM	3B	Parker Rd
37	23.02	QFARM	3B	E Valley Brook Rd
37	9	QFARM	3B	E Valley Brook Rd
37	4	QFARM	3B	E Valley Brook Rd

38	10	QFARM	3B	E Fox Hill Rd
38	11	QFARM	3B	E Fox Hill Rd
38	3.13	QFARM	3B	157 Parker Rd
38	2	QFARM	3B	83 Old Farmers Rd
38	10.01	QFARM	3B	E Fox Hill Rd
38	15.04	QFARM	3B	Fairmount Rd
38	9	QFARM	3B	50 E Fox Hill Rd
38	9.01	QFARM	3B	E Fox Hill Rd
39	5	QFARM	3B	10 W Fox Hill Rd
39	9	QFARM	3B	18 W Valley Brook Rd
*40	6.01	QFARM	3B	316 Fairmount Rd
*40	26.03	QFARM	3B	310 Fairmount Rd
41.01	29	QFARM	3B	13 Apgar Rd
42	13	QFARM		226 Old Farmers Rd
42	11.01	QFARM	3B	72 Hacklebarney Rd
42	3	QFARM	3B	210 Parker Rd
42	5	QFARM	3B	Parker Rd
42	14.03	QFARM	3B	50 Hacklebarney Rd
42	14.01	QFARM	3B	212 Old Farmers Rd
42	14.04	QFARM	3B	52 Hacklebarney Rd
42	12.11	QFARM	3B	9 Krista Ct
42	2.01	QFARM	3B	Parker Rd
42	11.02	QFARM	3B	74 Hacklebarney Rd
42	11.03	QFARM	3B	Hacklebarney Rd
42.03	1	QFARM	3B	116 Hacklebarney Rd
42.03	23	QFARM	3B	128 Hacklebarney Rd
*50	23	QFARM	3B	67 Califon Road
51	22	QFARM	3B	210 Middle Valley Rd
51	6.16	QFARM	3B	15 High Meadow Ln
51	2	QFARM	3B	130 Zellers Rd
51	11	QFARM	3B	106 Middle Valley Rd
51	16	QFARM	3B	182 Middle Valley Rd
51	14	QFARM	3B	Middle Valley Rd
51	23.01	QFARM	3B	58 Califon Rd
51	23	QFARM	3B	58 Califon Rd
51	20	QFARM	3B	155 Middle Valley Rd
51	19	QFARM	3B	121 Middle Valley Rd
51	17	QFARM	3B	121 Middle Valley Rd
51	15	QFARM	3B	121 Middle Valley Rd
52	3	QFARM	3B	121 Middle Valley Rd
52	6	QFARM	3B	Middle Valley Rd
52	1	QFARM	3B	121 Middle Valley Rd
54	29	QFARM	3B	462 W Mill Rd
54	26	QFARM	3B	458 W Mill Rd

54	24	QFARM	3B	499 W Mill Rd
54	63	QFARM	3B	398 W Mill Rd
54	20	QFARM	3B	398 W Mill Rd
54	39	QFARM	3B	Sky Top Rd
54	30	QFARM	3B	Mallard Cove Rd
54	37	QFARM	3B	Sky Top Rd
54	40	QFARM	3B	Sky Top Rd
54	41	QFARM	3B	Sky Top Rd
54	52	QFARM	3B	16 Mallard Cove Rd
54	50	QFARM	3B	Middle Valley Rd
54	11.04	QFARM	3B	6 Mallard Cove Rd
54	31	QFARM	3B	30 Skytop Rd
54	30.01	QFARM	3B	Mallard Cove Rd
54	38	QFARM	3B	Sky Top Rd
54	42	QFARM	3B	Middle Valley Rd
55	14	QFARM	3B	447 W Mill Rd
55	15	QFARM	3B	352 W Valley Brook Rd
55	11	QFARM	3B	427 W Mill Rd
55	7	QFARM	3B	54 Turtleback Rd
55	9.09	QFARM	3B	86 Turtleback Rd
55	10	QFARM	3B	446 W Mill Rd
55	6.01	QFARM	3B	42 Turtleback Rd
55	9	QFARM	3B	72 Turtleback Rd
55	5.01	QFARM	3B	30 Turtleback Rd
55	4.12	QFARM	3B	Beacon Hill Rd
55	4.13	QFARM	3B	Beacon Hill Rd
55	4.15	QFARM	3B	Beacon Hill Rd
55	30	QFARM	3B	W Mill Rd
55	3	QFARM	3B	9 Elaine Ct
55	17	QFARM	3B	370 Vernoy Rd
55	15.01	QFARM	3B	447 W Mill Rd
55	10.03	QFARM	3B	Turtleback Rd
55	14.01	QFARM	3B	447 W Mill Rd
55	10.01	QFARM	3B	Turtleback Rd
55	6	QFARM	3B	Turtleback Rd
55	5.03	QFARM	3B	30 Turtleback Rd
55	8	QFARM	3B	Turtleback Rd
55	5.04	QFARM	3B	Turtleback Rd
55	20	QFARM	3B	W Mill Rd
55	4.07	QFARM	3B	Beacon Hill Rd
55	28	QFARM	3B	W Mill Rd
56	20	QFARM	3B	Turtleback Rd
56	6.01	QFARM	3B	W Valley Brook Rd
56	6	QFARM	3B	W Valley Brook Rd

56	26.06	QFARM	3B	55 Turtleback Rd
56	4.02	QFARM	3B	212 W Valley Brook Rd
56	4.03	QFARM	3B	212 W Valley Brook Rd
56	26	QFARM	3B	59 Turtleback Rd
56	26.05	QFARM	3B	49 Turtleback Rd
58	20	QFARM	3B	14 Tall Timber Dr
58	17	QFARM	3B	93 Frog Hollow Rd
59	56	QFARM	3B	94 W Valley Brook Rd
59	60.07	QFARM	3B	93 W Valley Brook Rd
55	4.15	QFARM	3B	Beacon Hill Rd
55	30	QFARM	3B	W Mill Rd
55	3	QFARM	3B	9 Elaine Ct
55	17	QFARM	3B	370 Vernoy Rd
55	15.01	QFARM	3B	447 W Mill Rd
55	10.03	QFARM	3B	Turtleback Rd
55	14.01	QFARM	3B	447 W Mill Rd
55	10.01	QFARM	3B	Turtleback Rd
59	47.10	QFARM	3B	12 Abedim Way
59	56	QFARM	3B	94 W Valley Brook Rd
59	60.07	QFARM	3B	93 W Valley Brook Rd
59	60	QFARM	3B	W Valley Brook Rd
60	24	QFARM	3B	143 Pickle Rd
60	22.02	QFARM	3B	Pickle Rd
60	20.02	QFARM	3B	79 Pickle Rd
60	20	QFARM	3B	49 Pickle Rd
60	19	QFARM	3B	33 Pickle Rd
60	21.04	QFARM	3B	Pickle Rd
60	15.02	QFARM	3B	28 Black River Rd
60	2	QFARM	3B	390 Fairmount Rd
60	1	QFARM	3B	Parker Rd
60	15	QFARM	3B	Black River Rd
61	4.01	QFARM	3B	Hacklebarney Rd
61	6	QFARM	3B	Apgar Rd
61	21	QFARM	3B	Apgar Rd
61	20	QFARM	3B	Apgar Rd
61	5.01	QFARM	3B	Black River Rd
61	5.02	QFARM	3B	Black River Rd
61	5.03	QFARM	3B	Black River Rd
61	1	QFARM	3B	227 Old Farmers Rd
61	4	QFARM	3B	Hacklebarney Rd
61	1.04	QFARM	3B	13 Apgar Rd
61	1.03	QFARM	3B	13 Apgar Rd
61	19	QFARM	3B	13 Apgar Rd
62	15	QFARM	3B	Black River Rd

62	14	QFARM	3B	Black River Rd
62	12	QFARM	3B	180 Black River Rd
62	4	QFARM	3B	112 Black River Rd
62	1.10	QFARM	3B	10 Doolittle Ln
62	1.13	QFARM	3B	Doolittle Ln
62	1.16	QFARM		Doolittle Ln
62	1	QFARM	3B	Hacklebarney Rd
62	1.11	QFARM	3B	Doolittle Ln
62	1.12	QFARM	3B	6 Hacklebarney Rd
62	1.14	QFARM	3B	3 Doolittle Ln
62	1.15	QFARM	3B	89 Hacklebarney Rd
62	1.18	QFARM	3B	99 Hacklebarney Rd
62	18	QFARM	3B	270 Black River Rd
62	4.04	QFARM	3B	114 Black River Rd
62	3	QFARM	3B	19 Hacklebarney Rd
62	1.02	QFARM	3B	43 Hacklebarney Rd
62	1.17	QFARM	3B	Hacklebarney Rd
62	6	QFARM	3B	151 Hacklebarney Rd
63	22	QFARM	3B	Pickle Rd
63	14	QFARM	3B	Black River Rd
63	20.01	QFARM	3B	190 Pickle Rd
63	20	QFARM	3B	Pickle Rd
63	21	QFARM	3B	Pickle Rd
63	11	QFARM	3B	239 Black River Rd
63	8.01	QFARM	3B	185 Black River Rd
63	20.02	QFARM	3B	Pickle Rd
63	19.02	QFARM	3B	Pickle Rd
63	18	QFARM	3B	Black River Rd
63	19	QFARM	3B	Pickle Rd
63	13	QFARM	3B	Black River Rd
63	12	QFARM	3B	Black River Rd
63	8.08	QFARM	3B	185 Black River Rd
63	8.07	QFARM	3B	185 Black River Rd
63	8.04	QFARM	3B	173 Black River Rd
63	8.02	QFARM	3B	Black River Rd
63	5.01	QFARM	3B	147 Black River Rd
63	5	QFARM	3B	131 Black River Rd
63	25.01	QFARM	3B	Pickle Rd
63	3	QFARM	3B	Pickle Rd
64	1	QFARM	3B	169 Pickle Rd

*Only a portion of the Q-Farm is within the study area

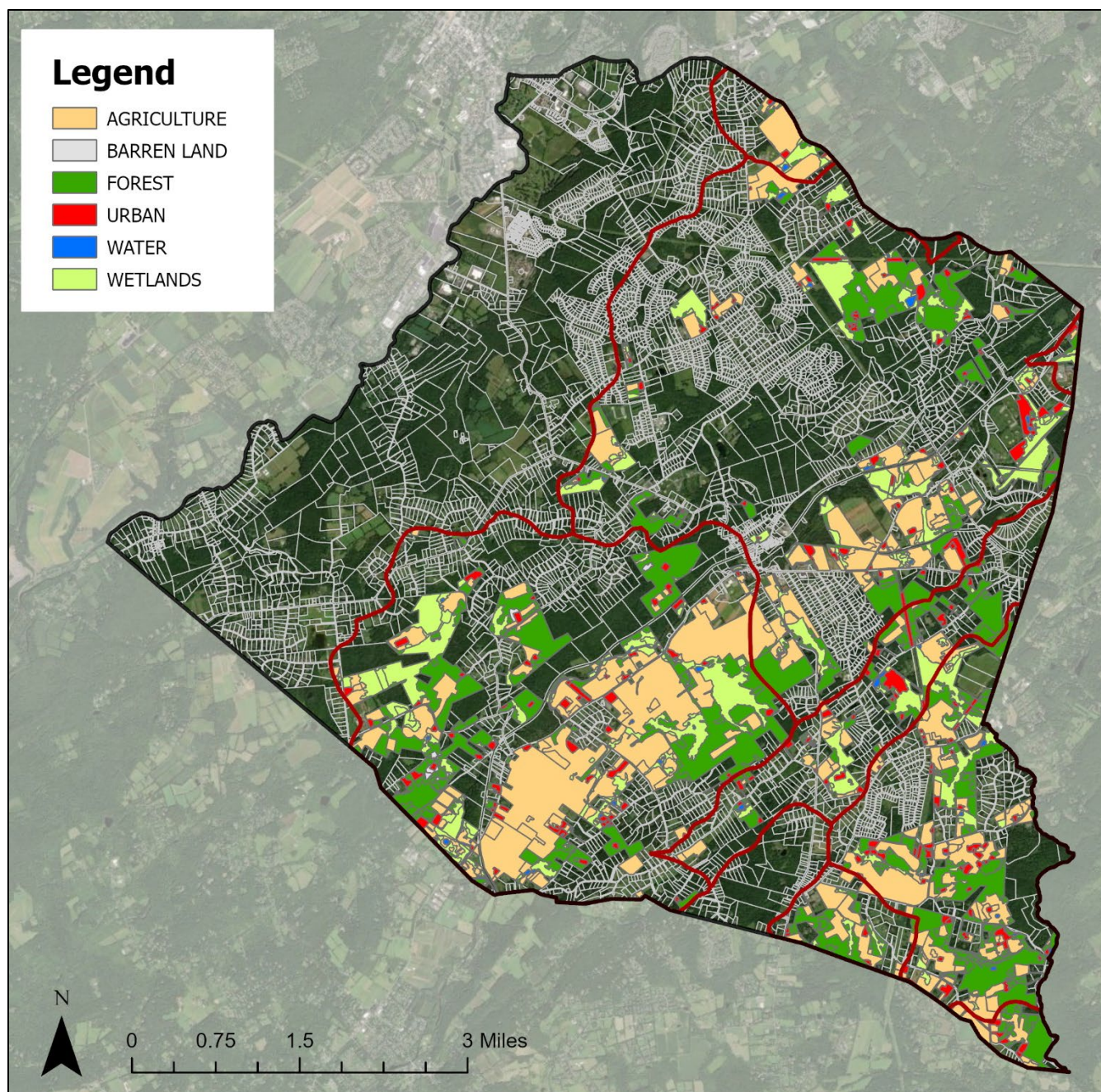


Figure 8: Land Use on Q-Farms Parcels in the Study Area of Washington Township

Table 7: Land Use on Q-Farms in the Study Area of Washington Township

Land Use	Area (acres)
Agriculture	3,181.6
Barren Land	21.7
Forest	2,862.6
Urban	533.1
Water	70.8
Wetlands	1,433.9
Total:	8,103.7

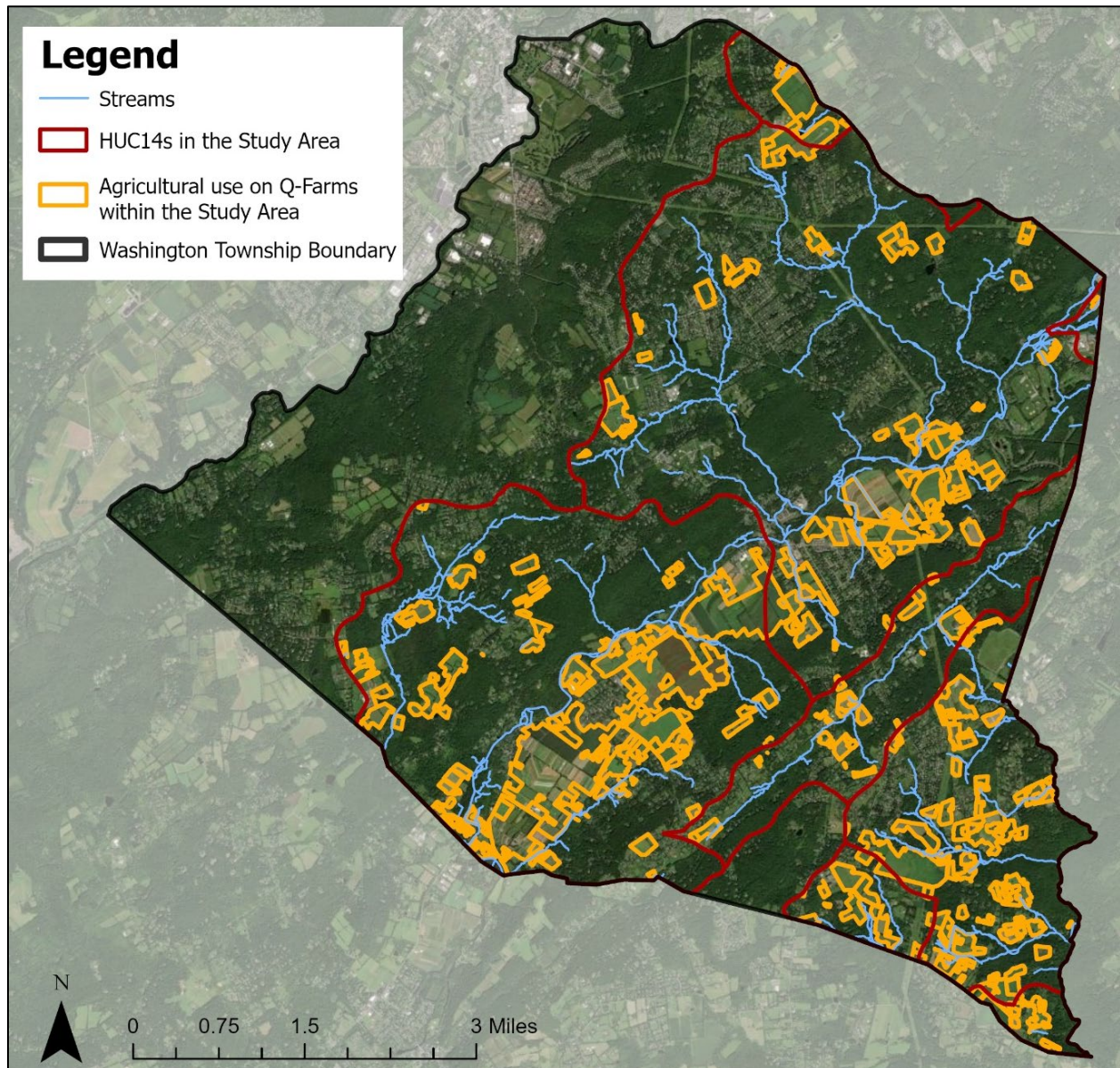


Figure 9: Aerial View of Agricultural Use on Q-Farm Parcels within the Study Area of Washington Township

Table 8: Recommendations for Specific Farms in the Study Area of Washington Township

Lamington River Study Area								
Block	Lot	Q-Farm Code	Cover Crop	Enhanced Stream Buffer	Impervious Cover Mgt.	Rainwater Harvesting	Livestock Exclusion	Manure Mgt.
62	12	QFARM	X	X		X		
63	3	QFARM						
63	8.01	QFARM	X		X	X		
63	14	QFARM	X					
63	25.01	QFARM	X					
South Branch Raritan River Study Area								
Block	Lot	Q-Farm Code	Cover Crop	Enhanced Stream Buffer	Impervious Cover Mgt.	Rainwater Harvesting	Livestock Exclusion	Manure Mgt.
12	4	QFARM	X					
12	37.03	QFARM		X				X
16	14	QFARM				X		X
28	4.01	QFARM						X
28	14	QFARM	X		X	X		
28	16	QFARM	X					
28	16.01	QFARM						X
28	18	QFARM	X					
33	61	QFARM						X
33	66	QFARM		X	X	X		X
33	67	QFARM						X
33	69	QFARM						X
33	69.02	QFARM		X				X
33	70.02	QFARM	X			X		X
33	71.02	QFARM			X	X		X
34	1.01	QFARM						X
34	13	QFARM	X					
34	42	QFARM	X		X	X		
34	43	QFARM	X					

34	46	QFARM	X		X	X		X
35	6	QFARM			X	X		X
54	26	QFARM			X	X		X
54	29	QFARM						X
54	30	QFARM	X					

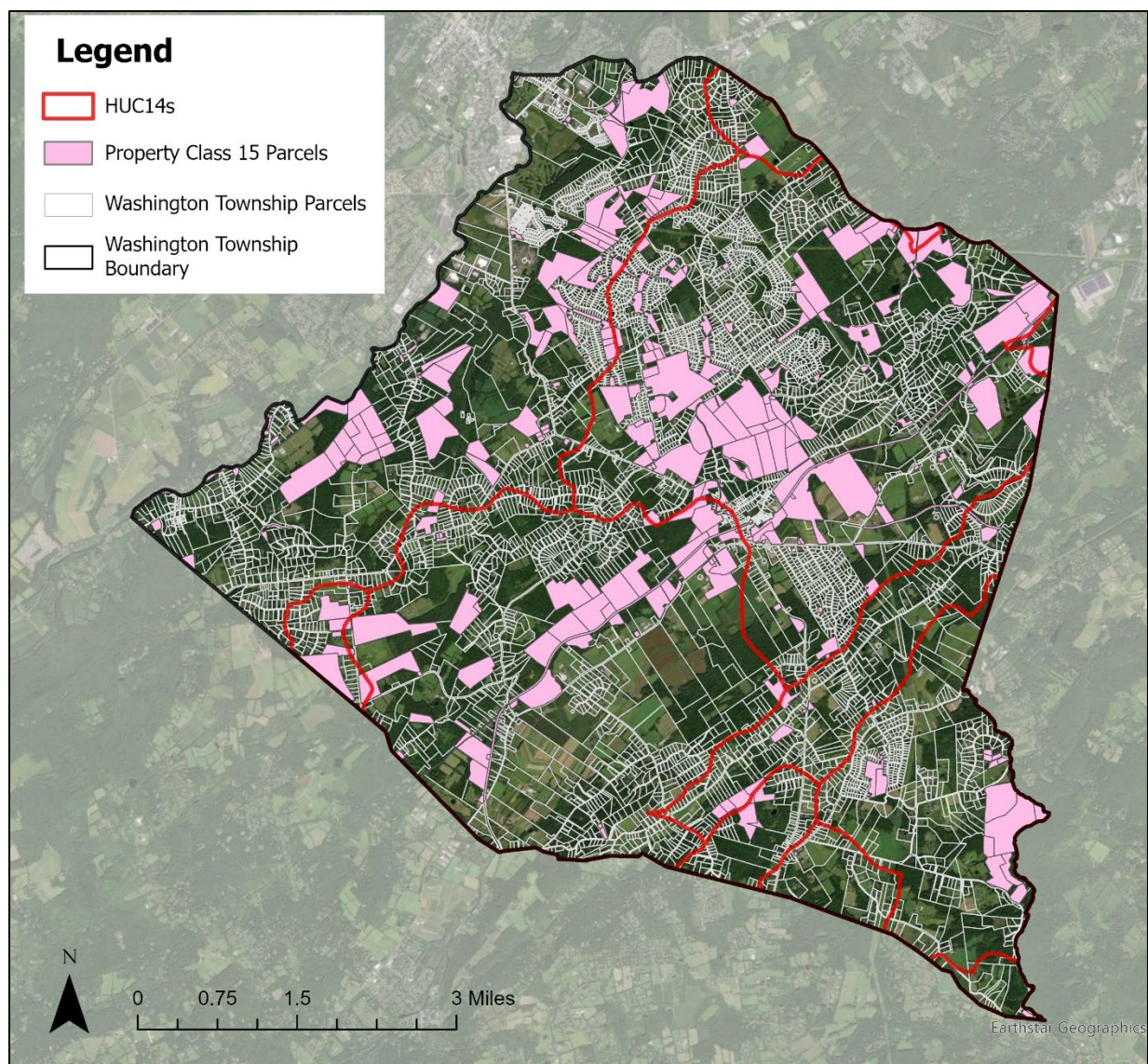


Figure 10: Property Class 15 Parcels in Washington Township

Table 9: Property Class 15 Parcels in Washington Township

Block	Lot	Prop Class	Location	Facility Type
12	37	15A	Naughtright Rd	Schools
17	9	15A	10 S Four Bridges Rd	Vacant Land
17	8	15A	10 S Four Bridges Rd	Schools
20.11	23	15A	Flocktown Rd	School
20.11	22	15A	Flocktown Rd	Vacant Land
20.11	21	15A	Quail Run	Vacant Land
20.11	24	15A	Flocktown Rd	Vacant Land
34	48	15A	53 W Mill Rd	Administrative Bldg
34	49	15A	35 W Mill Rd	Schools
35	3.01	15A	51 Old Farmers Rd	Schools
20	70	15B	420 Schooleys Mtn Rd	Nursery School
51	22.02	15B	40 Califon Rd	Farm
2	15	15C	2 East Ave	Vacant Land
3	8.45	15C	Heron Dr	Vacant Land
3	10	15C	Route 46	Vacant Land
3	10.02	15C	91 Reservoir Rd	Vacant Land
3.10	21	15C	Heron Dr	Vacant Land
5	1	15C	Route 46	Vacant Land
6	1	15C	Route 46	Vacant Land
7	2	15C	Route 46	Vacant Land
7	3	15C	Route 46	Vacant Land
7	4	15C	Route 46	Vacant Land
7	5	15C	Route 46	Vacant Land
8	1	15C	Drakestown Rd	Pumping Station
9	34	15C	70 Reservoir Rd	Vacant Land
9	1	15C	Reservoir Rd	Vacant Land
9	2	15C	Route 46	Vacant Land
9	6.02	15C	Drakestown Rd	Vacant Land
11	16	15C	Spring Ln	Vacant Land
11	20	15C	Spring Ln	Vacant Land
11	21	15C	Spring Ln	Vacant Land
11	22	15C	Marjorie Dr	Vacant Land
11	23	15C	Marjorie Dr	Vacant Land
11	27.07	15C	Mission/Spring Rd	Vacant Land
12	35	15C	424 Naughtright Rd	Water Twr Booster St
12.02	1	15C	17 Cindy Ln	Vacant Land
13	42	15C	74 Naughtright Rd	Vacant Land
13	37	15C	Fairview Ave	Vacant Land
13	26	15C	Jones Ln	Vacant Land
13	12.03	15C	9 Sylvan Cir	Sewage Disposal
13	57	15C	Naughtright Rd	Vacant Land
13	63	15C	Flocktown Rd	Vacant Land
13	65.02	15C	Flocktown Rd	Vacant Land
13	4	15C	Drakestown Rd	Vacant Land
13	19	15C	Fairview Ave	Vacant Land
13	6	15C	416 Fairview Ave	Vacant Land

13	5.01	15C	Drakestown Rd	Vacant Land
13	5.03	15C	Drakestown Rd	Vacant Land
13	5.02	15C	Drakestown Rd	Vacant Land
13	9	15C	Drakestown Rd	Vacant Land
13	5	15C	Drakestown Rd	Vacant Land
13.04	8	15C	Devon Rd	Vacant Land
13.08	15	15C	564 Bolton Dr	Well
13.12	4	15C	Amherst Dr	Vacant Land
13.16	19	15C	Naughtright Rd	Vacant Land
13.16	13	15C	Naughtright Rd	Vacant Land
14	9.03	15C	16 Laketown Rd	Vacant Land
14	3.02	15C	822 Laketown Rd	Vacant Land
14	12	15C	413 Fairview Ave	Vacant Land
14	1.01	15C	Drakestown Rd	Vacant Land
14	3	15C	N Four Bridges Rd	Vacant Land
15	13	15C	202 Bartley Rd	Vacant Land
15	8	15C	N Four Bridges Rd	Vacant Land
15	13.07	15C	16 Elizabeth Ln	Vacant Land
15	300	15C	Naughtright Rd	Vacant Land
15	13.99	15C	22 Stony Brook Rd	Vacant Land
16	11	15C	274 Bartley Rd	Vacant Land
16	10.01	15C	306 Bartley Rd	Vacant Land
16	300	15C	N Four Bridges Rd	Vacant Land
16	10	15C	290 Bartley Rd	Vacant Land
16	6	15C	Bartley Rd	Farm
16	24	15C	N Four Bridges Rd	Vacant Land
16	5.01	15C	Drakestown Rd	Vacant Land
16	22.01	15C	N Four Bridges Rd	Vacant Land
17	2.02	15C	279 Bartley Rd	Vacant Land
17	2.01	15C	291 Bartley Rd	Vacant Land
17	300	15C	Bartley Rd	Vacant Land
18	10.03	15C	Coleman's Rd	Vacant Land
18	10.02	15C	26 Coleman's Rd	Vacant Land
18	28	15C	209 Bartley Rd	Park
18	4	15C	S Four Bridges Rd	Vacant Land
19	7	15C	429 Schooleys Mtn Rd	Well House
20	54	15C	376 Schooleys Mtn Rd	Vacant Land
20	49	15C	376 Schooleys Mtn Rd	Vacant Land
20	51	15C	Schooleys Mtn Rd	Vacant Land
20	21.50	15C	72 Ann Rd	Vacant Land Flag
20	21	15C	Winay Ter	Utility Bldg
20	78	15C	Ann Rd	Vacant Land
20	84	15C	Mission Rd	Vacant Land
20	82	15C	Mission Rd	Vacant Land
20	83	15C	Mission Rd	Vacant Land
20	86	15C	Mission Rd	Vacant Land
20	85	15C	Mission Rd	Vacant Land
20	88	15C	Spring Ln	Vacant Land
20	87	15C	Mission Rd	Park

20	49.01	15C	Flocktown Rd	Vacant Land
20.02	39	15C	10 High Ridge Rd	Water Tower
20.02	1	15C	Rosalyn Dr	Vacant Land
20.04	1	15C	Nestling Wood Dr	Vacant Land
20.08	9	15C	Buttonwood Dr	Vacant Land
20.10	33	15C	Nestling Wood Dr	Pumping Station
20.10	49.02	15C	Spring Ln	Vacant Land
20.10	1.02	15C	Marlene Rd	Vacant Land
20.11	20	15C	8 Hunter Dr	Vacant Land
20.12	23	15C	Hunter Dr	Vacant Land
20.15	1	15C	Pheasant Dr	Water Supply
22	3.27	15C	4 Briarwood Rd	Vacant Land
22	3.03	15C	79 Rock Rd	Park
22	30.01	15C	Flocktown Rd	Vacant Land
22	3	15C	Rock Rd	Vacant Land
22	3.072	15C	13 Blackberry Pl	Vacant Land
23	16.01	15C	54 Rock Rd	Garage
23	8.08	15C	E Springtown Rd	Vacant Land
23	4.02	15C	5 Dogwood Dr	Vacant Land
23	17.01	15C	Rock Rd	Vacant Land
23	3.30	15C	Hemlock Dr	Vacant Land
23	16	15C	Rock Rd	Park
23	18.05	15C	Rock Rd	Garage
23	18.06	15C	Rock Rd	Vacant Land
23	18	15C	119 Flocktown Rd	Rescue Squad
23	18.07	15C	Cherry St	Vacant Land
23	18.08	15C	Flocktown Rd	Vacant Land
23.02	39	15C	Hemlock Dr	Water Supply
23.03	14	15C	Hemlock Dr	Vacant Land
23.04	2.06	15C	Flocktown Rd	Vacant Land
24	9	15C	116 Schooleys Mtn Rd	Vacant Land
24	8	15C	Schooleys Mtn Rd	Vacant Land
24	8.01	15C	E Springtown Rd	Police Station
24	8.01	15C	1 E Springtown Rd	Police Station
24	1	15C	Camp Washington Rd	Park
24	2.01	15C	79 Schooleys Mtn Rd	Vacant Land
24	2.02	15C	78 Schooleys Mtn Rd	Vacant Land
24	7	15C	Schooleys Mtn Rd	Park
25	52	15C	62 Schooleys Mtn Rd	Vacant Land
25	52.02	15C	64 Schooleys Mtn Rd	Vacant Land
25	55.01	15C	Camp Washington Rd	Pumping Station
25	55	15C	Camp Washington Rd	Park
25	23.01	15C	Fairview Ave	Park
25	53.05	15C	Camp Washington Rd	Park
25	53.06	15C	Camp Washington Rd	Park
25	54.01	15C	Camp Washington Rd	Park
25	9.02	15C	Camp Washington Rd	Park
25	47.03	15C	66 Schooleys Mtn Rd	Vacant Land
25	70	15C	Schooleys Mtn Rd	Water Supply

25	8	15C	Fairview Ave	Vacant Land
25	62	15C	Naughtright Rd	Park
25	63	15C	Naughtright Rd	Park
25	9.01	15C	Camp Washington Rd	Park
25	9	15C	Fairview Ave	Park
25	61	15C	Naughtright Rd	Park
25	65.19	15C	Ranney Rd	Vacant Land
25	56.04	15C	Naughtright Rd	Park
25	59	15C	Naughtright Rd	Park
25	60	15C	Naughtright Rd	Park
25	56.03	15C	Naughtright Rd	Park
25	56.01	15C	E Springtown Rd	Park
25	56.02	15C	E Springtown Rd	Park
25	58	15C	Naughtright Rd	Park
25	56	15C	E Springtown Rd	Park
26	8	15C	49 Schooleys Mtn Rd	Vacant Land
26	2	15C	43 Schooleys Mtn Rd	Municipal Bldg
27	17	15C	6 Fairview Ave	Historic Site
27	300	15C	20 Schooleys Mtn Rd	Vacant Land
28	19	15C	46 E Mill Rd	Administrative Bldg.
28	18.03	15C	70 E Mill Rd	Vacant Land
28	28	15C	12 E Mill Rd	Historic Site
28	38	15C	5 Fairview Ave	Volunteer Fire Co
28	47.01	15C	Fairview Ave	Vacant Land
28	46.103	15C	Welsh Farm Rd	Vacant Land
28	59	15C	Fairview Ave	Vacant Land
28	60.02	15C	Fairview Ave	Vacant Land
28	62	15C	Fairview Ave	Vacant Land
28	60	15C	Fairview Ave	Park
28	17	15C	E Mill Rd	Park
28	300	15C	Fairview Ave	Vacant Land
28	3.01	15C	Naughtright Rd	Vacant Land
28	26.01	15C	E Mill Rd	Vacant Land
28	26	15C	E Mill Rd	Vacant Land
28	24	15C	34 E Mill Rd	Garage
29	2.02	15C	E Mill Rd	Vacant Land
29	24	15C	Bartley Rd	Vacant Land
29	22	15C	101 Bartley Rd	Pumping Station
30	49.03	15C	Kings Hwy	Vacant Land
30	39	15C	Kings Hwy	Vacant Land
30	59	15C	Kings Hwy	Vacant Land
30	71.02	15C	71 Esna Dr	Sewage Disposal
30.02	44	15C	Pleasant Grove Rd	Vacant Land
30.02	47.04	15C	Cobblestone Ln	Vacant Land
31	27	15C	231 Schooleys Mtn Rd	Volunteer Fire Co
33	76	15C	Middle Valley Rd	Vacant Land
33	77	15C	Middle Valley Rd	Vacant Land
33	73	15C	W Mill Rd	Vacant Land
33	71.01	15C	W Mill Rd	Vacant Land

33	67.01	15C	212 W Mill Rd	Recreation Center
33	70.01	15C	W Mill Rd	Vacant Land
33	64.01	15C	W Mill Rd	Vacant Land
33	94.02	15C	W Springtown Rd	Vacant Land
33	63	15C	W Mill Rd	Park
33	87	15C	W Springtown Rd	Vacant Land
33	58.03	15C	62 W Mill Rd	Vacant Land
33	58	15C	W Mill Rd	Vacant Land
33	58.01	15C	W Mill Rd	Vacant Land
33	300	15C	Middle Valley Rd	Vacant Land
33	52	15C	W Mill Rd	Vacant Land
33	8.06	15C	20 James Trl	Vacant Land
33	19	15C	Schooleys Mtn Rd	Pumping Station
33	8	15C	Schooleys Mtn Rd	Vacant Land
33	9	15C	79 Schooleys Mtn Rd	Vacant Land
33	70.03	15C	W Mill Rd	Vacant Land
33	59.03	15C	James Trl	Vacant Land
33	68.01	15C	W Mill Rd	Vacant Land
33	69.01	15C	W Mill Rd	Vacant Land
33	65.02	15C	W Mill Rd	Vacant Land
33	65.03	15C	W Mill Rd	Vacant Land
33	69.03	15C	W Mill Rd	Vacant Land
33	68.03	15C	W Mill Rd	Vacant Land
34	7	15C	W Valley Brook Rd	Vacant Land
34	2	15C	123 Fairmount Rd	Vacant Land
34	1.08	15C	99 Fairmount Rd	Pumping Station
34	46.03	15C	73 W Mill Rd	Residence
34	46.04	15C	W Mill Rd	Vacant Land
35	3.05	15C	Old Farmers Rd	Water Tower
36	42	15C	Overlook Dr	Vacant Land
37	34.11	15C	Old Farmers Rd	Water Stand Pipe
39	1	15C	219 Fairmount Rd	Water Supply
39	11.01	15C	5 W Valley Brook Rd	Vacant Land
41	3.07	15C	2 Douglas Dr	Water Supply
41	3.08	15C	10 Douglas Dr	Vacant Land
41.01	1	15C	Old Farmers Rd	Wtr Booster Station
41.01	1.01	15C	Green Hills Rd	Vacant Land
42.02	36	15C	167 Old Farmers Rd	Vacant Land
42.03	21	15C	Long Hill Rd	Vacant Land
*42.03	22	15C	57 Long Hill Rd	Vacant Land
42.03	19	15C	55 Long Hill Rd	Vacant Land
42.03	18	15C	Long Hill Rd	Vacant Land
42.03	17	15C	Long Hill Rd	Vacant Land
43	66.06	15C	Old Turnpike Rd	Vacant Land
43	80	15C	Fishers Mine Rd	Vacant Land
43	76	15C	Fishers Mine Rd	Vacant Land
43	77	15C	Fishers Mine Rd	Vacant Land
43	81	15C	Fishers Mine Rd	Vacant Land
43	82	15C	Fishers Mine Rd	Vacant Land

43	77.01	15C	Fishers Mine Rd	Vacant Land
43	78	15C	Fishers Mine Rd	Vacant Land
43	79	15C	Fishers Mine Rd	Farm
43	83	15C	Fishers Mine Rd	Vacant Land
43	66.04	15C	Old Turnpike Rd	Vacant Land
43	85	15C	Kings Hwy	Vacant Land
43	4	15C	18 River Rd	Vacant Land
43	1	15C	227 Kings Hwy	Vacant Land
44	6.02	15C	180 Stephensburg Rd	Watershed
44	3.03	15C	38 Old Turnpike Rd	Vacant Land
44	2.02	15C	16 Old Turnpike Rd	Vacant Land
44	3.02	15C	Old Turnpike Rd	Vacant Land
44	2.03	15C	Old Turnpike Rd	Vacant Land
44	18	15C	194 Stephensburg Rd	Vacant Land
45	39.01	15C	Old Turnpike Rd	Vacant Land
45	40.01	15C	Old Turnpike Rd	Vacant Land
45	37.01	15C	Old Turnpike Rd	Vacant Land
45	38.01	15C	Old Turnpike Rd	Vacant Land
45	36.01	15C	Old Turnpike Rd	Vacant Land
45	35.01	15C	Roosevelt Ave	Vacant Land
45	3.01	15C	Stephensburg Rd	Vacant Land
45	1.01	15C	195 Stephensburg Rd	Vacant Land
46	59	15C	Old Turnpike Rd	Vacant Land
47	24	15C	Stephensburg Rd	Vacant Land
47	8	15C	99 Stephensburg Rd	Vacant Land
50	23.15	15C	Califon Rd	Vacant Land
50.02	25	15C	8 Ascot Dr	Vacant Land
50.02	23	15C	Califon Rd	Vacant Land
51	21	15C	220 Middle Valley Rd	Vacant Land
51	12	15C	Zellers Rd	Vacant Land
51	3.03	15C	Zellers Rd	Vacant Land
51	3	15C	Zellers Rd	Vacant Land
51	24	15C	Califon Rd	Vacant Land
52	7	15C	Sky Top Rd	Vacant Land
54	29.01	15C	W Mill Rd	Vacant Land
54	28.01	15C	W Mill Rd	Vacant Land
54	28	15C	W Mill Rd	Vacant Land
54	25	15C	W Mill Rd	Tax Lien Foreclosure
54	301	15C	W Mill Rd	Vacant Land
54	32	15C	22 Sky Top Rd	Garage
54	24.02	15C	Mallard Cove Rd	Vacant Land
54	24.01	15C	Mallard Cove Rd	Vacant Land
54	300	15C	W Mill Rd	Vacant Land
54	43	15C	Middle Valley Rd	Vacant Land
54	51.03	15C	Middle Valley Rd	Vacant Land
56	10	15C	16 Sand Hill Rd	Vacant Land
56	11	15C	14 Sand Hill Rd	Vacant Land
59	48	15C	Fairmount Rd	Vacant Land
59	49.02	15C	W Valley Brook Rd	Vacant Land

59	47.09	15C	Abedim Way	Vacant Land
59	49.01	15C	W Valley Brook Rd	Vacant Land
59	49	15C	Fairmount Rd	Vacant Land
59	10	15C	Fleming Ct	Vacant Land
59	1	15C	W Fox Hill Rd	Vacant Land
60	13	15C	12 Parker Rd	Volunteer Fire Co
60	13	15C	12 Parker Rd	Cell Tower
62	21	15C	378 Black River Rd	Vacant Land
62	12.03	15C	Black River Rd	Park
62	12.02	15C	196 Black River Rd	Park
62	12.01	15C	Black River Rd	Park
62	10.01	15C	Black River Rd	Park
62	11	15C	Black River Rd	Park
62	9	15C	119 Hacklebarney Rd	Park
62	8	15C	119 Hacklebarney Rd	Park
62	7	15C	119 Hacklebarney Rd	Park
*63	17	15C	347 Black River Rd	Vacant Land
*6700	1	15C	681 Bartley-Long Valley R	Vacant Land
3.01	1	15D	450 Schooleys Mtn Rd	Church & Parsonage
10	11	15D	Naughtright Rd	Cemetery
18.01	18	15D	40 Coleman's Rd	Church
20	90	15D	59 Spring Ln	Church
20	30	15D	Schooleys Mtn Rd	Camp
21	2.01	15D	6 Heath Ln	Parsonage
21	2.02	15D	8 Heath Ln	Residence
22	5	15D	10 E Springtown Rd	Church & Cemetery
22	4	15D	14 E Springtown Rd	Rectory
28	18.01	15D	70 E Mill Rd	Rescue Squad
29	20.03	15D	39 Bartley Rd	Church
30	42	15D	Pleasant Grove Rd	Camp
30	34.02	15D	Pleasant Grove Rd	Camp
30	32	15D	12 Pleasant Grove Rd	Parsonage
30	31	15D	3 Heath Ln	Church
30	30	15D	Heath Ln	Administrative Bldg
30	34	15D	26 Pleasant Grove Rd	Residence
31	26	15D	3 Pleasant Grove Rd	Church
33	44	15D	Schooleys Mtn Rd	Church
34	38.01	15D	265 W Mill Rd	Church
36	43.01	15D	115 E Mill Rd	Valley View Chapel
51	31.03	15D	132 Califon Rd	Church
51	1.08	15D	165 Pleasant Grove Rd	Church
51	1.07	15D	159 Pleasant Grove Rd	Church
55	29	15D	357 W Mill Rd	Community Center
3.01	7.21	15F	21 Trafalgar Ct	Disabled Veteran
3.01	7.10	15F	10 Trafalgar Ct	Residence
3.06	3	15F	98 Knob Hill Rd	Disabled Veteran
11.05	9	15F	245 Mission Rd	Residence
11.05	12	15F	257 Mission Rd	Residence
11.07	11	15F	86 Kim Ln	Disabled Veteran

12	30.42	15F	2 Hidden Glen Rd	Disabled Veteran
12	38.02	15F	490 Naughtright Rd	Disabled Veteran
12.02	36	15F	28 Paula Dr	Disabled Veteran
13	50.05	15F	7 Chestnut St	Disabled Veteran
13	54.05	15F	8 Windswept Way	Disabled Veteran
13.17	7	15F	25 Squire Hill Rd	Disabled Veteran
16	15	15F	38 N Four Bridges Rd	Widow - Disabled Vet
18.01	23	15F	127 Bartley Rd	Disabled Veteran
20	78.31	15F	40 Ann Rd	Widow - Disabled Vet
20	72	15F	Schooleys Mtn Rd	Nursing Home
20.02	11	15F	41 Ann Rd	Disabled Veteran
20.14	3	15F	11 Pheasant Dr	Disabled Veteran
20.15	9	15F	49 Quail Run	Disabled Veteran
28	46.16	15F	27 Welsh Farm Rd	Disabled Veteran
28	11.02	15F	60 Bartley Rd	Disabled Veteran
30	58	15F	166 Kings Hwy	Vacant Land
30	62	15F	170 Kings Hwy	Dedicated Open Space
30	68	15F	192 Kings Hwy	Disabled Veteran
30	61	15F	Kings Hwy	Vacant Land
30	60	15F	Kings Hwy	Vacant Land
31	14.10	15F	74 Wehrli Rd	Widow - Disabled Vet
35.01	3101	15F	59 E Mill Rd	Community Center
35.03	37	15F	2 Hilltop Ter	Residence
36	42	15F	25 Overlook Dr	Residence
38	14	15F	208 Fairmount Rd	Residence
43	101.01	15F	39A Old Turnpike Rd	Residence
43	28	15F	185A Kings Hwy	Disabled Veteran
46	55	15F	195 Old Turnpike Rd	Disabled Veteran
50	26	15F	23 Califon Rd	Vacant Land
50	23.06	15F	5 Ascot Dr	Disabled Veteran
51	1.05	15F	163 Zellers Rd	Disabled Veteran

*Only a portion of the parcel is within the Washington Township boundary

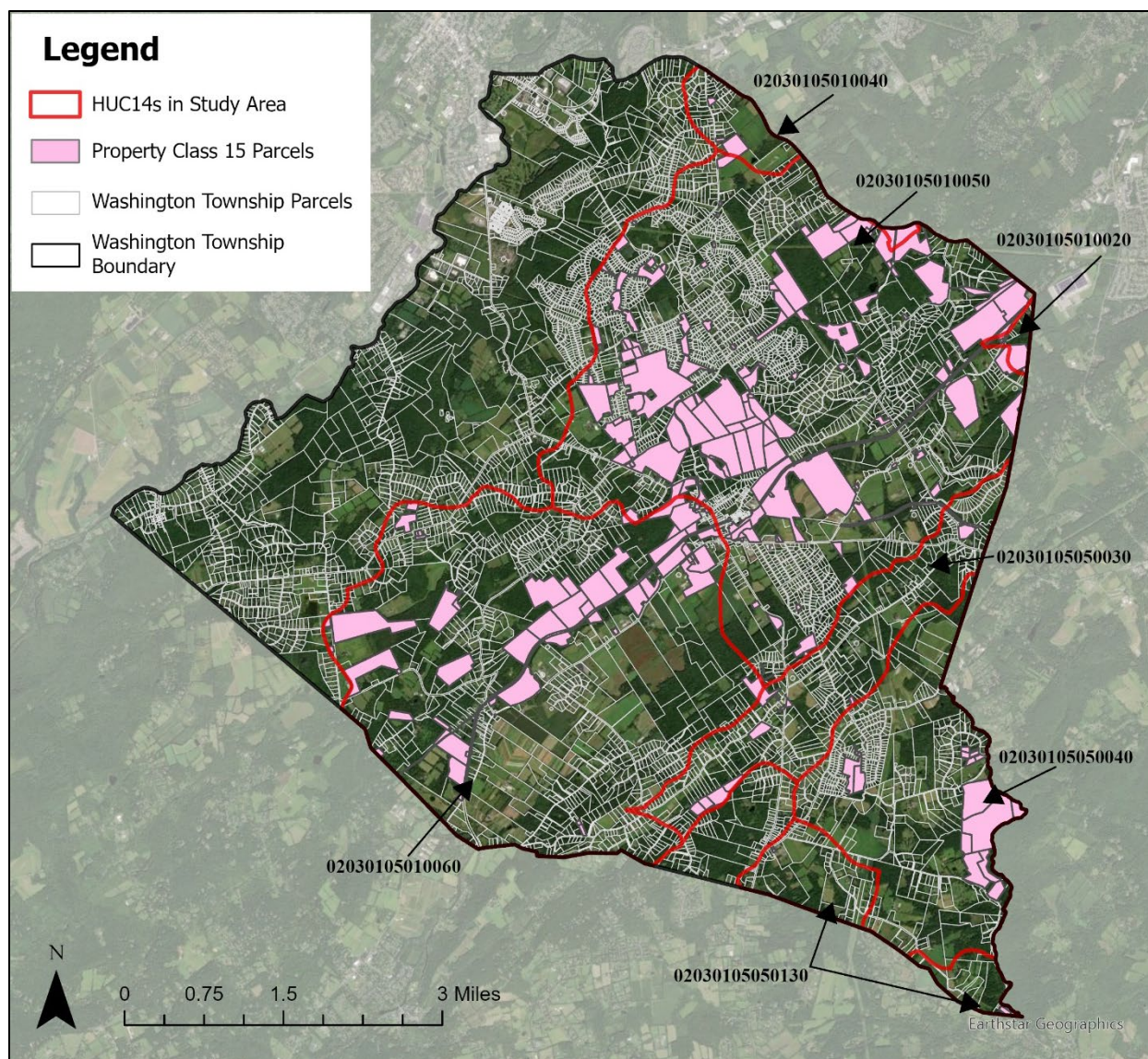


Figure 11: Property Class 15 parcels in the Study Area of Washington Township

Table 10: Property Class 15 Parcels in the Study Area of Washington Township

Block	Lot	Prop Class	Location	Facility Type
*12	37	15A	Naughtright Rd	Schools
17	9	15A	10 S Four Bridges Rd	Vacant Land
*17	8	15A	10 S Four Bridges Rd	Schools
20.11	24	15A	Flocktown Rd	Vacant Land
34	48	15A	53 W Mill Rd	Administrative Bldg
*34	49	15A	35 W Mill Rd	Schools
*35	3.01	15A	51 Old Farmers Rd	Schools
51 ³	22.02	15B	40 Califon Rd	Farm
12	35	15C	424 Naughtright Rd	Water Twr Booster St
12.02	1	15C	17 Cindy Ln	Vacant Land
13	42	15C	74 Naughtright Rd	Vacant Land
13	37	15C	Fairview Ave	Vacant Land
13	26	15C	Jones Ln	Vacant Land
13	12.03	15C	9 Sylvan Cir	Sewage Disposal
13	57	15C	Naughtright Rd	Vacant Land
13	63	15C	Flocktown Rd	Vacant Land
13	65.02	15C	Flocktown Rd	Vacant Land
13	4	15C	Drakestown Rd	Vacant Land
13	19	15C	Fairview Ave	Vacant Land
13	6	15C	416 Fairview Ave	Vacant Land
13	5.01	15C	Drakestown Rd	Vacant Land
13	5.03	15C	Drakestown Rd	Vacant Land
13	5.02	15C	Drakestown Rd	Vacant Land
13	9	15C	Drakestown Rd	Vacant Land
13	5	15C	Drakestown Rd	Vacant Land
13.04	8	15C	Devon Rd	Vacant Land
13.08	15	15C	564 Bolton Dr	Well
13.12	4	15C	Amherst Dr	Vacant Land
13.16	19	15C	Naughtright Rd	Vacant Land
13.16	13	15C	Naughtright Rd	Vacant Land
14	9.03	15C	16 Laketown Rd	Vacant Land
14	3.02	15C	822 Laketown Rd	Vacant Land
14	12	15C	413 Fairview Ave	Vacant Land
14	1.01	15C	Drakestown Rd	Vacant Land
14	3	15C	N Four Bridges Rd	Vacant Land
15	13	15C	202 Bartley Rd	Vacant Land
15	8	15C	N Four Bridges Rd	Vacant Land
15	13.07	15C	16 Elizabeth Ln	Vacant Land
15	300	15C	Naughtright Rd	Vacant Land
15	13.99	15C	22 Stony Brook Rd	Vacant Land
16	11	15C	274 Bartley Rd	Vacant Land
16	10.01	15C	306 Bartley Rd	Vacant Land
16	300	15C	N Four Bridges Rd	Vacant Land
16	10	15C	290 Bartley Rd	Vacant Land
16	6	15C	Bartley Rd	Farm
16	24	15C	N Four Bridges Rd	Vacant Land

16	5.01	15C	Drakestown Rd	Vacant Land
16	22.01	15C	N Four Bridges Rd	Vacant Land
17	2.02	15C	279 Bartley Rd	Vacant Land
17	2.01	15C	291 Bartley Rd	Vacant Land
17	300	15C	Bartley Rd	Vacant Land
18	10.03	15C	Coleman's Rd	Vacant Land
18	10.02	15C	26 Coleman's Rd	Vacant Land
18	28	15C	209 Bartley Rd	Park
18	4	15C	S Four Bridges Rd	Vacant Land
20.02 ³	39	15C	10 High Ridge Rd	Water Tower
20.04	1	15C	Nestling Wood Dr	Vacant Land
20.08	9	15C	Buttonwood Dr	Vacant Land
20.10	33	15C	Nestling Wood Dr	Pumping Station
20.10	49.02	15C	Spring Ln	Vacant Land
20.10	1.02	15C	Marlene Rd	Vacant Land
22	3.27	15C	4 Briarwood Rd	Vacant Land
22	3.03	15C	79 Rock Rd	Park
22 ³	30.01	15C	Flocktown Rd	Vacant Land
22	3	15C	Rock Rd	Vacant Land
22	3.072	15C	13 Blackberry Pl	Vacant Land
*23	16.01	15C	54 Rock Rd	Garage
23	8.08	15C	E Springtown Rd	Vacant Land
23	4.02	15C	5 Dogwood Dr	Vacant Land
23	17.01	15C	Rock Rd	Vacant Land
23	3.30	15C	Hemlock Dr	Vacant Land
23	16	15C	Rock Rd	Park
23	18.05	15C	Rock Rd	Garage
23	18.06	15C	Rock Rd	Vacant Land
23	18	15C	119 Flocktown Rd	Rescue Squad
23	18.07	15C	Cherry St	Vacant Land
23	18.08	15C	Flocktown Rd	Vacant Land
23.02	39	15C	Hemlock Dr	Water Supply
23.03	14	15C	Hemlock Dr	Vacant Land
23.04	2.06	15C	Flocktown Rd	Vacant Land
24	9	15C	116 Schooleys Mtn Rd	Vacant Land
*24	8	15C	Schooleys Mtn Rd	Vacant Land
24	8.01	15C	E Springtown Rd	Police Station
24	8.01	15C	1 E Springtown Rd	Police Station
24	1	15C	Camp Washington Rd	Park
24	2.01	15C	79 Schooleys Mtn Rd	Vacant Land
24	2.02	15C	78 Schooleys Mtn Rd	Vacant Land
*24	7	15C	Schooleys Mtn Rd	Park
25	52	15C	62 Schooleys Mtn Rd	Vacant Land
25	52.02	15C	64 Schooleys Mtn Rd	Vacant Land
25	55.01	15C	Camp Washington Rd	Pumping Station
25	55	15C	Camp Washington Rd	Park
25	23.01	15C	Fairview Ave	Park
25	53.05	15C	Camp Washington Rd	Park
25	53.06	15C	Camp Washington Rd	Park

25	54.01	15C	Camp Washington Rd	Park
25	9.02	15C	Camp Washington Rd	Park
25	47.03	15C	66 Schooleys Mtn Rd	Vacant Land
25	70	15C	Schooleys Mtn Rd	Water Supply
25	8	15C	Fairview Ave	Vacant Land
25	62	15C	Naughtright Rd	Park
25	63	15C	Naughtright Rd	Park
25	9.01	15C	Camp Washington Rd	Park
25	9	15C	Fairview Ave	Park
25	61	15C	Naughtright Rd	Park
25	65.19	15C	Ranney Rd	Vacant Land
25	56.04	15C	Naughtright Rd	Park
25	59	15C	Naughtright Rd	Park
25	60	15C	Naughtright Rd	Park
25	56.03	15C	Naughtright Rd	Park
*25¹	56.01	15C	E Springtown Rd	Park
*25¹	56.02	15C	E Springtown Rd	Park
25	58	15C	Naughtright Rd	Park
25	56	15C	E Springtown Rd	Park
*26²	8	15C	49 Schooleys Mtn Rd	Vacant Land
*26²	2	15C	43 Schooleys Mtn Rd	Municipal Bldg
27	17	15C	6 Fairview Ave	Historic Site
27	300	15C	20 Schooleys Mtn Rd	Vacant Land
28	19	15C	46 E Mill Rd	Administrative Bldg.
28	18.03	15C	70 E Mill Rd	Vacant Land
28	28	15C	12 E Mill Rd	Historic Site
28	38	15C	5 Fairview Ave	Volunteer Fire Co
28	47.01	15C	Fairview Ave	Vacant Land
28	46.103	15C	Welsh Farm Rd	Vacant Land
28	59	15C	Fairview Ave	Vacant Land
28	60.02	15C	Fairview Ave	Vacant Land
28	62	15C	Fairview Ave	Vacant Land
28	60	15C	Fairview Ave	Park
28	17	15C	E Mill Rd	Park
28	300	15C	Fairview Ave	Vacant Land
28	3.01	15C	Naughtright Rd	Vacant Land
28	26.01	15C	E Mill Rd	Vacant Land
28	26	15C	E Mill Rd	Vacant Land
28	24	15C	34 E Mill Rd	Garage
29	2.02	15C	E Mill Rd	Vacant Land
29	24	15C	Bartley Rd	Vacant Land
29	22	15C	101 Bartley Rd	Pumping Station
30.02	44	15C	Pleasant Grove Rd	Vacant Land
33	76	15C	Middle Valley Rd	Vacant Land
33	77	15C	Middle Valley Rd	Vacant Land
33	73	15C	W Mill Rd	Vacant Land
33	71.01	15C	W Mill Rd	Vacant Land
33	67.01	15C	212 W Mill Rd	Recreation Center
33	70.01	15C	W Mill Rd	Vacant Land

33	64.01	15C	W Mill Rd	Vacant Land
33	94.02	15C	W Springtown Rd	Vacant Land
33	63	15C	W Mill Rd	Park
33	87	15C	W Springtown Rd	Vacant Land
33	58.03	15C	62 W Mill Rd	Vacant Land
33	58	15C	W Mill Rd	Vacant Land
33	58.01	15C	W Mill Rd	Vacant Land
33	300	15C	Middle Valley Rd	Vacant Land
33	52	15C	W Mill Rd	Vacant Land
33	8.06	15C	20 James Trl	Vacant Land
33	19	15C	Schooleys Mtn Rd	Pumping Station
33	8	15C	Schooleys Mtn Rd	Vacant Land
33	9	15C	79 Schooleys Mtn Rd	Vacant Land
33	70.03	15C	W Mill Rd	Vacant Land
33	59.03	15C	James Trl	Vacant Land
33	68.01	15C	W Mill Rd	Vacant Land
33	69.01	15C	W Mill Rd	Vacant Land
33	65.02	15C	W Mill Rd	Vacant Land
33	65.03	15C	W Mill Rd	Vacant Land
33	69.03	15C	W Mill Rd	Vacant Land
33	68.03	15C	W Mill Rd	Vacant Land
34	7	15C	W Valley Brook Rd	Vacant Land
34	2	15C	123 Fairmount Rd	Vacant Land
34	1.08	15C	99 Fairmount Rd	Pumping Station
34	46.03	15C	73 W Mill Rd	Residence
34	46.04	15C	W Mill Rd	Vacant Land
35	3.05	15C	Old Farmers Rd	Water Tower
36	42	15C	Overlook Dr	Vacant Land
37	34.11	15C	Old Farmers Rd	Water Stand Pipe
39	1	15C	219 Fairmount Rd	Water Supply
39	11.01	15C	5 W Valley Brook Rd	Vacant Land
41	3.07	15C	2 Douglas Dr	Water Supply
41	3.08	15C	10 Douglas Dr	Vacant Land
41.01	1	15C	Old Farmers Rd	Wtr Booster Station
41.01	1.01	15C	Green Hills Rd	Vacant Land
42.02	36	15C	167 Old Farmers Rd	Vacant Land
42.03	21	15C	Long Hill Rd	Vacant Land
42.03	22	15C	57 Long Hill Rd	Vacant Land
42.03	19	15C	55 Long Hill Rd	Vacant Land
42.03	18	15C	Long Hill Rd	Vacant Land
42.03	17	15C	Long Hill Rd	Vacant Land
50 ³	23.15	15C	Califon Rd	Vacant Land
50.02 ³	25	15C	8 Ascot Dr	Vacant Land
51	21	15C	220 Middle Valley Rd	Vacant Land
51	12	15C	Zellers Rd	Vacant Land
51	3.03	15C	Zellers Rd	Vacant Land
51	3	15C	Zellers Rd	Vacant Land
51	24	15C	Califon Rd	Vacant Land
52	7	15C	Sky Top Rd	Vacant Land

54	29.01	15C	W Mill Rd	Vacant Land
54	28.01	15C	W Mill Rd	Vacant Land
54	28	15C	W Mill Rd	Vacant Land
54	25	15C	W Mill Rd	Tax Lien Foreclosure
54	301	15C	W Mill Rd	Vacant Land
54	32	15C	22 Sky Top Rd	Garage
54	24.02	15C	Mallard Cove Rd	Vacant Land
54	24.01	15C	Mallard Cove Rd	Vacant Land
54	300	15C	W Mill Rd	Vacant Land
54	43	15C	Middle Valley Rd	Vacant Land
54	51.03	15C	Middle Valley Rd	Vacant Land
56	10	15C	16 Sand Hill Rd	Vacant Land
56	11	15C	14 Sand Hill Rd	Vacant Land
59	49.02	15C	W Valley Brook Rd	Vacant Land
59 ³	47.09	15C	Abedim Way	Vacant Land
59	49.01	15C	W Valley Brook Rd	Vacant Land
59 ³	49	15C	Fairmount Rd	Vacant Land
59 ³	10	15C	Fleming Ct	Vacant Land
59	1	15C	W Fox Hill Rd	Vacant Land
60	13	15C	12 Parker Rd	Volunteer Fire Co
60	13	15C	12 Parker Rd	Cell Tower
62	21	15C	378 Black River Rd	Vacant Land
62	12.03	15C	Black River Rd	Park
62	12.02	15C	196 Black River Rd	Park
62	12.01	15C	Black River Rd	Park
62	10.01	15C	Black River Rd	Park
62	11	15C	Black River Rd	Park
62	9	15C	119 Hacklebarney Rd	Park
62	8	15C	119 Hacklebarney Rd	Park
62	7	15C	119 Hacklebarney Rd	Park
63	17	15C	347 Black River Rd	Vacant Land
6700	1	15C	681 Bartley-Long Valley R	Vacant Land
*10	11	15D	Naughtright Rd	Cemetery
*18.01	18	15D	40 Coleman's Rd	Church
*20³	90	15D	59 Spring Ln	Church
22	5	15D	10 E Springtown Rd	Church & Cemetery
22	4	15D	14 E Springtown Rd	Rectory
28	18.01	15D	70 E Mill Rd	Rescue Squad
*29	20.03	15D	39 Bartley Rd	Church
*33	44	15D	Schooleys Mtn Rd	Church
*34	38.01	15D	265 W Mill Rd	Church
36	43.01	15D	115 E Mill Rd	Valley View Chapel
51	31.03	15D	132 Califon Rd	Church
51	1.08	15D	165 Pleasant Grove Rd	Church
51	1.07	15D	159 Pleasant Grove Rd	Church
55	29	15D	357 W Mill Rd	Community Center
11.05 ³	12	15F	257 Mission Rd	Residence
11.07	11	15F	86 Kim Ln	Disabled Veteran
12	30.42	15F	2 Hidden Glen Rd	Disabled Veteran

12	38.02	15F	490 Naughtright Rd	Disabled Veteran
12.02	36	15F	28 Paula Dr	Disabled Veteran
13	50.05	15F	7 Chestnut St	Disabled Veteran
13	54.05	15F	8 Windswept Way	Disabled Veteran
13.17	7	15F	25 Squire Hill Rd	Disabled Veteran
16	15	15F	38 N Four Bridges Rd	Widow - Disabled Vet
18.01	23	15F	127 Bartley Rd	Disabled Veteran
28	46.16	15F	27 Welsh Farm Rd	Disabled Veteran
28	11.02	15F	60 Bartley Rd	Disabled Veteran
35.01	3101	15F	59 E Mill Rd	Community Center
35.03	37	15F	2 Hilltop Ter	Residence
36	42	15F	25 Overlook Dr	Residence
38	14	15F	208 Fairmount Rd	Residence
50 ³	23.06	15F	5 Ascot Dr	Disabled Veteran
51	1.05	15F	163 Zellers Rd	Disabled Veteran

*** Sites that can be retrofitted with green infrastructure**

¹Site includes two tax-exempt parcels

²Site includes two tax-exempt parcels

³Only a portion of the parcel is within the study area

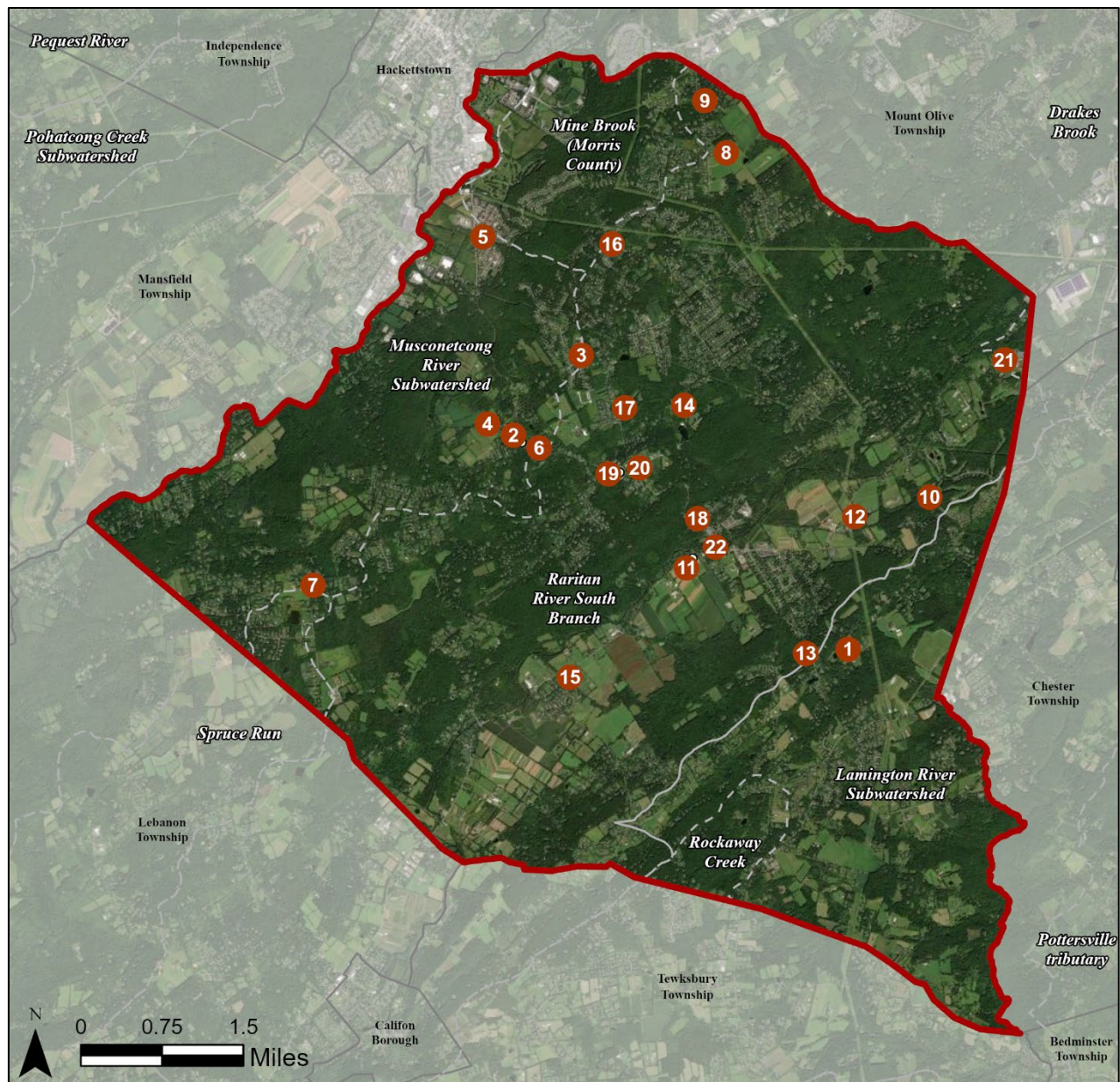


Figure 12: Sites with Green Infrastructure Opportunities in Washington Township

VALLEY BROOK COUNTRY DAY SCHOOL

RAP ID: 1

Subwatershed: Lamington River

Site Area: 1,079,999 sq. ft.

Address: 73 East Valley Brook Rd
Long Valley, NJ 07853

Block and Lot: Block 37, Lot 25

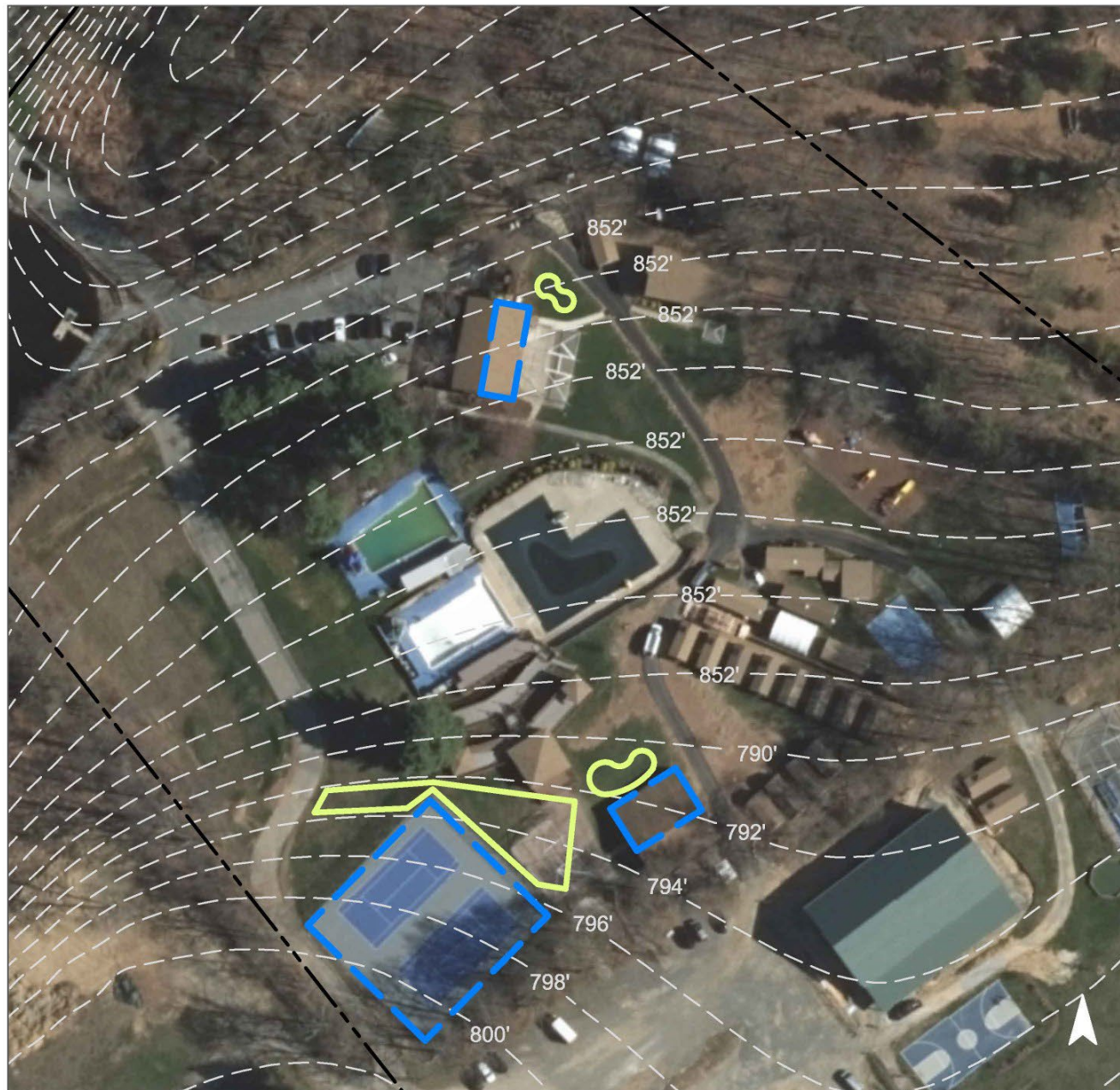


Rain gardens can be installed adjacent to buildings and impervious surfaces like the tennis courts to capture stormwater runoff. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.





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"
19	4.76	207,492	10.0	104.8	952.7	0.162

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	0.389	65	30,430	1.07	3,740	\$18,700

GREEN INFRASTRUCTURE RECOMMENDATIONS



VALLEY BROOK COUNTRY DAY SCHOOL

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

0 50' 100'



EMMANUEL BIBLE CHURCH

RAP ID: 2

Subwatershed: Musconetcong River

Site Area: 622,785 sq. ft.

Address: 3 Pleasant Grove Road
Schooleys Mountain, NJ
07870

Block and Lot: Block 31 Lot 26



A rain garden and downspout planter boxes can be installed adjacent to the main building to capture, treat, and infiltrate stormwater runoff from the roof. Pervious pavement is proposed to treat runoff in the southeast parking lot. Planter boxes can also be installed to treat the rooftop drainage area. 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"
18	2.54	110,514	5.3	55.8	507.4	0.086

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	0.021	4	1,670	0.06	205	\$1,025
Pervious pavement	0.269	45	21,030	0.74	1,845	\$46,125
Planter boxes	n/a	2	n/a	n/a	2 (boxes)	\$2,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Emmanuel Bible Church

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

0 50' 100'

FLOCKTOWN ROAD & KOSSMANN ELEMENTARY SCHOOLS

RAP ID: 3

Subwatershed: Musconetcong River

HUC14: 02040105160010

Site Area: 1,074,908 sq. ft.

Address: 90 Flocktown Road
Long Valley, NJ 07853



Block and Lot: Block 20.11, Lot 21-23

Rain gardens may be installed off the north, east, and west corners and the southeast facade of Flocktown Road Elementary (southern building in the depicted aerial). Rain gardens may also be installed off the north and south facades of Kossmann Elementary School (northern building in the provided aerial). These would capture, treat, and infiltrate stormwater runoff from the rooftops utilizing existing downspouts, most of which would require disconnection. The rain garden off the south facade of Kossmann Elementary School requires a downspout redirection as well. Portions of pavement in the parking lots along the east side of both buildings, and the basketball court in the west can be converted to pervious pavement. These sections of pervious pavement can capture and infiltrate stormwater runoff before reaching nearby catch basins or flooding the adjacent grassy 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 50"
22	235,615	11.4	119.0	1,081.8	0.184	7.34

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	19,885	0.589	87	41,480	1.56	4,970	\$49,700
Pervious Pavement	43,805	1.297	192	91,370	3.43	14,330	\$358,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Flocktown Road & Kossmann Elementary Schools

-  bioretention system
-  pervious pavement
-  captured drainage area
-  property line
-  2020 Aerial: NJOIT, OGIS



HIGHLANDS PRESBYTERIAN CHURCH

RAP ID: 4

Subwatershed: Musconetcong River

HUC14: 02040105160010

Site Area: 67,073 sq. ft.

Address: 3 Heath Lane
Long Valley, NJ 07853



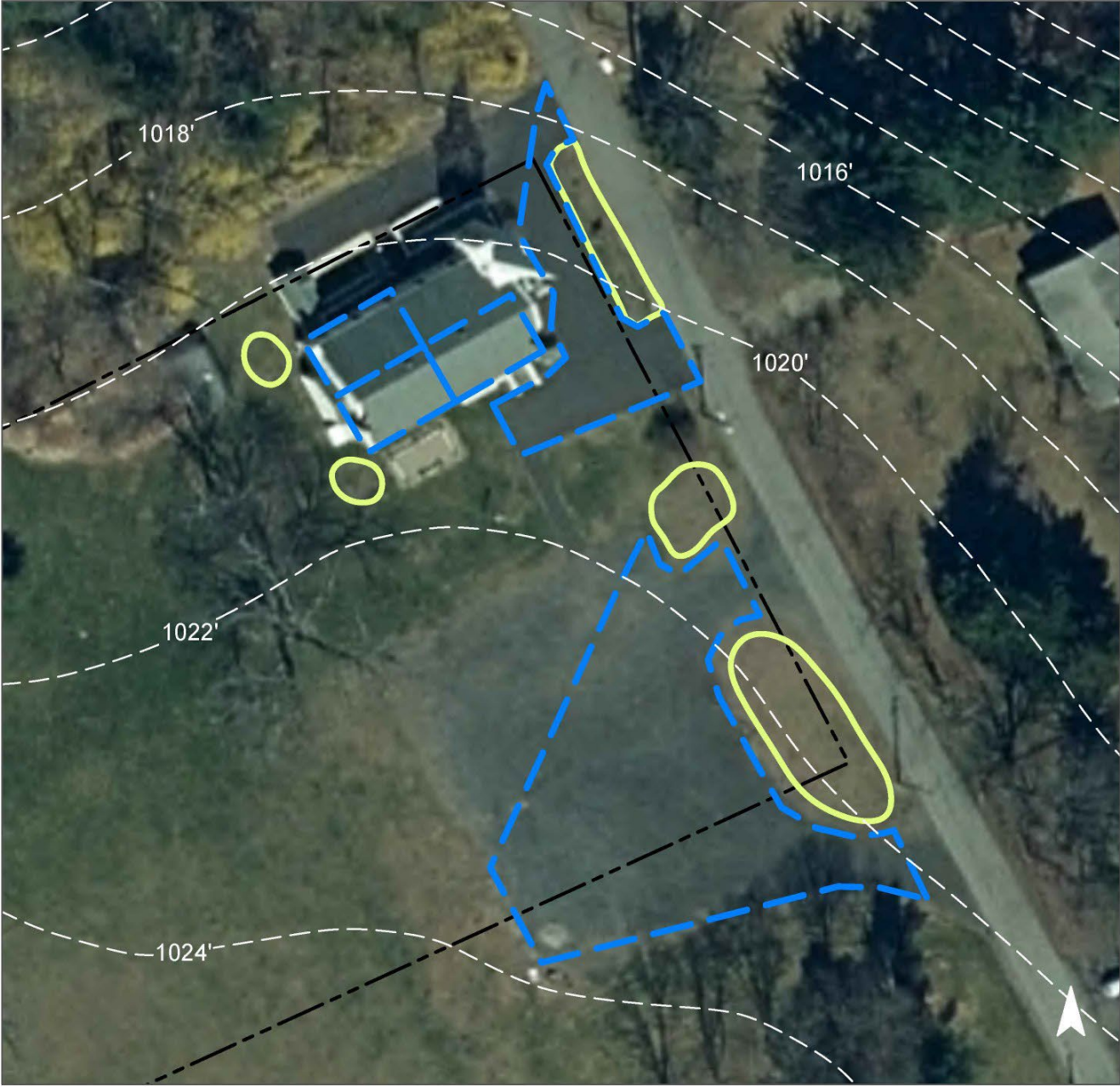
Block and Lot: Block 30, Lot 31

Rain gardens may be installed off the east face, northwest and southwest corners of the church, utilizing downspouts which require disconnection, as well as the north corner and east edge of the parking lot. These would capture, treat, and infiltrate stormwater runoff from the rooftops and pavement. All four exits from the parking lot to the road would require a trench drain to redirect and convey stormwater runoff to the surrounding rain gardens. 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 50"
32	21,403	1.0	10.8	98.3	0.017	0.67

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	12,965	0.384	57	27,040	1.02	3,245	\$32,450

GREEN INFRASTRUCTURE RECOMMENDATIONS



Highlands Presbyterian Church

-  bioretention system
-  captured drainage area
-  property line
-  2020 Aerial: NJOIT, OGIS



Hope Center Hackettstown

RAP ID: 5

Subwatershed: Musconetcong River

HUC14: 02040105160010

Site Area: 136,488 sq. ft.

Address: 450 Schooleys Mountain Road
Hackettstown, NJ 07840



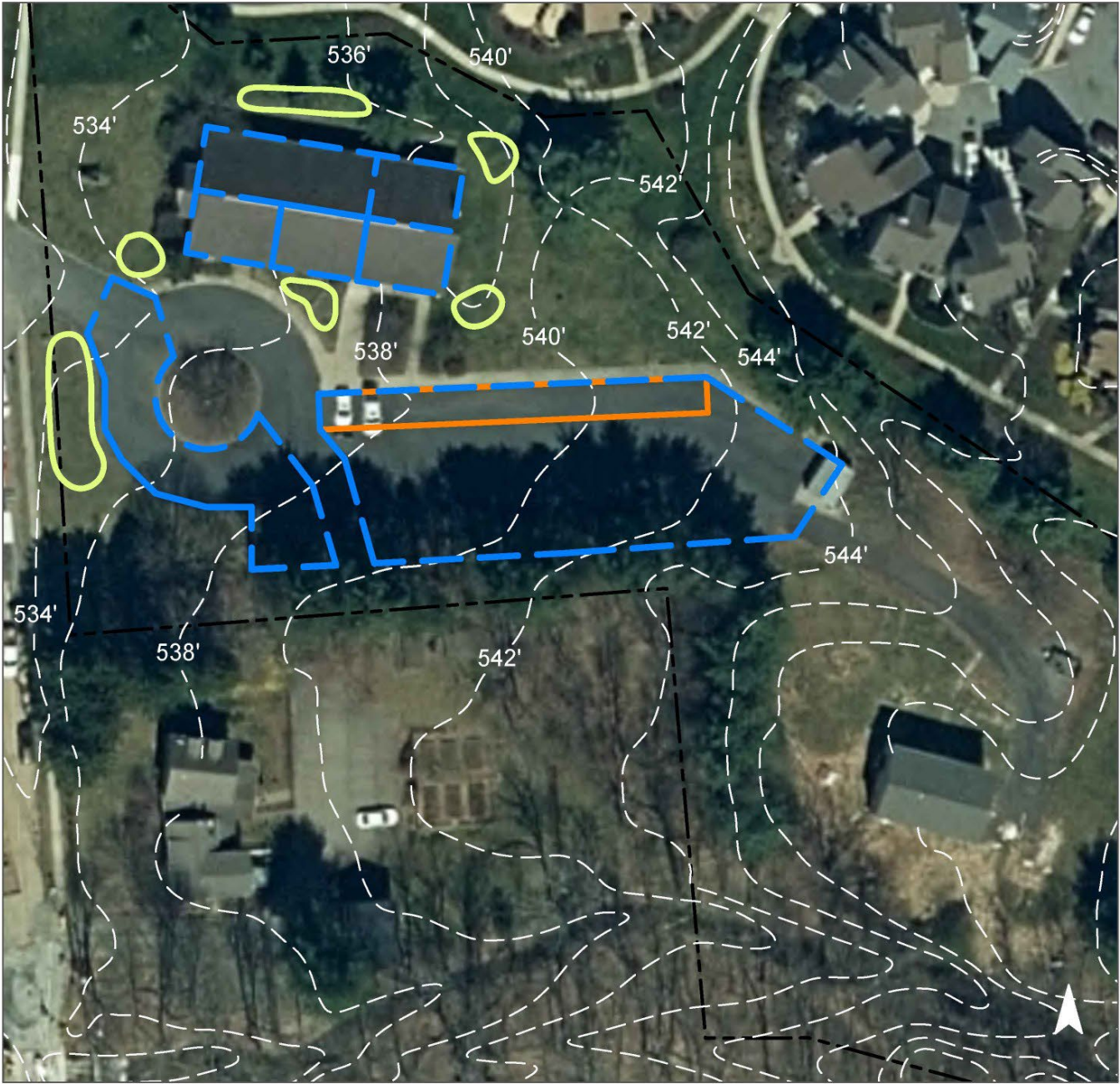
Block and Lot: Block 3.01, Lot 1

Rain gardens can be installed off the northeast, southeast, and southwest corners, the north and south facades of the building to capture, treat, and infiltrate stormwater runoff from the roof. Existing downspouts convey water to the rain gardens; the downspouts on the southwest corner and south facade require disconnection. In the parking lot, a rain garden can also be installed off the west side of the roundabout to capture, treat, and infiltrate runoff. A row of parking stalls on the north edge of the parking lot can be converted to pervious pavement to capture and infiltrate stormwater before it reaches the adjacent catch. Despite what the contour data suggests, the grading of the pavement pitches to the northwest to two catch basins. Additionally, a curb cut on the west side of the roundabout and a trench drain before the exit to the street would be required to allow stormwater runoff to flow into the rain 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 50"
25	34,162	1.6	17.3	156.9	0.027	1.06

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	8,925	0.264	38	18,620	0.70	2,240	\$22,400
Pervious pavement	11,565	0.342	51	24,120	0.91	2,130	\$53,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Hope Center Hackettstown

-  bioretention system
-  pervious pavement
-  captured drainage area
-  property line
-  2017 - 2018 USGS Lidar: NW New Jersey 6 County



SCHOOLEYS MOUNTAIN FIRE PROTECTION

RAP ID: 6

Subwatershed: Musconetcong River

Site Area: 69,972 sq. ft.

Address: 231 Schooleys Mountain Road
Long Valley, NJ 07870

Block and Lot: Block 31, Lot 27



Runoff from different sections of the parking lot can be treated by a rain garden and also a section of porous parking spaces. A cistern can be installed adjacent to the building to capture runoff from the roof. The water can then be reused for washing vehicles or watering the lawn. Additionally, downspout planters can be installed to treat the northeast rooftop drainage area. 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	0.58	25,147	1.2	12.7	115.5	0.020

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	0.248	42	20,031	0.88	2,385	\$11,925
Pervious pavement	0.348	58	27,160	1.19	2,570	\$64,250
Planter boxes	n/a	2	n/a	n/a	2 (boxes)	\$2,000
Rainwater harvesting	0.033	6	2,446	0.11	1,000 (gal)	\$2,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Schooleys Mountain Fire Protection

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

0 30' 60'

THE LIFE GIVING FOUNTAIN ROMANIAN ORTHODOX CHURCH

RAP ID: 7

Subwatershed: Musconetcong River

HUC 14: 02040105160020

Site Area: 104,415 sq. ft.

Address: 132 Califon Road
Long Valley, NJ 07853



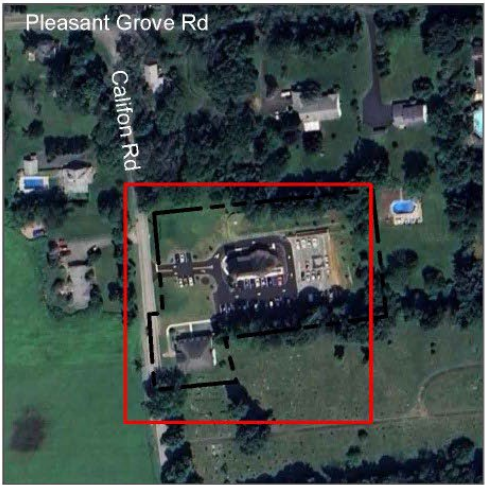
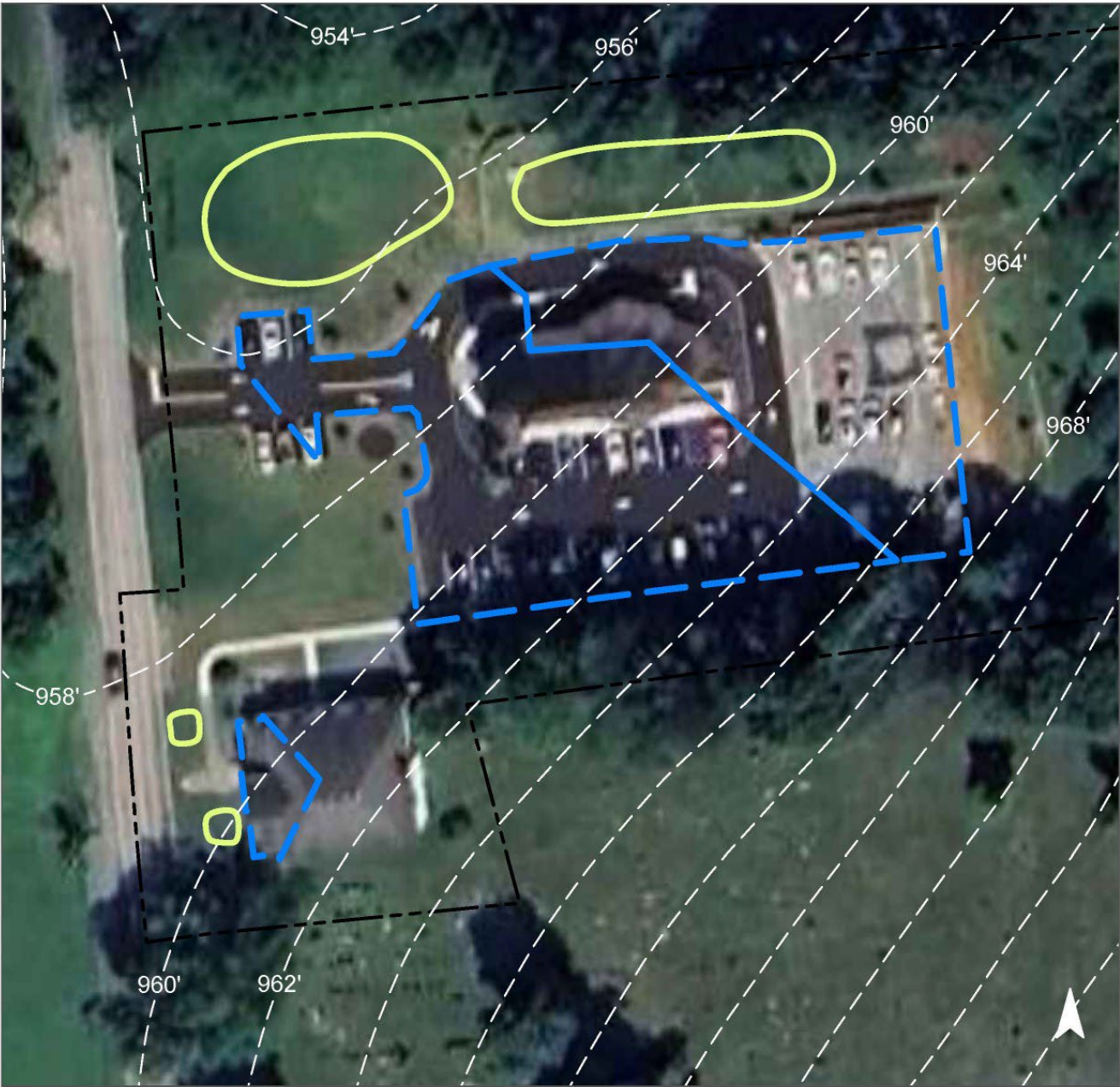
Block and Lot: Block 51, Lot 31.03

Rain gardens can be installed on the northwest corners of the parking lot to capture stormwater runoff from the pavement and rooftop of the church (which has no downspouts). and treat and infiltrate the stormwater. This requires curb cuts off the northwest corner of the building, and the north edge of the small row of parking stalls close to the road. An existing retention basin north of the parking lot can be transformed into a rain garden to capture, treat, and infiltrate runoff from the parking lot and church. Rain gardens can also be placed by disconnected downspouts off the northwest and southwest corners of the small building in the southwest corner of the property to capture, treat, and infiltrate stormwater 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 50"
36	37,538	1.8	19.0	172.4	0.029	1.17

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	30,965	0.917	135	64,590	2.43	7,740	\$77,400

GREEN INFRASTRUCTURE RECOMMENDATIONS



**The Life Giving Fountain
Romanian Orthodox
Church**

-  bioretention system
-  captured drainage area
-  property line
-  2020 Aerial: NJOIT, OGIS



BENEDICT A. CUCINELLA SCHOOL

RAP ID: 8

Subwatershed: Raritan River South Branch

Site Area: 1,278,641 sq. ft.

Address: 470 Naughtright Road
Long Valley, NJ 07853

Block and Lot: Block 12, Lot 37



Downspout planter boxes are suggested at the entrance of the school to promote green infrastructure awareness. A section of parking spaces can be converted to pervious pavement to capture and infiltrate runoff from the parking lot. Tree filter boxes can be installed in islands in the parking lot to capture runoff from other spaces in 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"
23	6.61	287,755	13.9	145.3	1,321.2	0.224

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	0.230	38	17,960	0.63	2,715	\$67,875
Planter boxes	n/a	2	n/a	n/a	2 (boxes)	\$2,000
Tree filter boxes	n/a	116	n/a	n/a	3 (boxes)	\$30,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



**Benedict A.
Cucinella School**

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

0 50' 100'

DRAKESTOWN UNITED METHODIST CHURCH

RAP ID: 9

Subwatershed: Raritan River South Branch

Site Area: 42,024 sq. ft.

Address: 6 Church Road
Hackettstown, NJ 0784

Block and Lot: Block 10, Lot 11

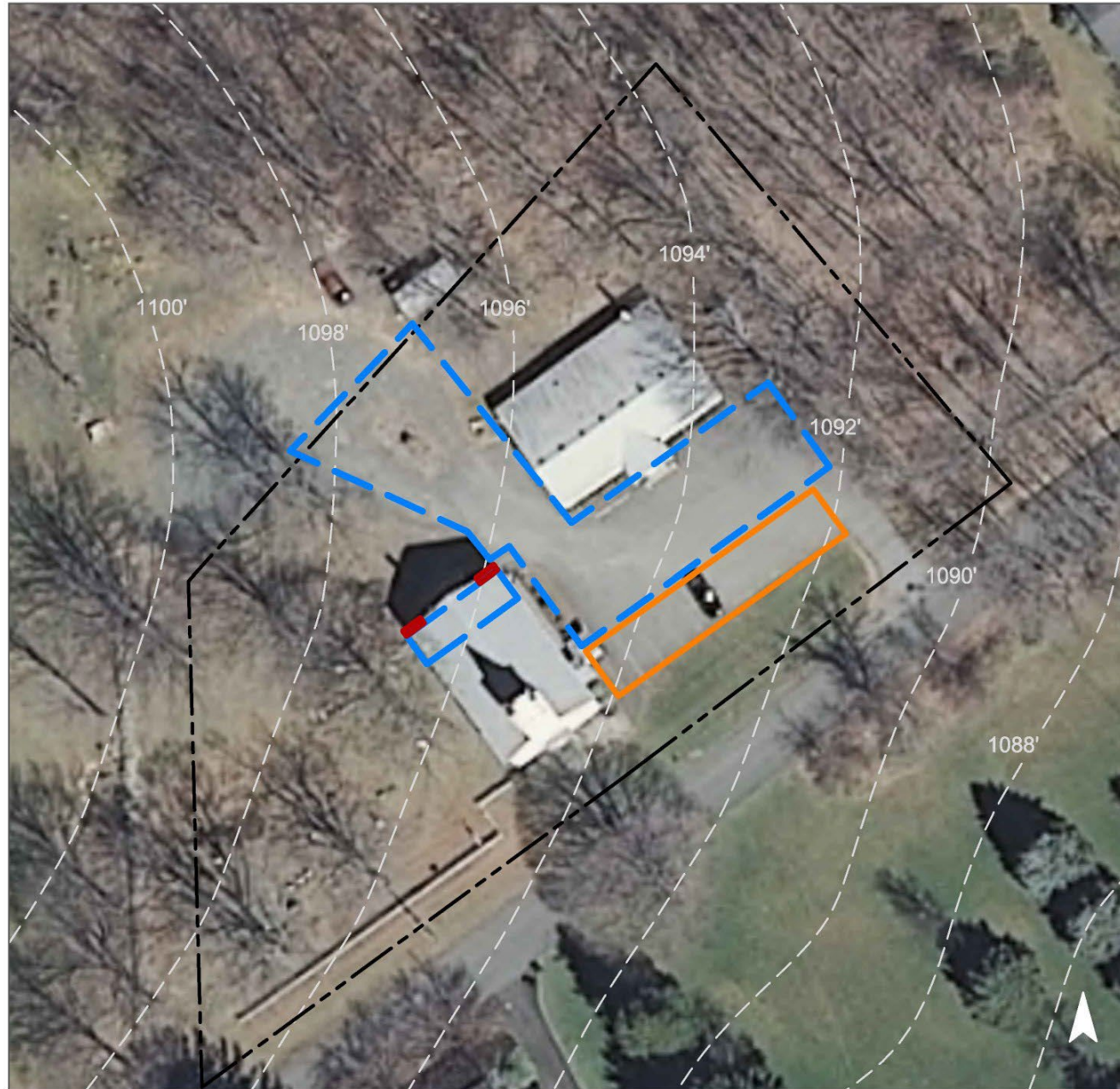


Downspout planter boxes can be installed to capture and retain runoff from the rooftop. Pervious pavement is proposed along the south edge of the parking lot to treat the entire parking lot's drainage area. A preliminary soil assessment suggests that more soil testing would be required before determining 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"
39	0.38	16,468	0.8	8.3	75.6	0.013

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	0.168	28	13,090	0.46	1,630	\$40,750
Planter boxes	n/a	1	n/a	n/a	2 (boxes)	\$2,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Drakestown United Methodist Church

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

0 25' 50'

Immanuel Lutheran Church

RAP ID: 10

Subwatershed: Raritan River South Branch

HUC 14: 02030105010050

Site Area: 218,150 sq. ft.

Address: 40 Coleman Road
Long Valley, NJ 07853



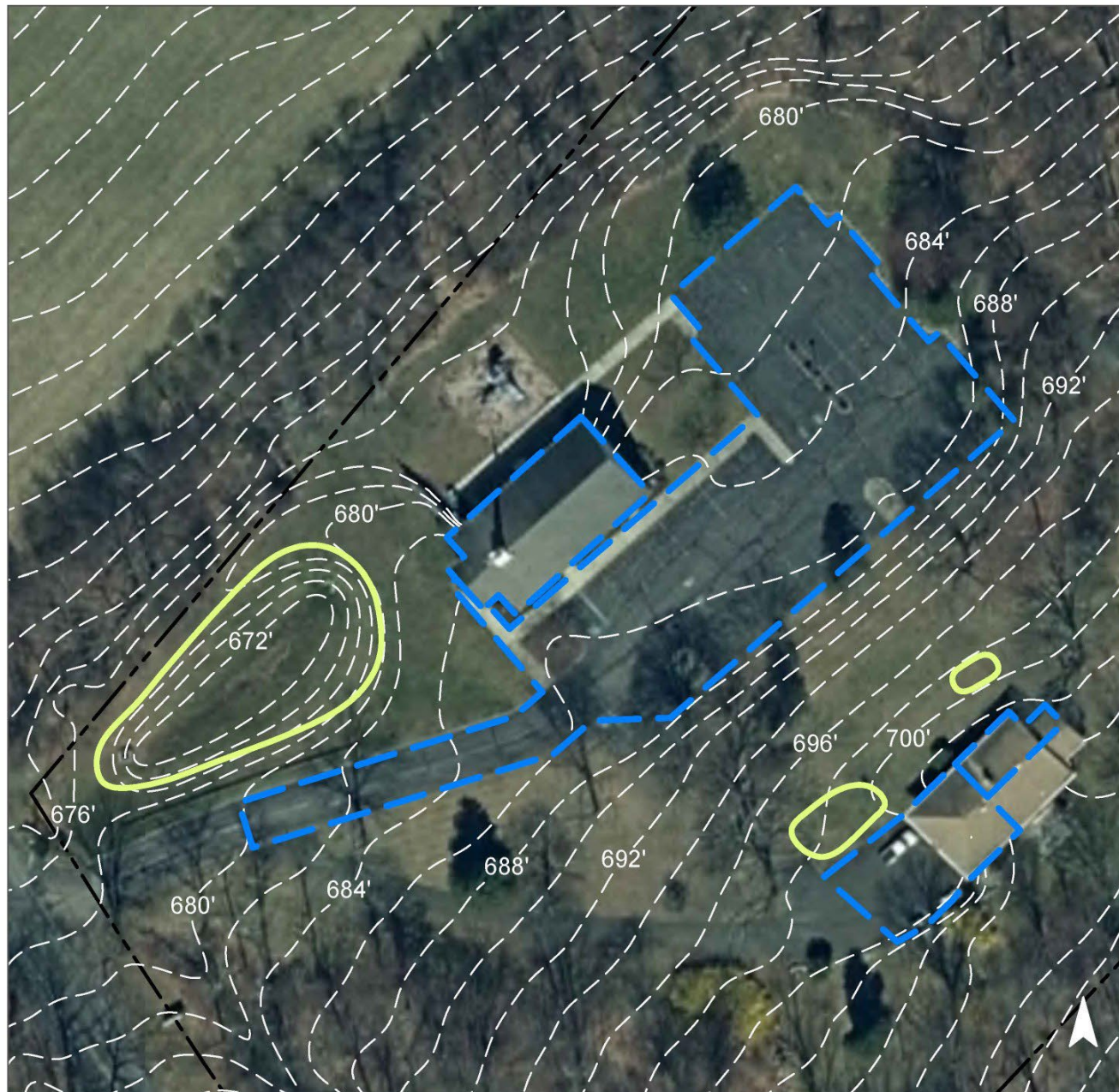
Block and Lot: Block 18.01, Lot 18

In the southwest corner of the property, there is an existing retention basin to which water is conveyed from the rooftop and pavement via connected downspouts and catch basins. This can be converted into a rain garden to capture, treat, and infiltrate stormwater runoff. A trench drain can be installed half-way up the driveway coming from the southwest to increase runoff capture and convey it to the rain garden. Two rain gardens can also be installed off the northwest facade of the house in the southeast section of the property. 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 50"
16	33,865	1.6	17.1	155.5	0.026	1.06

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	26,010	0.770	114	54,250	2.04	6,505	\$65,050

GREEN INFRASTRUCTURE RECOMMENDATIONS



Immanuel Lutheran Church

-  bioretention system
-  captured drainage area
-  property line
-  2017 - 2018 USGS Lidar: NW New Jersey 6 County



LONG VALLEY MIDDLE SCHOOL

RAP ID: 11

Subwatershed: Raritan River South Branch

Site Area: 1,089,160 sq. ft.

Address: 51 West Mill Road
Long Valley, NJ 07853

Block and Lot: Block 34 Lot 49

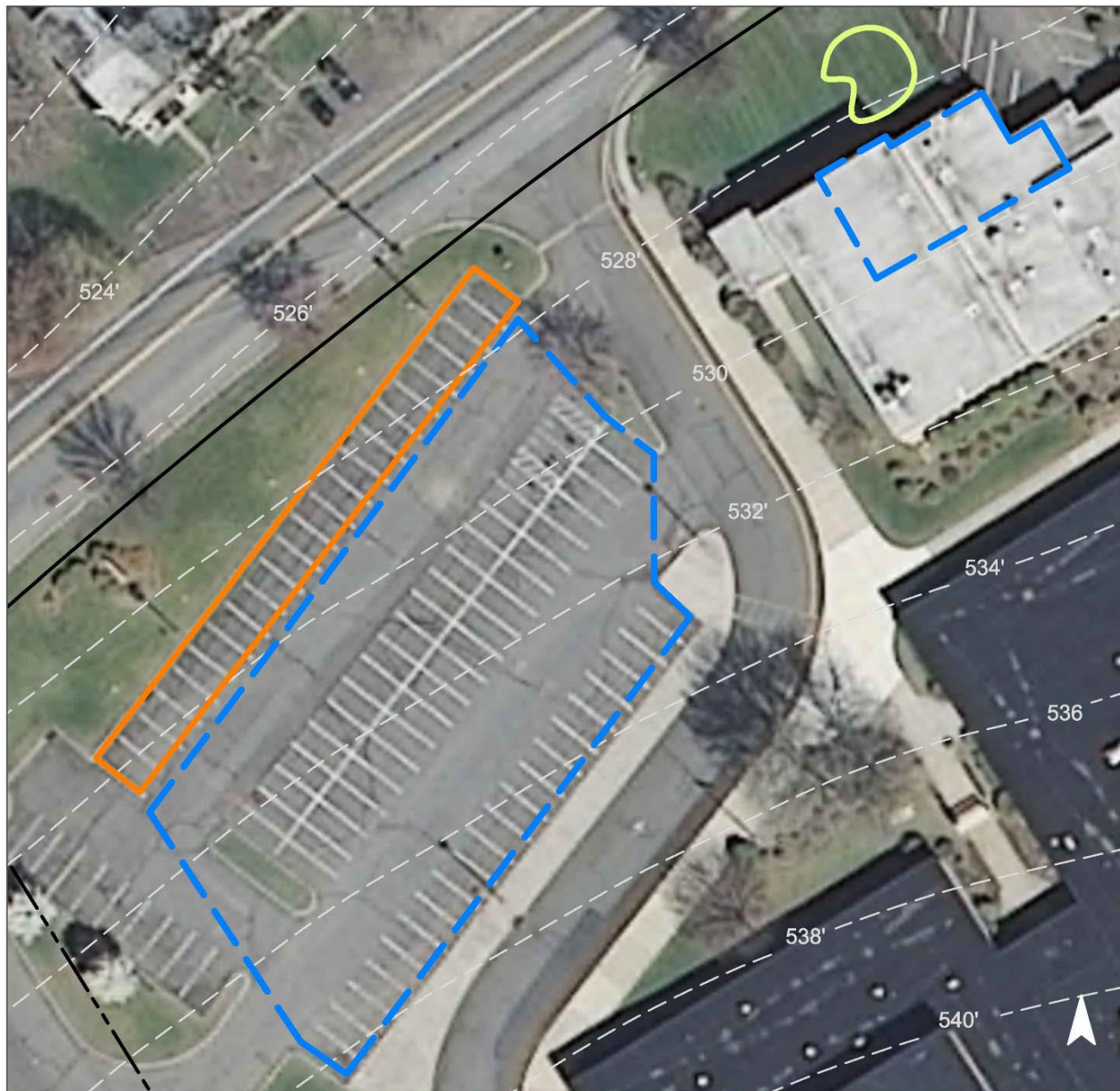


Pervious pavement is proposed in a section of parking spaces to capture and infiltrate runoff from the parking lot. A bioretention system is proposed in the north turfgrass area to capture runoff from the roof of the school. A preliminary soil assessment suggests that more soil testing would be required 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"
32	8.03	349,813	16.9	176.7	1,606.1	0.273

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	0.062	10	4,870	0.17	600	\$3,000
Pervious pavement	0.527	88	41,160	1.45	3,610	\$90,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Long Valley Middle School

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

0 25' 50'

LONG VALLEY PRESBYTERIAN CHURCH

RAP ID: 12

Subwatershed: Raritan River South Branch

HUC 14: 02030105010050

Site Area: 441,899 sq. ft.

Address: 39 Bartley Road
Long Valley, NJ 07853



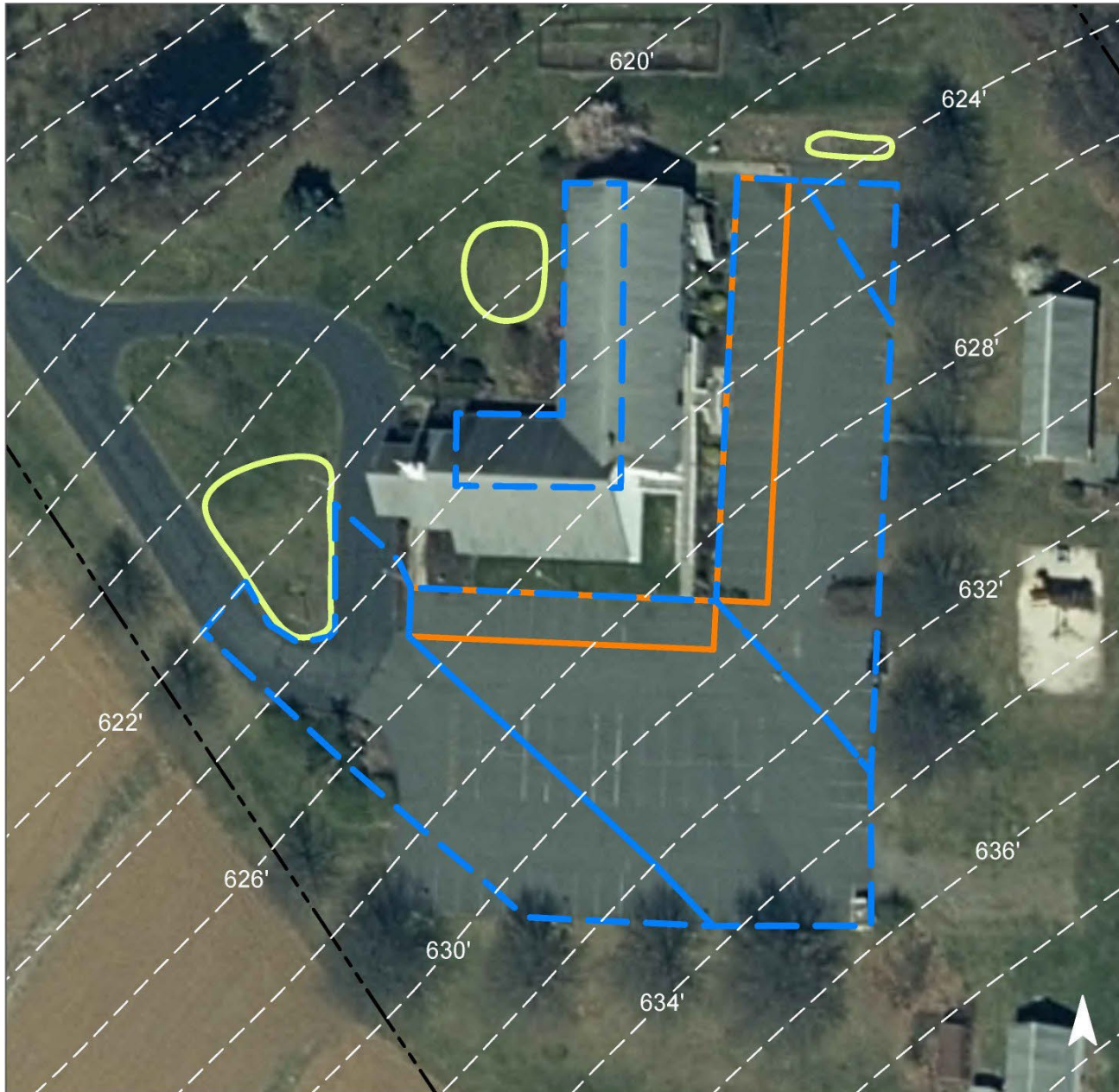
Block and Lot: Block 29, Lot 20.03

Rain gardens can be installed off the north and west ends of the parking lot, and the west face of the church to capture, treat, and infiltrate stormwater runoff. In the west end of the parking lot, a trench drain could be installed on the western side of the roundabout to increase stormwater runoff capture. The existing parking spaces off the south and east faces of the building can be converted into pervious pavement to capture and infiltrate stormwater. The pervious pavement off the south face of the building would collect runoff from the parking lot and via downspouts which require disconnection, and the pervious pavement off the east face would collect runoff 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 50"
16	71,830	3.5	36.3	329.8	0.056	2.24

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	14,635	0.433	65	30,530	1.15	3,695	\$36,950
Pervious pavement	23,795	0.705	105	49,630	1.87	5,520	\$138,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Long Valley Presbyterian Church

-  bioretention system
-  pervious pavement
-  captured drainage area
-  property line
-  2020 Aerial: NJOIT, OGIS

0 30' 60'

OLD FARMERS ROAD ELEMENTARY SCHOOL

RAP ID: 13

Subwatershed: Raritan River South Branch

Site Area: 636,598 sq. ft.

Address: 51 Old Farmers Road
Long Valley, NJ 07853

Block and Lot: Block 35, Lot 3.01



Two rain gardens can be installed to capture, treat, and infiltrate stormwater runoff from the building's roof as well as the adjacent 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"
24	151,534	7.3	76.5	695.7	0.118	4.16

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	0.349	58	27,290	0.96	3,350	\$16,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



OLD FARMERS ROAD ELEMENTARY SCHOOL

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

0 50' 100'

SCHOOLEYS MOUNTAIN PARK PARKING

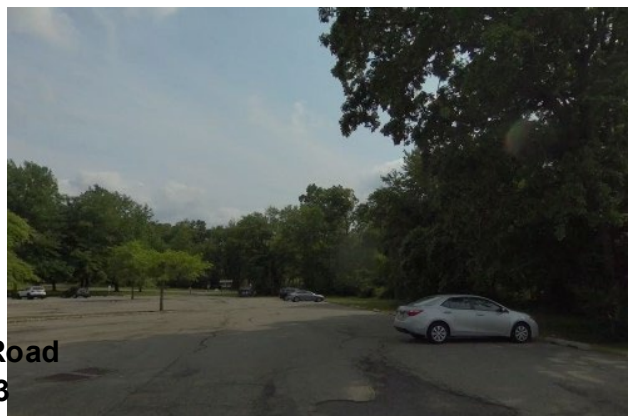
RAP ID: 14

Subwatershed: Raritan River South Branch

HUC 14: 02030105010050

Site Area: 1,975,631 sq. ft.

Address: 91 East Springtown Road
Long Valley, NJ 07853



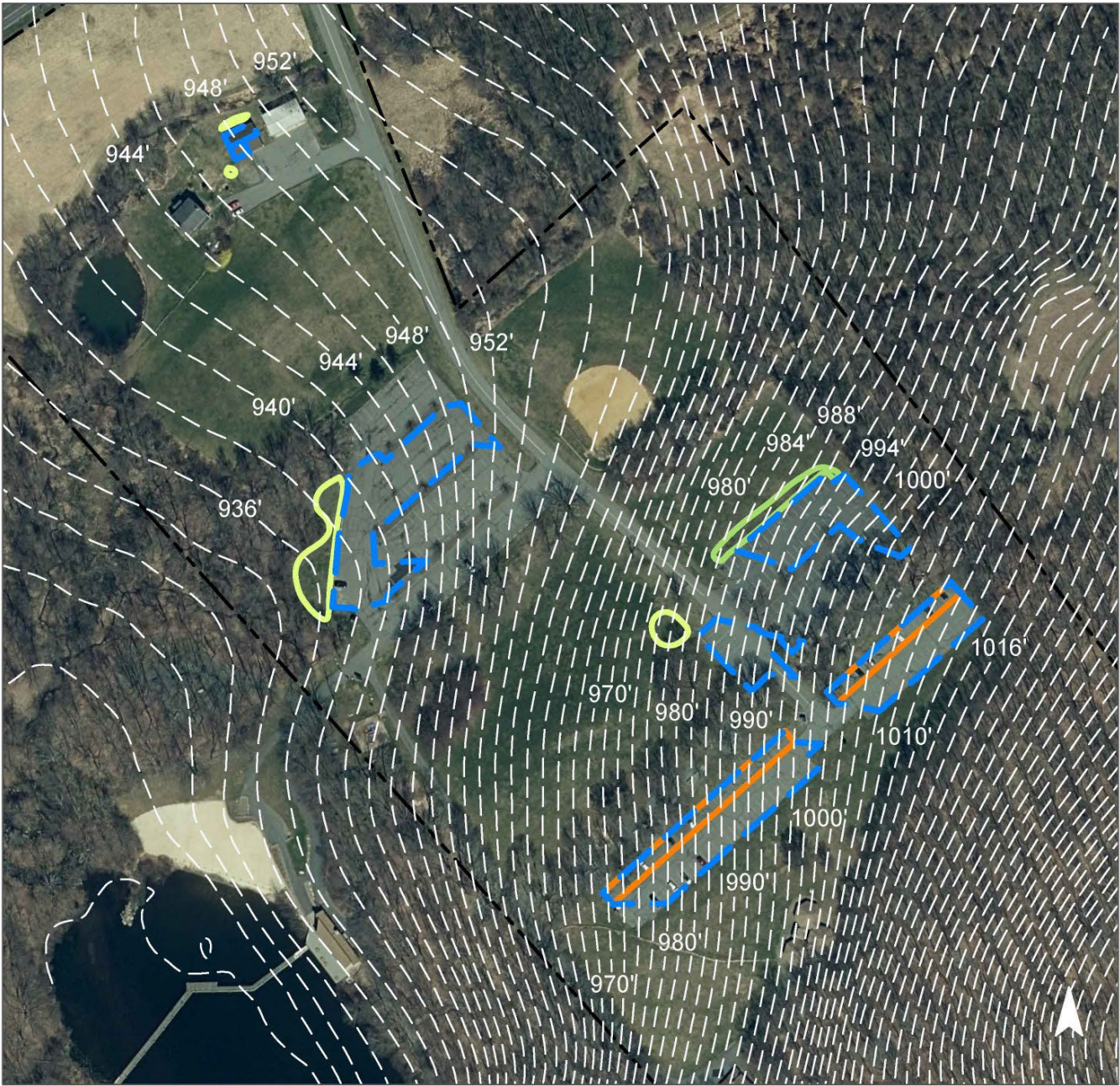
Block and Lot: Block 25, Lot 56.01,56.02

Rain gardens can be installed to capture, treat, and infiltrate stormwater runoff coming from the rooftops of buildings in the northwest corner of the property, in the west corners of the central parking lot, and the smaller parking lot further southeast. A bioswale can be installed off the northern edge of the central eastern parking lot to treat stormwater runoff while conveying it toward a catch basin in the western corner of this lot. In the furthest southeast parking lots, rows of parking stalls can be converted to pervious pavement to capture and infiltrate stormwater runoff from the 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 50"
10	206,323	9.9	104.2	947.3	0.161	6.43

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	28,255	0.837	124	58,930	2.21	7,065	\$70,650
Bioswale	12,310	0.182	38	11,520	0.12	3,080	\$30,800
Pervious Pavement	33,080	0.979	144	69,000	2.59	10,680	\$267,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Schooleys Mountain Park Parking

- bioretention system
- bioswale
- pervious pavement
- captured drainage area
- property line
- 2020 Aerial: NJOIT, OGIS



ST. LUKE PARISH

RAP ID: 15

Subwatershed: Raritan River South Branch

Site Area: 494,989 sq. ft.

Address: 265 West Mill Road
Long Valley, NJ 07853

Block and Lot: Block 34 Lot 38

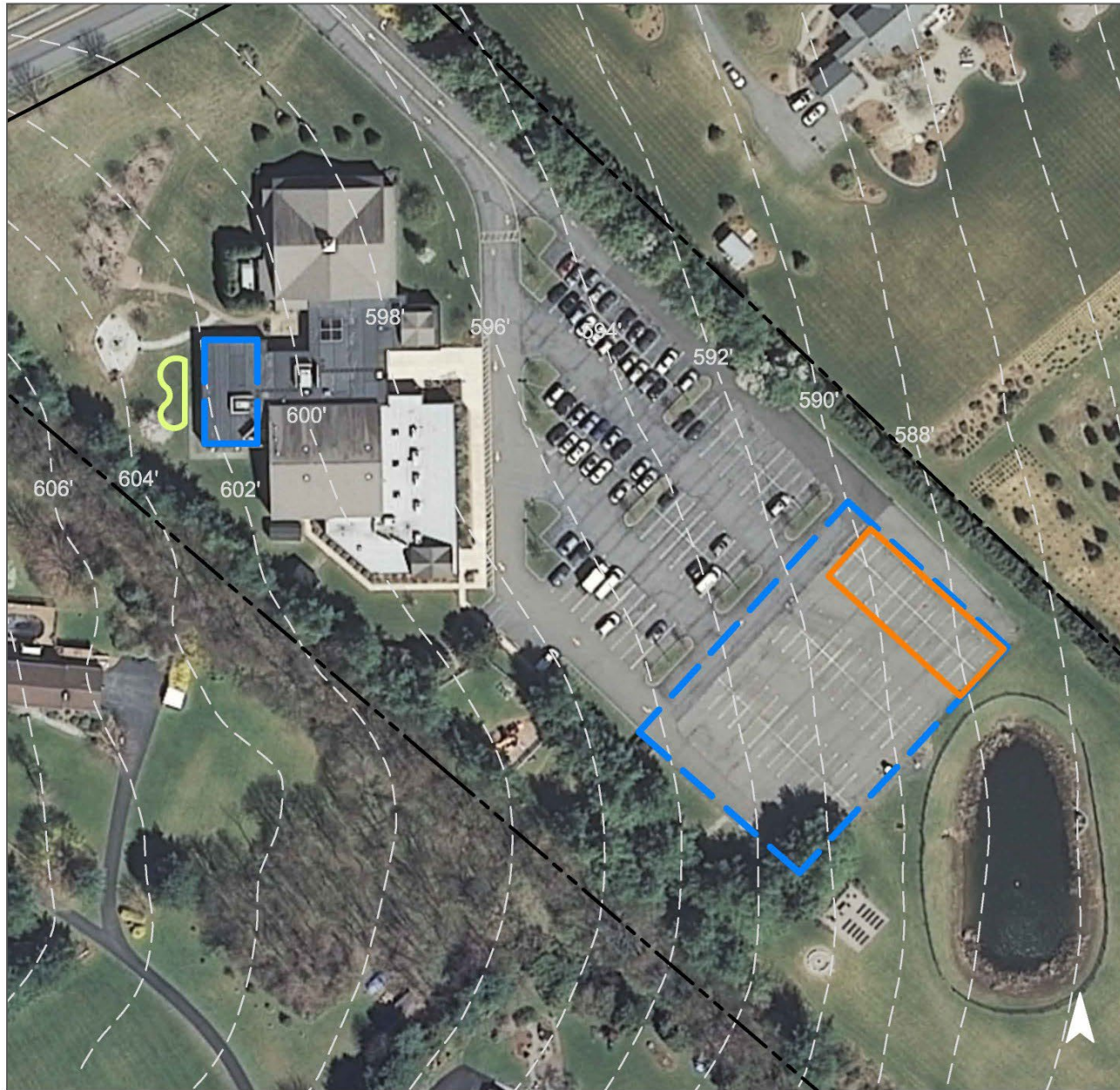


A bioretention system can be installed to infiltrate the water from three disconnected downspouts on the west side of the building. In addition, pervious pavement is proposed along the southeast corner of the parking lot to the parking lot's drainage area. A preliminary soil assessment suggests that 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	136,492	6.6	68.9	626.7	0.106	3.74

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	0.060	10	4,710	0.17	580	\$2,900
Pervious pavement	0.700	117	54,730	1.93	4,800	\$120,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



St. Luke Parish

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

0 50' 100'



ST. MARK THE EVANGELIST ROMAN CATHOLIC CHURCH

RAP ID: 16

Subwatershed: Raritan River South
Branch

Site Area: 366,270 sq. ft.

Address: 59 Spring Lane
Long Valley, NJ 07853

Block and Lot: Block 20 Lot 90

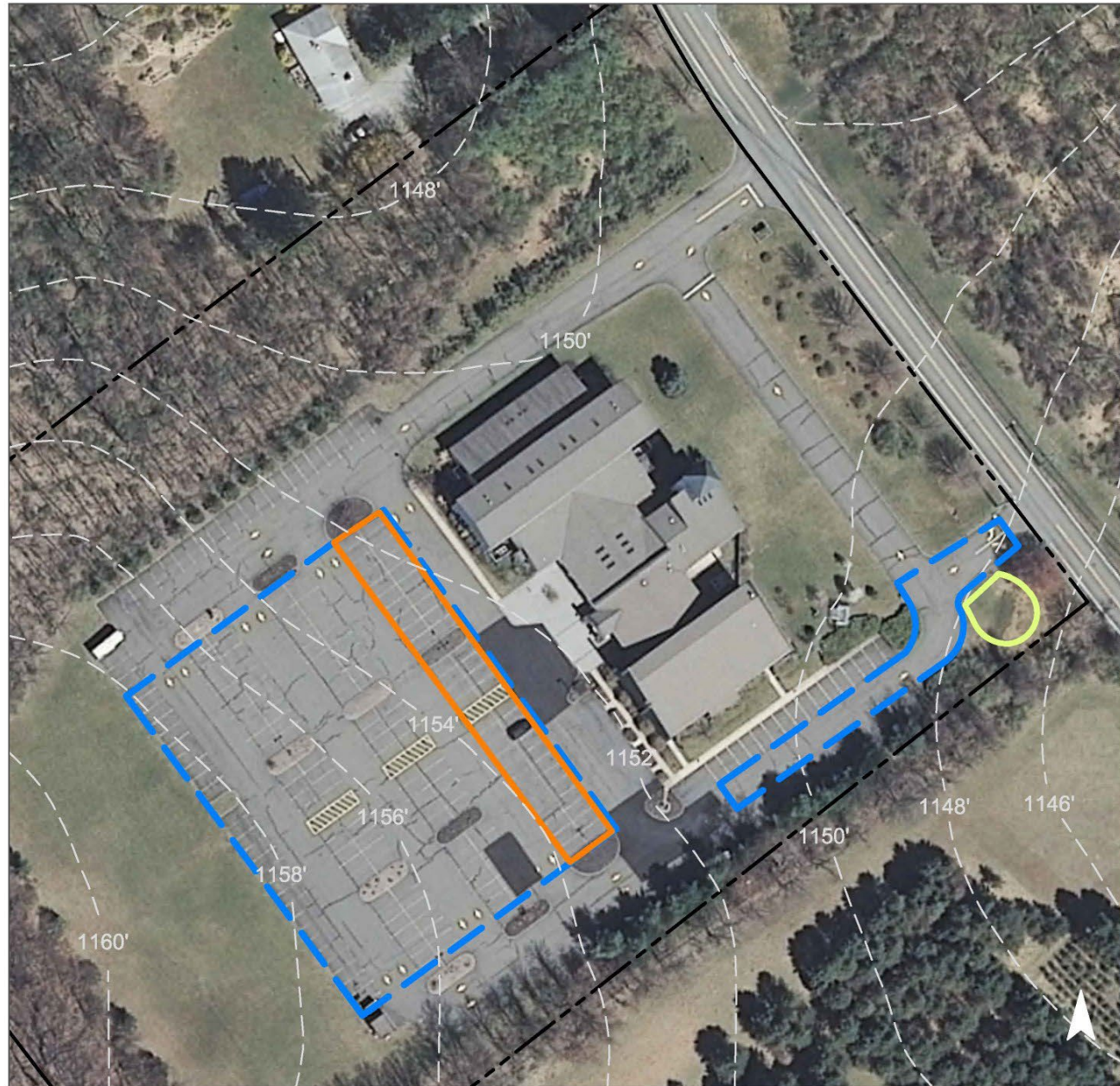


A bioretention system can be installed in the southeast corner of the property to mitigate flooding. Additionally, pervious pavement is suggested adjacent to the southwest edge of the building to capture and infiltrate stormwater runoff from the parking lot. A preliminary soil assessment suggests that 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"
43	158,478	7.6	80.0	727.6	0.123	4.35

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	0.159	27	12,420	0.44	1,525	\$7,625
Pervious pavement	1.473	247	115,100	4.06	8,910	\$222,750

GREEN INFRASTRUCTURE RECOMMENDATIONS



St. Mark the Evangelist Roman Catholic Church

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

0 50' 100'

WASHINGTON TOWNSHIP DEPARTMENT OF PUBLIC WORKS

RAP ID: 17

Subwatershed: Raritan River South Branch

HUC 14: 02030105010050

Site Area: 576,734 sq. ft.

Address: 54 Rock Road
Long Valley, NJ 07853



Block and Lot: Block 23, Lot 16.01

Rain gardens can be installed off the northwest corner and southern edge of the two buildings in the west edge of the property, and off the southern facades of the two buildings in the southeast edge of the property to capture, treat, and infiltrate stormwater from the rooftops via downspouts requiring disconnection. Rows of parking stalls off the west face of the western buildings, south face of the building in the northeast, and northwest corner of the building in the east can be converted to pervious pavement to capture and infiltrate stormwater runoff. The northeast and east buildings require one downspout each to be disconnected. 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 50"
57	329,629	15.9	166.5	1,513.4	0.257	10.27

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	5,540	0.164	25	11,560	0.43	1,385	\$13,850
Pervious pavement	21,085	0.624	91	43,980	1.65	5,405	\$135,125

GREEN INFRASTRUCTURE RECOMMENDATIONS



Washington Township Department of Public Works

-  bioretention system
-  pervious pavement
-  captured drainage area
-  property line
-  2020 Aerial: NJOIT, OGIS



WASHINGTON TOWNSHIP MUNICIPAL BUILDING

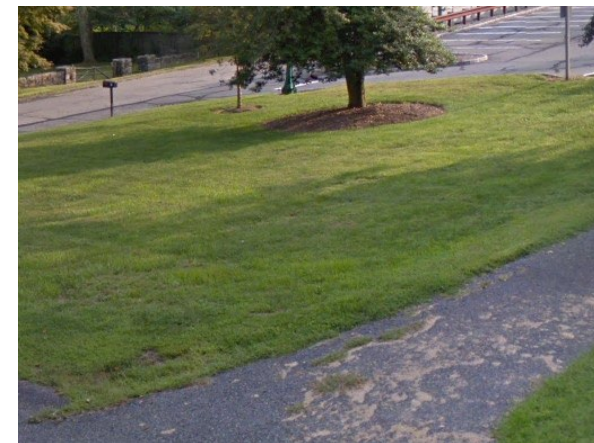
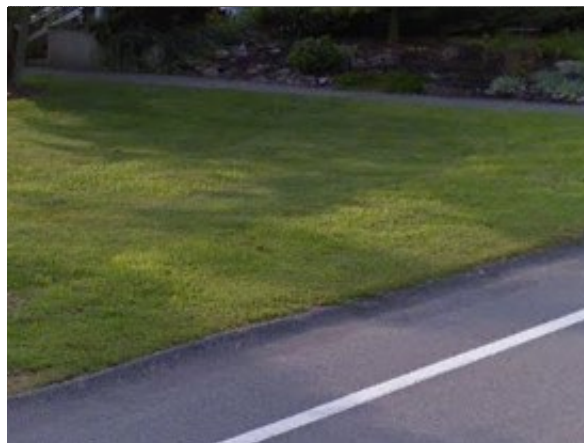
RAP ID: 18

Subwatershed: Raritan River South Branch

Site Area: 42,944 sq. ft.

Address: 43 Schooleys Mountain Road
Long Valley, NJ 07853

Block and Lot: Block 26 Lot 2

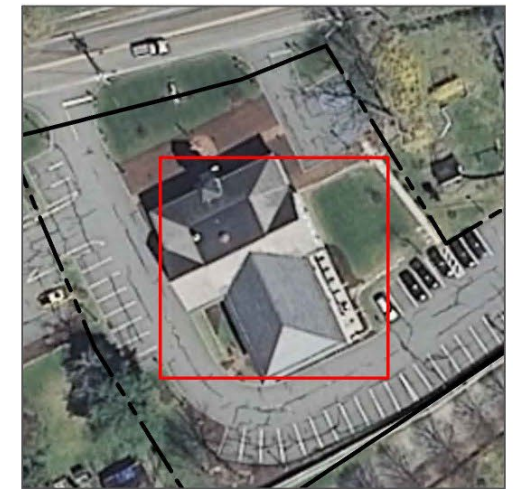
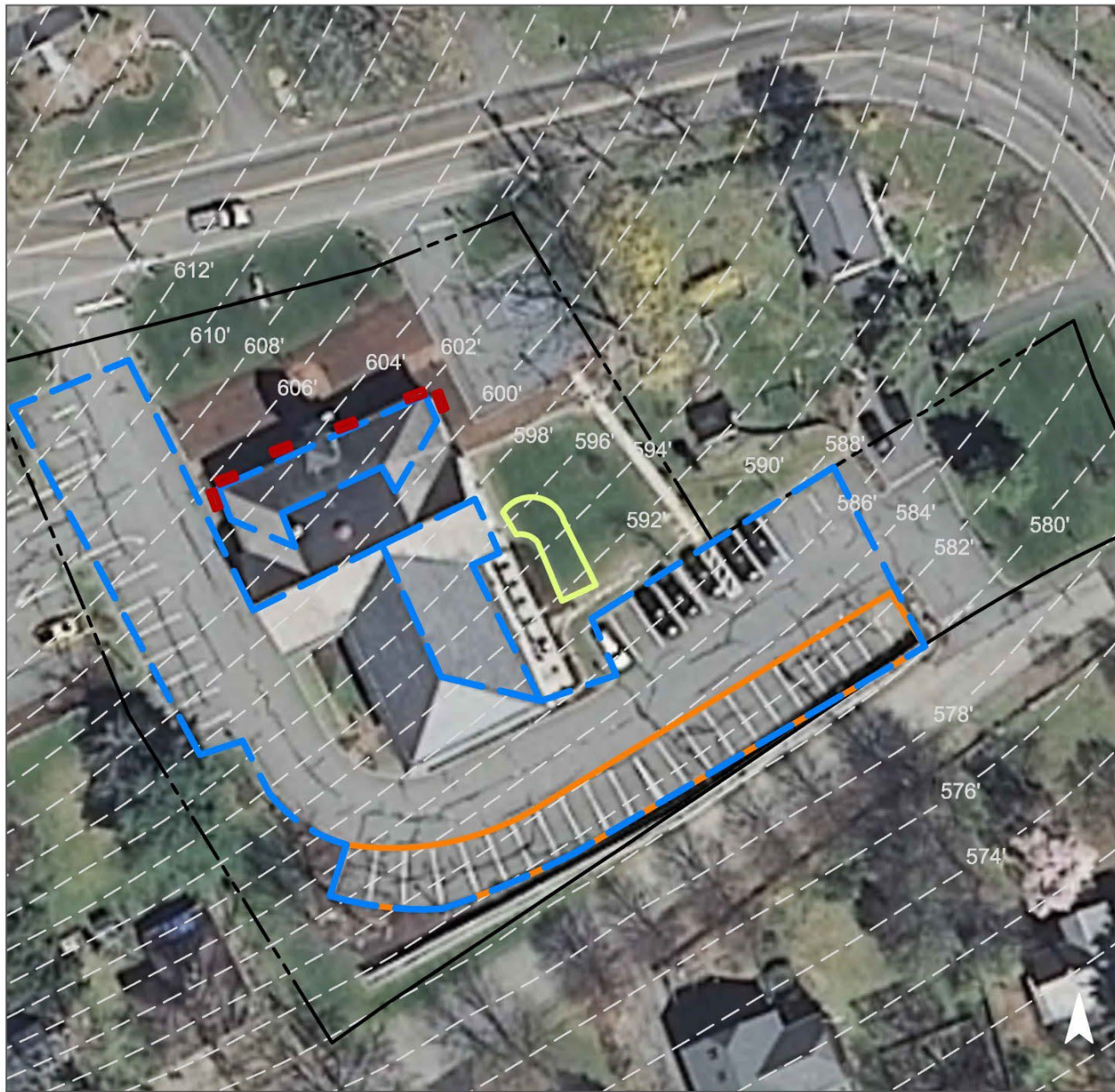


A rain garden can be installed adjacent to the building to infiltrate water from two connected downspouts. Additionally, pervious pavement can capture and infiltrate the stormwater runoff from the entire parking lot and a portion of the roof. Downspout planter boxes can be installed at downspouts to capture runoff from the roof as well. 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"
60	34,223	2.3	24.2	220.0	0.027	0.94

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 system	0.039	7	3,050	0.11	400	\$2,000
Pervious pavement	0.519	87	40,560	1.43	4,020	\$100,500
Planter boxes	n/a	5	n/a	n/a	6 (boxes)	\$6,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Washington Township Municipal Building

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

0 25' 50'

WASHINGTON TOWNSHIP POLICE DEPARTMENT

RAP ID: 19

Subwatershed: Raritan River South Branch

HUC 14: 02030105010050

Site Area: 105,858 sq. ft.

Address: 1 East Springtown Road
Long Valley, NJ 07853



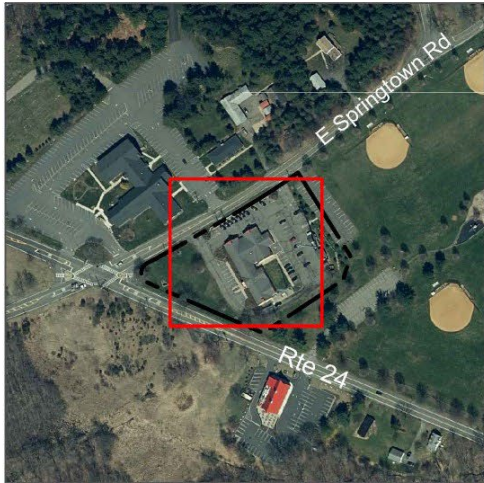
Block and Lot: Block 24, Lot 8,8.01

A rain garden off the southeast facade of the building to capture, treat, and infiltrate stormwater runoff from the rooftop. The rows of parking stalls off the southwest and northeast facades of the building can be converted into pervious pavement to capture and infiltrate stormwater from the rooftop. Two cisterns could be installed off the northeast corner and eastern nook of the building to divert and detain stormwater runoff for later non-potable reuse such as washing police vehicles. All stormwater conveyed from the rooftop is via downspouts which would require disconnection. 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 50"
66	69,597	3.4	35.2	319.5	0.054	2.17

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	2,145	0.064	10	4,470	0.17	535	\$5,350
Pervious pavement	23,275	0.689	101	48,550	1.82	6,040	\$151,000
Rainwater Harvesting	2,110	0.062	10	1,650	0.00	1,650 (gal)	\$4,950

GREEN INFRASTRUCTURE RECOMMENDATIONS



Washington Twp. Police Dept.

- bioretention system
- pervious pavement
- rainwater harvesting
- captured drainage area
- property line
- 2020 Aerial: NJOIT, OGIS



WASHINGTON TOWNSHIP PUBLIC LIBRARY AND SENIOR CITIZEN CENTER

RAP ID: 20

Subwatershed: Raritan River South Branch

HUC 14: 02030105010050

Site Area: 3,126,890 sq. ft.

Address: 35 & 37 East Springtown Road
Long Valley, NJ 07853

Block and Lot: Block 24, Lot 7

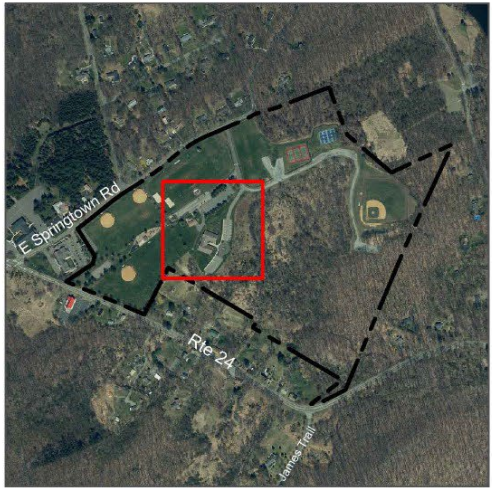
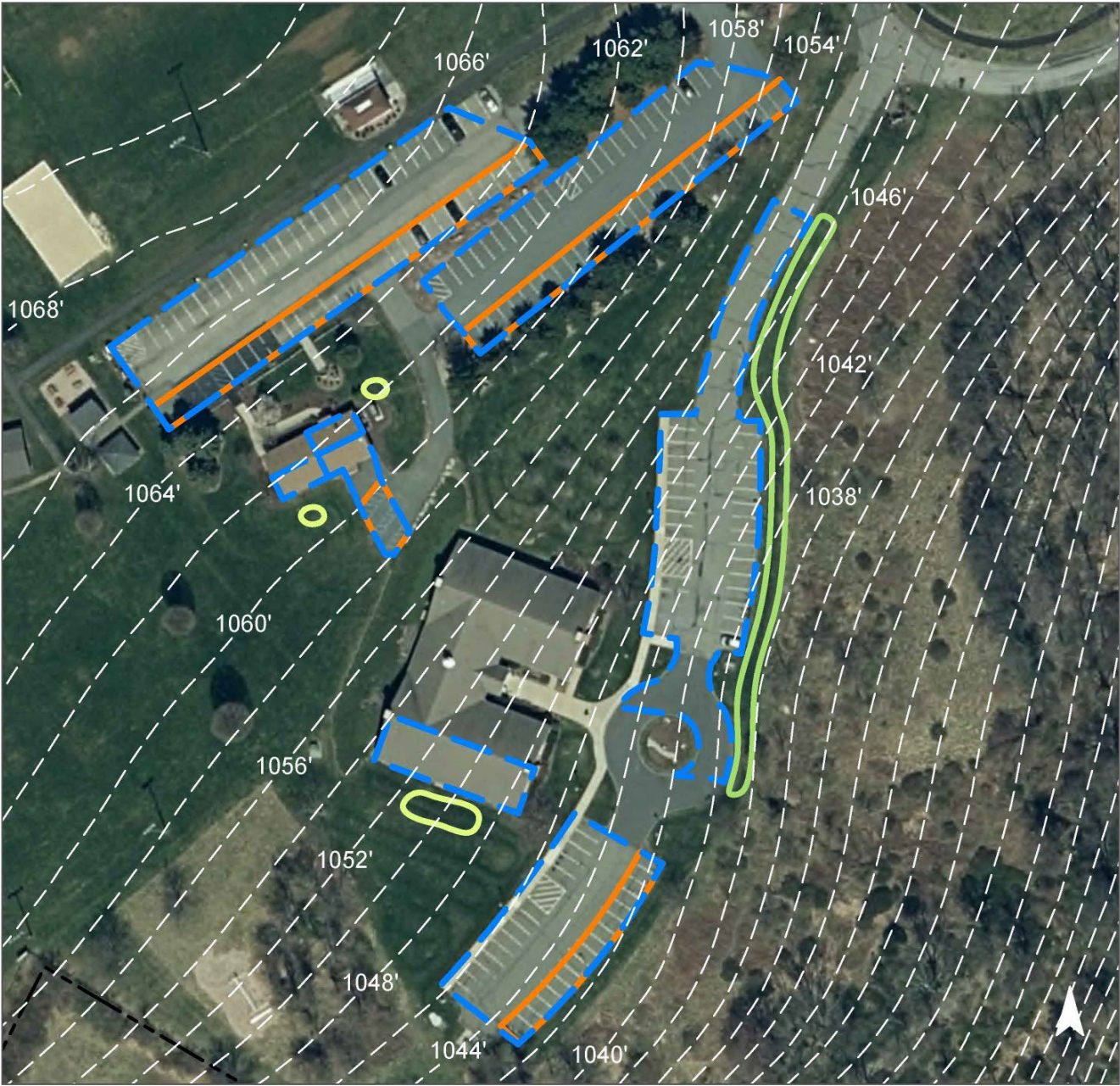


Rain gardens can be installed off the northeast and southwest corners of the senior center, and the south face of the library to capture, treat, and infiltrate stormwater from the roof via disconnected downspouts. Rows of parking stalls in the two parking lots to the north, the small parking lot off the south facade of the senior center, and the southern tip of the library's parking lot can be converted to pervious pavement to capture and infiltrate stormwater from the roof and pavement. A bioswale can also be installed along the northern half of the library's parking lot to convey water to the catch basins along the way while treating it. 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 50"
9	292,858	14.1	147.9	1,344.6	0.228	9.13

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	4,160	0.123	19	8,680	0.33	1,035	\$10,350
Bioswale	16,175	0.239	50	15,130	0.26	4,045	\$40,450
Pervious Pavement	45,780	1.355	200	95,490	3.59	13,410	\$335,250

GREEN INFRASTRUCTURE RECOMMENDATIONS



Washington Twp. Public Library & Senior Citizen Center

-  bioretention system
-  bioswale
-  pervious pavement
-  captured drainage area
-  property line
-  2020 Aerial: NJOIT, OGIS

0 50' 100'

WEST MORRIS CENTRAL HIGH SCHOOL

RAP ID: 21

Subwatershed: Raritan River South Branch

HUC 14: 02030105010050

Site Area: 1,827,488 sq. ft.

Address: 259 Bartley Road
Chester, NJ 07930



Block and Lot: Block 17, Lot 8

Rain gardens may be installed off portions of the west, south, and east facades of the school building to capture, treat and infiltrate stormwater runoff. Runoff would be conveyed to these rain gardens via downspouts requiring disconnection. Two existing swales can be converted to bioswales on the north and northwest sections of the property to treat stormwater runoff from adjacent parking lots, while conveying it to catch basins. Rows of parking stalls in the southeastern and northeastern parking lots can be converted to pervious pavement to capture and infiltrate stormwater runoff from the 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 50"
40	734,334	35.4	370.9	3,371.6	0.572	22.89

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	38,760	1.148	169	80,840	3.04	9,690	\$96,900
Bioswale	123,605	1.830	386	115,570	2.78	30,900	\$309,000
Pervious Pavement	29,370	0.870	127	61,260	2.30	8,280	\$207,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



West Morris Central High School

-  bioretention system
-  bioswale
-  pervious pavement
-  captured drainage area
-  property line
-  2020 Aerial: NJOIT, OGIS



ZION LUTHERAN CHURCH AND PARISH CENTER

RAP ID: 22

Subwatershed: Raritan River South Branch

HUC 14: 02030105010050

Site Area: 401,736 sq. ft.

Address: 11 Schooleys Mountain Road
Long Valley, NJ 07853

Block and Lot: Block 33, Lot 44

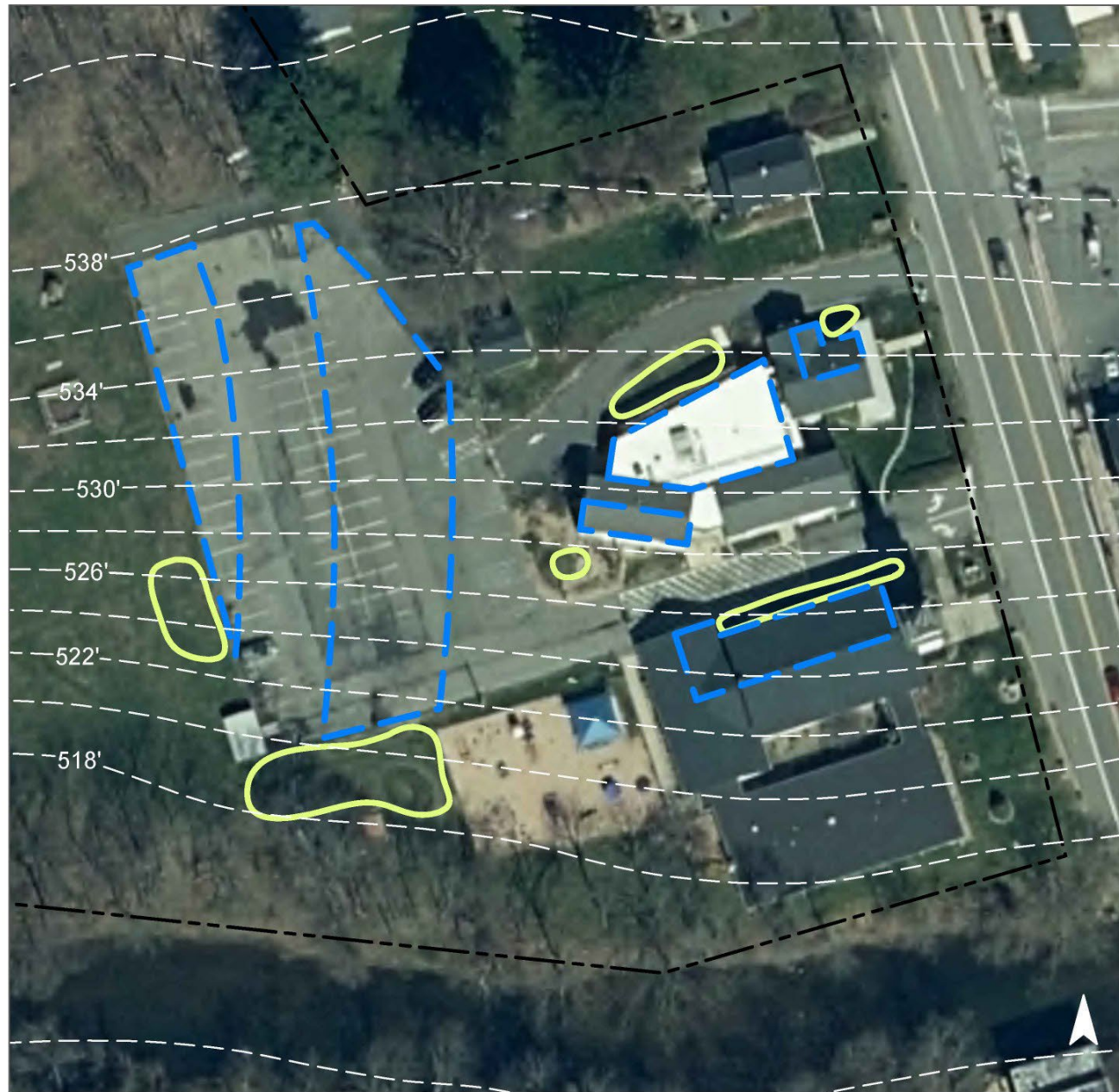


Rain gardens can be installed on the north and southwest faces of the church, the north face of the parish center building, and along the southwest corner of the parking lot to capture, treat, and infiltrate stormwater from the rooftops via disconnected downspouts and from the parking lot. A preliminary 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 50"
16	63,124	3.0	31.9	289.8	0.049	1.97

Recommended Green Infrastructure Practices	Drainage Area (sq. ft.)	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	15,560	0.461	68	32,460	1.22	3,885	\$38,850

GREEN INFRASTRUCTURE RECOMMENDATIONS



Zion Lutheran Church and Parish Center

-  bioretention system
-  captured drainage area
-  property line
-  2020 Aerial: NJOIT, OGIS

0 30' 60'

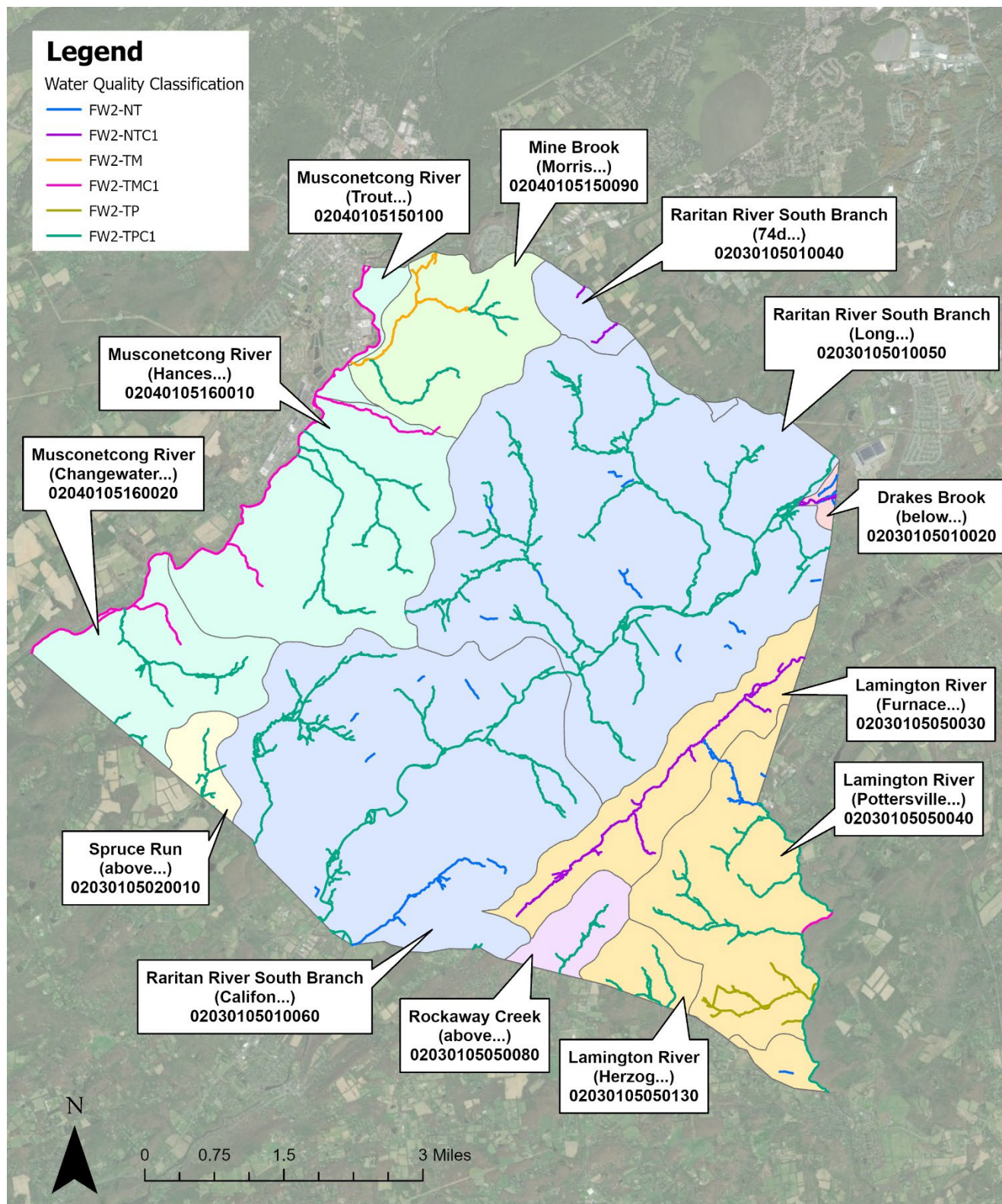


Figure 13. Water Quality Classification of Surface Waters in Washington Township

Table 11. Water Quality Classification of Surface Waters in Washington Township

Surface Water Quality Classification	Surface Water Quality Code	Miles	Percent of Municipal Streams
Freshwater 2, non-trout	FW2-NT	8.4	6.7%
Freshwater 2, non-trout, Category One	FW2-NTC1	8.4	6.6%
Freshwater 2, trout production, Category One	FW2-TPC1	91.4	72.5%
Freshwater 2, trout maintenance	FW2-TM	2.8	2.3%
Freshwater 2, trout production	FW2-TP	3.8	3.0%
Freshwater 2, trout maintenance, Category One	FW2-TMC1	11.4	9.0%

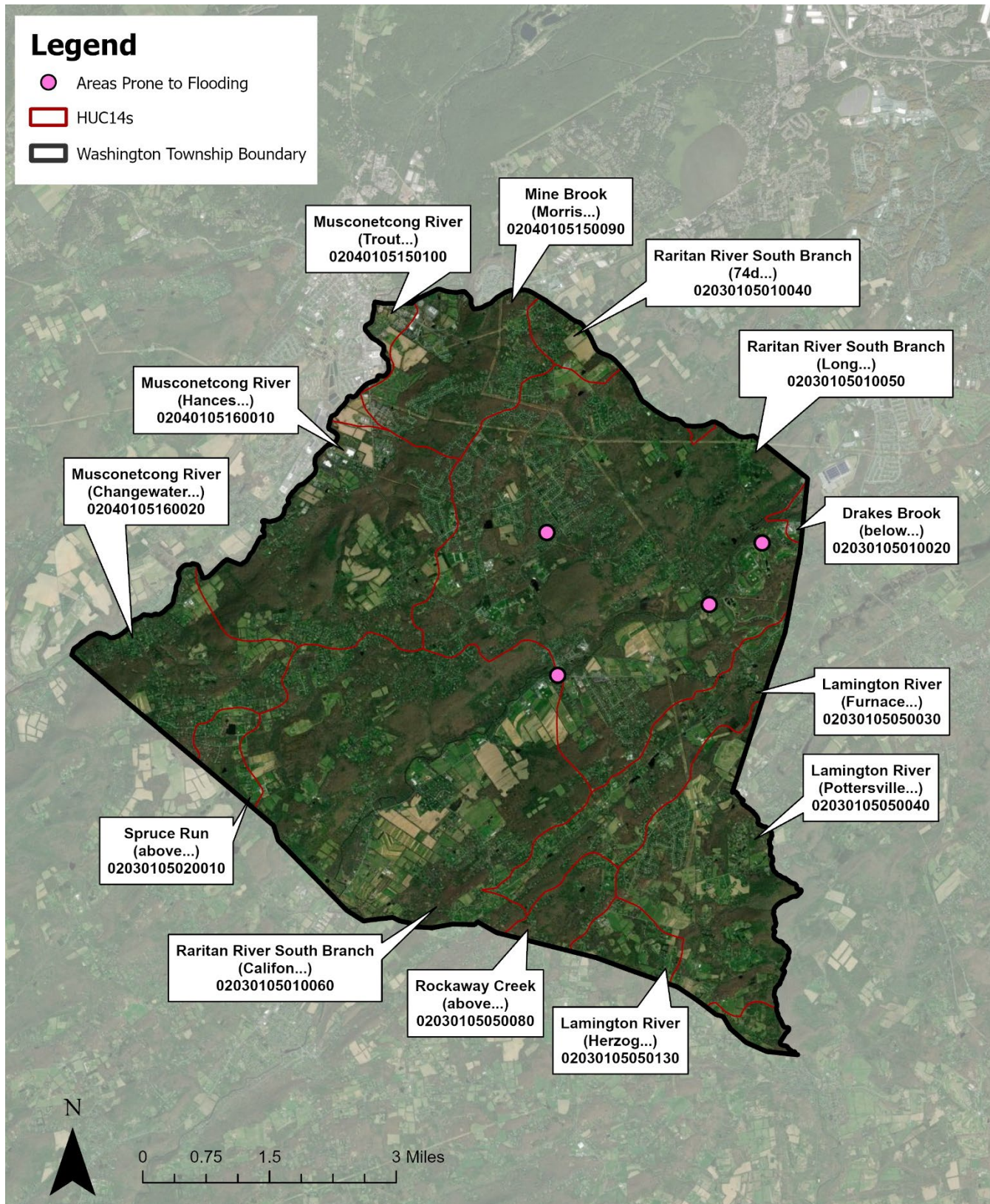


Figure 14. Areas Prone to Flooding in Washington Township