

ADOPTED 2018 WATER AND SEWER PLAN

CHAPTER 4 SEWER PLAN FOR COMMUNITY SYSTEMS

The proper handling, treatment and disposal of wastewater are some of the primary goals of the Water and Sewer Plan. Wastewater or sewage is disposed in two ways, either through transmission conveyances to wastewater treatment plants or through individual septic systems. This chapter discusses the County's existing sewer system, treatment plants, future sewer needs, biosolids management and financial needs. It includes discharge permits for smaller plants that discharge treated wastewater into County streams or rivers. Individual septic systems are discussed in Chapter 5, Rural Sanitation.

4.1 EXISTING SEWER SYSTEM

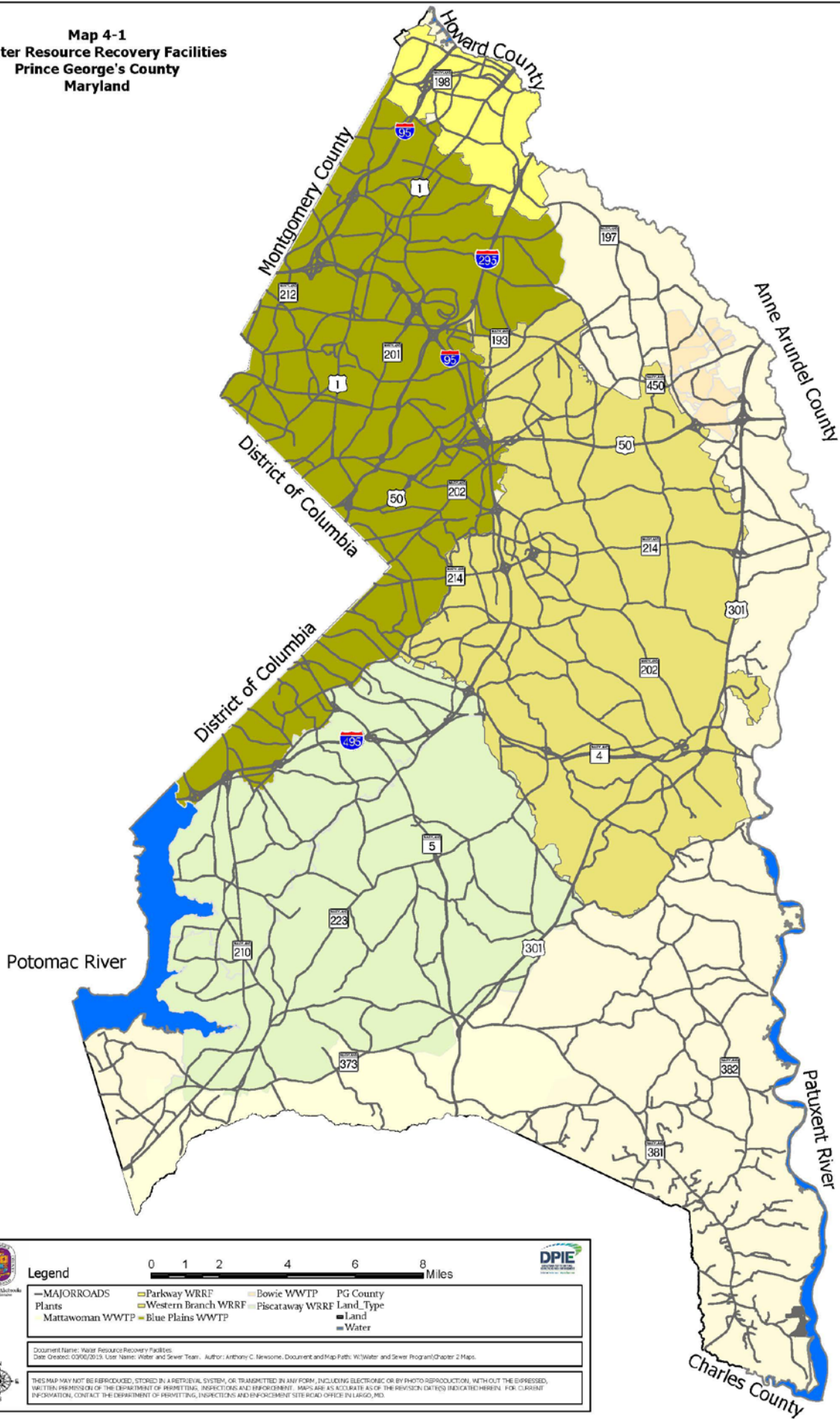
Six drainage basins in Prince George's County are served by public sewage treatment systems. **Map 4-1** identifies the six basins and locates the wastewater resource recovery facilities (WRRF). Four of these municipal plants are located in the County, whereas the Blue Plains WWTP is located in Washington, D.C., and is operated by the District of Columbia Water and Sewer Authority (DC Water). The Mattawoman WWTP is located in and operated by Charles County.


The Washington Suburban Sanitary Commission (WSSC) operates three of the four municipal WWTP located in Prince George's County. These include Parkway, Western Branch and Piscataway. As of 2018, these three WSSC wastewater treatment plants will now be referred to as Water Resource Recovery Facilities (WRRF). The City of Bowie operates a WWTP serving the northern portion of the city. A description of each of the plants is in Section 4.2. An inventory of municipal, industrial, community and institutional wastewater treatment plants located in Prince George's County can be found in **Table 4-1**.

Any treated wastewater discharge that exceeds an average of 5,000 gallons per day must be included in the County's Water and Sewer Plan and must have a State discharge permit issued by the Maryland Department of the Environment (MDE). A State discharge permit must be renewed every five years. A complete listing of discharge permits issued as new, renewal or pending is attached in **Appendix 4-1** of this chapter.

The County Health Department conducts sanitary surveys of areas served by septic systems by request. Occasionally, these surveys lead to a Health Department recommendation that public sewer service be extended to the properties in question to alleviate any health hazard. The Health Department is collaborating with other county agencies and WSSC to identify areas that are unserved or underserved by a public sewerage system. These areas are addressed in Section 4.3.6 of this chapter and as **Appendix G** of this plan.


**Map 4-1
Water Resource Recovery Facilities
Prince George's County
Maryland**





Legend

0 1 2 4 6 8 Miles



| | | | |
|-----------------|-----------------------|-------------------|-----------|
| —MAJORROADS | ■ Parkway WRRF | ■ Bowie WWTP | PG County |
| Plants | ■ Western Branch WRRF | ■ Piscataway WRRF | Land Type |
| Mattawoman WWTP | ■ Blue Plains WWTP | ■ Land | ■ Water |

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Table 4-1. Inventory of Existing Wastewater Treatment Plants (WWTP) Located in Prince George’s County

| <u>Name</u> | <u>Location</u> | <u>Type Treatment</u> | <u>Point of Discharge</u> | <u>Existing Capacity (mgd)</u> | <u>Flows (mgd) Avg/Peak</u> | <u>Operating Agency</u> |
|---|-----------------|--|----------------------------------|--------------------------------|-----------------------------|-------------------------|
| <u>Municipal (Public)</u> | | | | | | |
| Parkway | Bowie | Tertiary | Patuxent River | 7.5 | 6.26 | WSSC |
| Western Branch | Upper Marlboro | Tertiary | Western Branch | 30.6 | 19.72 | WSSC |
| Piscataway | Piscataway | Tertiary | Piscataway Creek | 30.0 | 21.84 | WSSC |
| Bowie | Bowie | Tertiary | Patuxent River | 3.3 | 2.2 | City of Bowie |
| <u>Industrial</u> | | | | | | |
| PEPCO- Chalk Point | Aquasco | Package Plant Secondary Treatment Activated Sludge | Patuxent River | | 0.008 | PEPCO |
| <u>Community/ Institutional</u> | | | | | | |
| Brandywine E.S. | Brandywine | Septic Tank and Filter | Timothy Branch | | 0.01 | County |
| Cheltenham Boys Village | Cheltenham | Secondary Trickling Filter | Piscataway Creek | | 0.18/0.085 | State |
| Edgemeade School | Brandywine | Septic Tank and Filter | Tributary of Patuxent River | | | County |
| Edgemeade School – Adm. | Brandywine | Septic Tank and Filter | Tributary of Patuxent River | | | County |
| Bowie State University | Bowie | Secondary Treatment Trickling Filter/Sand | Patuxent River | 0.08 | 0.08 | State |
| Patuxent Wildlife Headquarters | Laurel | Secondary Treatment Activated Sludge | Pond Patuxent River | 0.027 | | U.S. |
| Patuxent Research Refuge | Laurel | Tertiary | Patuxent River | 0.0067 | | U.S. |
| Andrews AFB | Camp Springs | Septic Tank | | | | U.S. |
| Andrews AFB Brandywine Housing | Brandywine | Septic Tank and Filter | Timothy | | | U.S. |
| Beltsville USDA Horticultural Station | Beltsville | Activated Sludge/ Overland Flow | Little Paint Branch | 0.25 | 0.206 | U.S. |
| Beltsville USDA Research Station | Beltsville | Activated Sludge/ Overland Flow | Beaverdam Creek | 0.5 | 0.4 | U.S. |
| Beltsville Pharmacological Lab | Beltsville | Secondary Treatment Activated Sludge | Beaverdam Creek | 0.02 | 0.01 | U.S. |
| Globecom Sewage Treatment Plant | Brandywine | Secondary Treatment Activated Sludge | Tributary of Mattawoman Creek | 0.005 | | U.S. |

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Marinas in Prince George's County require a wastewater collection and treatment system, or a pumpout station to connect the marina to a community sewer system. The County Health Department inspects and approves the wastewater treatment and sanitation facilities at all County marinas. The sanitation requirements are set in COMAR 26.24.04.03 and County Code Subtitle 22. The Fort Washington Marina meets these requirements. The Tantallon Marina is planning to provide the required facilities over the term of this plan. The Bladensburg Marina, while technically a marina, has no tie-up facilities or the ability to receive vessels large enough to have sanitary holding tanks and, therefore, shall not be required to have pumpout facilities.

4.2 WASTEWATER TREATMENT PLANTS SERVING THE COUNTY

Each wastewater treatment plant in the County has specific capacity, wastewater flow and commitments of capacity for future flows authorized by MDE. The following subsections describe the statistics for each of the wastewater treatment plants. Capacity is defined as what is currently being treated and what is planned for in the future. Flow statistics are defined as base flow and peak flow.

A 1986 Agreement with the State of Maryland on Monitoring and Control of Sewage Flows and Allocations requires all treatment plants to prepare a quarterly report on existing flows and flow commitments. Quarterly, WSSC adds flow commitments from final plat recordation and subtracts flow figures from service hook-ups during the same period. The following sections include the quarterly reports for each of the basins.

WSSC also produces monthly reports on all service approvals and service hookups. These approvals are calculated into flow and are subtracted from the available capacity for each basin.

The growth and development in the County's Growth Policy Area has decreased the available capacity faster than expected at the Parkway, Western Branch and Piscataway WRRFs. However, based on WSSC's Wastewater Flow Projections and Demographic Analysis of 2017, the capacities of Parkway, Western Branch and Piscataway WRRFs should be adequate through 2045. The wastewater flow projections were updated with the Round 9.0 Metropolitan Washington Council of Government (MWCOG) and County Planning Department's cooperative demographic forecasts and the forecast updates that were forwarded to WSSC.

4.2.1 Blue Plains Wastewater Treatment Plant

Sewage originating in the Anacostia, Beaverdam and Oxon Run basins of Prince George's County is treated at the Blue Plains WWTP operated by DC Water. Blue Plains is located in southwest Washington, D.C., adjacent to the U.S. Naval Research Lab facilities on the Potomac River. The Blue Plains WWTP has been the principal wastewater treatment facility for the Washington Metropolitan area since its original construction in 1938. Service to Prince George's and Montgomery Counties is provided under the terms of the 2012 Blue Plains Intermunicipal Agreement (IMA). The updated 2012 IMA was signed by the regional jurisdictions and became effective in April 2013.

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The IMA provides for wastewater conveyance, treatment and biosolids management in the Blue Plains service area. As a signatory to the IMA, Prince George's County recognizes the shared duties and obligations that are essential elements for effective regional wastewater management including:

- Honoring the wastewater capacity limitations at the points of discharge into the DC Water collection and treatment system;
- Equitably sharing in the capital costs of regional wastewater treatment, collection and biosolids management;
- Equitably sharing in operation and maintenance costs;
- Serving on the DC Water Board of Directors and Regional Committees;
- Defining the process of making future planning decisions;
- Providing a mechanism for continuing coordination, cooperation and communication; and
- Supporting a continuing water quality monitoring and evaluation program.

The IMA allocates plant capacity to each user and defines capital and operating cost formulas. WSSC is allocated plant capacity for those portions of Prince George's and Montgomery Counties in the Blue Plains Service Area and by authority of the 1983 Bi-County Agreement, WSSC determines the amount of wastewater flows from these counties to Blue Plains on a first-come, first-served basis. Under the terms of the IMA, WSSC pays for a flow-proportionate share (approximately 40 percent) of the operating costs, and a capacity-proportionate share (approximately 46 percent) of the capital costs at Blue Plains and various shared conveyance and related facilities. The allocated capacity to WSSC is 169.6 mgd of the total 370-mgd plant capacity. Allocated capacity in the DC Water sewage collection and conveyance facilities varies depending on the share of capacity allocated to WSSC. **Table 4-2** reflects the daily average wastewater flows to the Blue Plains WWTP and the authorized IMA limitations for the year 2017.

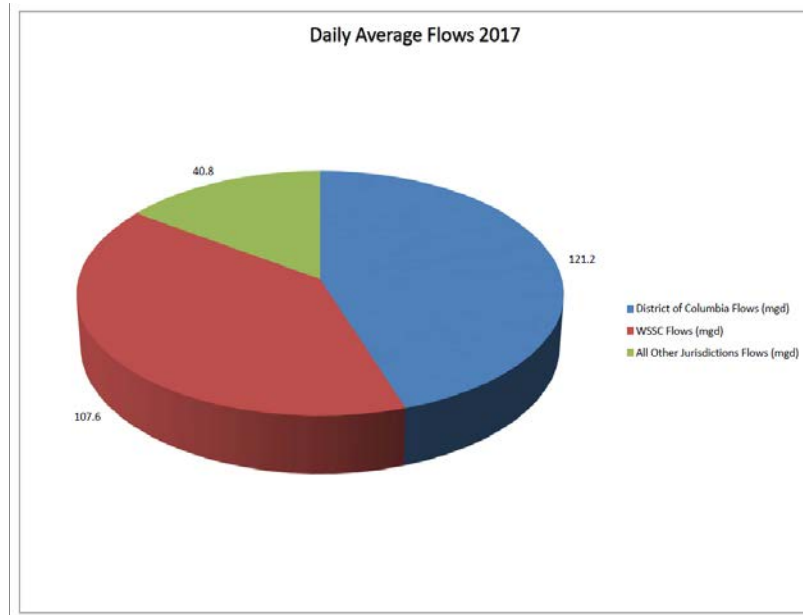
In 1996, Congress authorized the creation of the District of Columbia Water and Sewer Authority (then WASA, now DC Water) as an independent authority to operate the water and sewerage facilities within the District. The 11-member board includes six members from the District of Columbia and five members from the suburban users. Prince George's County has two representatives and two alternates on the Board. More than 318,000 Prince George's County residents, or 43 percent of its population, are served by Blue Plains through WSSC. The County's Board representatives are instrumental in setting policy, overseeing capital construction, and approving the operating and capital budgets of the water and wastewater facilities within the District.

Under the terms of the IMA that governs the County's use of the Blue Plains facility through WSSC, the District of Columbia is not currently obligated to expand the plant beyond the 370-mgd capacity. As such, planning is essential to manage available wastewater treatment and conveyance capacity.

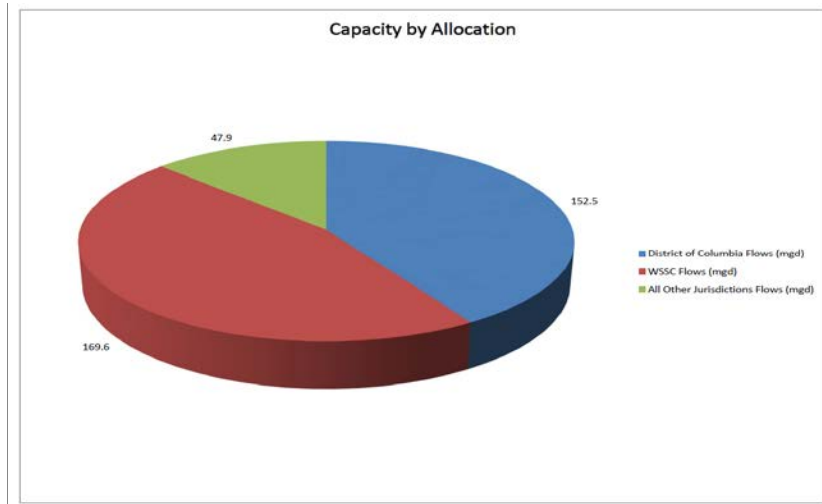
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Table 4-2 2017 Actual Daily Average Wastewater Flows to the Blue Plains WWTP and Intermunicipal Agreement (IMA) Allocations

| Month | Total Flows to Blue Plains (mgd) | District of Columbia Flows (mgd) | WSSC Flows (mgd) | All Other Jurisdictions Flows (mgd) |
|----------------|----------------------------------|----------------------------------|------------------|-------------------------------------|
| Jan-16 | 260.5 | 111.7 | 109.0 | 39.83 |
| Feb-16 | 244.2 | 100.9 | 104.3 | 38.90 |
| Mar-16 | 271.5 | 122.2 | 107.9 | 41.42 |
| Apr-16 | 290.5 | 133.4 | 113.9 | 43.16 |
| May-16 | 310.0 | 147.1 | 118.2 | 44.76 |
| Jun-16 | 267.8 | 117.3 | 108.7 | 41.77 |
| Jul-16 | 282.4 | 129.3 | 110.2 | 42.89 |
| Aug-16 | 288.5 | 132.5 | 113.8 | 42.23 |
| Sep-16 | 269.1 | 123.0 | 106.6 | 39.53 |
| Oct-16 | 258.6 | 118.5 | 100.5 | 39.63 |
| Nov-16 | 253.7 | 113.5 | 101.1 | 39.10 |
| Dec-16 | 238.3 | 105.0 | 97.3 | 36.01 |
| Daily Average | 269.6 | 121.2 | 107.6 | 40.8 |
| Total Capacity | 370 | 152.5 | 169.6 | 47.9 |



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4.2.2 Parkway Water Resource Recovery Facility

The Parkway basin in the northern part of the County covers an area of approximately 14 square miles, including the City of Laurel. Ten square miles of the basin is sewered. The Parkway Wastewater Treatment Plant is located on the western shore of the Patuxent River, south of Laurel, adjacent to the Baltimore-Washington Parkway. It has a total capacity of 7.5 million gallons per day (mgd). It is owned and operated by WSSC.

Statistics of the Parkway Water Resource Recovery Facility (FY 2017)

| | | |
|---------------------------|------|-----|
| Existing capacity | 7.5 | mgd |
| County-approved expansion | 2.9 | mgd |
| Total capacity | 10.4 | mgd |
| Existing flow | 6.26 | mgd |
| Remaining capacity | 1.24 | mgd |

Biosolids produced at the Parkway Branch are disposed of by offsite land application in Virginia and Maryland on permitted sites. Enhanced nutrient removal (ENR) facilities (denitrification filters) at the Parkway WWTP were completed in June 2013. The ENR process achieves a limit of less than four milligrams per liter of nitrogen in the effluent as an annual average.

4.2.3 Western Branch Water Resource Recovery Facility

The Western Branch WRRF is located approximately one mile southeast of the Town of Upper Marlboro at the Patuxent River. It is owned and operated by WSSC. The WRRF serves an area of approximately 113 square miles. The majority of the service area is the natural drainage basin of the Western Branch. Horsepen Basin, north of Bowie, is connected to the Western Branch

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system through a pumping station and force main. There are no plans to expand the capacity of the plant which is an enhanced nutrient removal facility designed to achieve a limit of four milligrams per liter of nitrogen in the effluent as an annual average. Between April and October of every year, the discharge limit for nitrogen is further reduced to 3 milligrams per liter.

Statistics of the Western Branch Water Resource Recovery Facility (FY 2017)

| | |
|------------------------|-----------|
| Existing capacity | 30.6 mgd |
| Total planned capacity | 30.6 mgd |
| Existing flow | 19.72 mgd |
| Remaining capacity | 10.88 mgd |

| Transmission statistics (mgd) | Peak | 2017 | |
|--------------------------------------|----------|------------|------------|
| | | Average | Maximum |
| | Capacity | Daily Flow | Daily Flow |
| Horsepen Pumping Station | 4.0 | 1.006 | 1.643 |
| Collington Branch Trunk Sewer | 18.4 | n/a | n/a |
| Charles Branch Trunk Sewer | n/a | n/a | n/a |
| Western Branch | n/a | n/a | n/a |

Biosolids produced at the Western Branch WRRF are hauled to a landfill in Virginia.

4.2.4 Piscataway Water Resource Recovery Facility

The Piscataway WRRF is located to the west of Indian Head Highway on the Piscataway Bay of the Potomac River and is owned and operated by WSSC. There are no plans for expansion of this plant which is an enhanced nutrient removal (ENR) facility. This ENR process achieves a limit of less than four milligrams per liter of nitrogen in the effluent as an annual average.

Statistics of the Piscataway Water Resource Recovery Facility (FY 2017)

| | |
|------------------------|-----------|
| Existing capacity | 30.0 mgd |
| Total planned capacity | 30.0 mgd |
| Existing flow | 21.84 mgd |
| Remaining capacity | 8.16 mgd |

| Transmission statistics (mgd) | Peak | 2017 | |
|--------------------------------------|----------|------------|------------|
| | | Average | Maximum |
| | Capacity | Daily Flow | Daily Flow |
| Broad Creek Pumping Station | 37.0 | 9.897 | 10.626 |
| Tinkers Creek Trunk Sewer | 21.1 | - | - |
| Upper Piscataway Trunk Sewer | 10.3 | - | - |
| Lower Piscataway Trunk Sewer | - | - | - |

The peak capacity of the Broad Creek Pumping Station was exceeded during extreme wet weather in July 2004. As a result of a facility plan for the Broad Creek Wastewater Pumping Station, a 4.2-million gallon onsite storage basin, located at WSSC's Piscataway WRRF and other

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related capacity enhancements for the Broad Creek Pumping Station and force main system, are currently under construction. Biosolids that are produced at the Piscataway Branch are land applied offsite in Maryland and Virginia on permitted sites.

On May 9, 2014, WSSC's general manager/CEO signed a long-term Agreement with Mattawoman Energy LLC that will allow them to purchase up to 5 million gallons a day (mgd) of treated effluent from the Piscataway Wastewater Resource Recovery Facility for use at their proposed 990- megawatt power plant in Brandywine, Maryland. The Commission adopted Resolution 2014-2043 on March 19, 2014, authorizing the general manager/CEO to finalize and execute the Agreement.

The initial term of this Agreement is for 30 years with five-year option terms after that. Mattawoman Energy is responsible for the design and construction of all required capital facilities as well as operation and maintenance of these facilities once they become operational. The Agreement requires Mattawoman Energy to pay WSSC an option fee until the facilities are operational. Thereafter, they will pay WSSC a fixed demand charge every month as well as commodity charges based on their actual usage of reclaimed water. These charges will also be escalated in the future based on the CPI for industrial commodities less fuel, and are expected to generate about \$1million annually based on their projected usage of reclaimed water. The option fee is payable every six months.

Plans and specifications for the treated effluent facilities, including the routing of the pipeline and location of the pumping station, has and continues to be coordinated with WSSC. However, the facility will be a private utility pipeline owned and maintained by Mattawoman Energy LLC for the sole purpose of routing purchased and reclaimed water to its energy plant in Brandywine. Construction of the first half-mile segment of the pipeline has been constructed. The design of the remaining 9 ½-mile segment has been approved but construction has not yet begun. Mattawoman Energy LLC began construction of the new power plant in 2016 and plans to have all related facilities constructed and operational in 2021.

4.2.5 Bowie Wastewater Treatment Plant

The City of Bowie operates a WWTP in northern Bowie. The treatment plant is located north of Route 450, west of its intersection with Route 3. The drainage basin is mostly developed and there are no plans to extend the service area beyond its current limits.

Statistics of the Bowie Wastewater Treatment Plant

| | |
|--------------------|---------|
| Existing capacity | 3.3 mgd |
| Design capacity | 3.3 mgd |
| Existing flow | 2.2 mgd |
| Remaining capacity | 1.1 mgd |

Capital improvements to the Bowie WWTP include an electrical upgrade at Pump Station #1 and to replace impellers at Pump Station #5 and Pump Station #6. The following is contingent upon receiving State Revolving Loan Funds: construction and inspection of a 550 square-foot building addition; a 350 square-foot interior renovation of the administration building; replacement of main electrical switch gear; installation of wire covers; and construction of a sludge building.

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The biosolids process at the City of Bowie Plant consists of dewatering and lime stabilization. The biosolids are land applied on permitted agricultural properties in Virginia.

4.2.6 Mattawoman Wastewater Treatment Plant

A portion of Prince George's County is located within the Mattawoman Creek watershed. By an agreement between WSSC and Charles County, 3 mgd at the 20-mgd Mattawoman Wastewater Treatment Plant is reserved for WSSC. Flows from Prince George's County discharge into the Mattawoman Creek interceptor and are conveyed to the treatment plant. Current average annual flows from Prince George's County amount to 1.25 mgd for an approximate population of 4,200. The Mattawoman WWTP is owned, operated by and located in Charles County. All operation and capital program management for this facility is the responsibility of Charles County. WSSC is responsible for paying its share of operating and capital costs in accordance with the inter-municipal agreement between the WSSC and Charles County (see Section 1.3.1).

The biosolids process at the Mattawoman Plant consists of dewatering and lime stabilization. The biosolids are either land applied on permitted sites where weather permits, or stored in a facility at King George County, Virginia, for later land application.

4.3 FUTURE SEWER NEEDS

Each of the six sewersheds served by community systems in Prince George's County has adequate capacity to provide service into the future. The ultimate sewer service envelope, and the revision of sewer categories to match the envelope boundary, accurately delineates the area to be sewered in the foreseeable future. The current Water and Sewer Plan maps thus provide a better tool for land-use planning in the County.

In its Capital Improvement Program, WSSC has programmed certain relief and improvement projects for existing sewer lines, as well as numerous sections of developer extension projects, which add CIP-sized sewer lines to serve particular developments. The major challenges in future sewer system needs are, however, in maintaining the integrity of the aging system, meeting the enhanced environmental regulations, and optimizing the operations in a cost-effective manner.

Managing a wastewater collection, treatment and transmission system poses several challenges. Numerous health, regulatory, environmental and economic factors are under continual review at the State, County and regional levels. Some of these challenges are discussed further in this section.

4.3.1 Infiltration and Inflow

Infiltration can be defined as groundwater that enters the sewer from the groundwater table through holes in the pipe, poor joints, cracked pipes, and manhole walls. During precipitation events, such as rainfall and snowfall, the groundwater table may rise above the elevation of the sewer allowing the water to seep into the pipe.

Inflow can be defined as flow that enters the sewer system during precipitation. Inflow can typically enter the sewer through perforated manhole covers, unsealed manhole covers, catch

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basins, areaways and roof drains. The WSSC wastewater system that serves Prince George's County is a separate system, meaning, that only wastewater is collected. Some other municipal systems convey combined wastewater and stormwater flows.

Elimination of the infiltration and inflow (I/I) is necessary so that the sewers can adequately convey only the collected wastewater to the wastewater treatment plant and, eventually, the treated effluent into local waters discharged at limits set by the federal government. This extraneous flow can significantly reduce the capacity of a sanitary sewer. Infiltration and inflow can also impact the capacity of other conveyance and treatment facilities. Simply stated, treatment of the wastewater that *needs* to be treated is the goal.

The Federal Water Pollution Control Act, (also known as the Clean Water Act), was established in 1948. In 1972, amendments to the Clean Water Act set objectives to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Other amendments to the Clean Water Act may be found in Section 2.4.1, Federal Law. The 1972 amendment to the Clean Water Act required that applicants for related grants perform an analysis demonstrating the existence or nonexistence of excessive I/I in each sewer system tributary. Each portion of the analysis is directed toward the acquisition of a federal construction grant for completion of the subsequent step. The federal government required that I/I studies be performed in three phases:

- The Infiltration/Inflow analysis must identify the presence, quantity and type of infiltration and inflow in a sewer system basin or service area. The analysis requires an overview of an entire basin to determine whether excessive infiltration/inflow conditions exist and, if so, whether they are cost effective to remove. Those areas determined to have excessive I/I conditions then proceed to the second phase of the study.
- The Sewer System Evaluation Survey (SSES) is used to more specifically isolate the individual sewer line sections and defects contributing to the extraneous flow. The SSES consists of several steps to narrow the search:
 1. Flow Monitoring
 2. Early morning isolation and measurement of the infiltration component
 3. Physical inspection of manhole structures
 4. Smoke testing and dyed water flooding of suspected inflow sources
 5. Subsequent cleaning and televising of qualifying sewers to inspect the I/I sources

The SSES will determine the location, flow rate and cost of correction for each definable element of the total I/I problem. A report on the Evaluation Survey and a program of rehabilitation to correct the excessive infiltration/inflow must then be submitted.

- As a result of the SSES, a cost-effective analysis determines recommendations for I/I source repairs under the third phase of the study. All of the grant-funded studies in the Prince George's County basins are completed through the Sewer System Evaluation Survey.

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Infiltration/Inflow Analyses and Sewer System Evaluation Surveys were conducted in the following basins of Prince George’s County between 1974 and 2019 (with the most recent studies in parentheses):

| | |
|-------------------------------------|-------------------------|
| Oxon Run (2018) | Broad Creek II (2006) |
| Piscataway (2010) | Beaverdam Branch (2010) |
| Parkway (2012) | |
| Northeast Branch (2012) | |
| Western Branch (currently underway) | |

4.3.2 Regional Water Quality Initiatives in the Chesapeake Bay Watershed

Excess levels of nitrogen and phosphorus are the primary pollution problems facing the Chesapeake Bay. Reducing these pollutants has been a major focus of the multi-state Chesapeake Bay Program over the past two decades. The 1987 Chesapeake Bay Agreement, as amended in 1992, set a goal to reduce levels of nitrogen and phosphorus that are discharged to the Bay by 40% by 2000, and to maintain that reduction thereafter. The Chesapeake 2000 Bay Agreement reaffirmed the minimum commitment, and proposed to remove all nutrient and sediment impairments to the Bay by 2010. Despite significant efforts by federal, state, and local governments and other interested parties, pollution in the Chesapeake Bay prevents the attainment of existing water quality standards. The pollutants that are largely responsible for impairment of the Bay are nutrients, in the form of nitrogen and phosphorus, and sediment.

The United States Environmental Protection Agency (EPA), in coordination with the Bay watershed jurisdictions established a nutrient and sediment pollution diet for the Bay, consistent with Clean Water Act requirements, to guide and assist Chesapeake Bay restoration efforts. This pollution diet is known as the Chesapeake Bay Total Maximum Daily Load (TMDL), or Bay TMDL.

Concurrent with the development of the Bay TMDL, EPA charged the Bay watershed states and DC with developing watershed implementation plans (WIPs) in order to provide adequate “reasonable assurance” that the jurisdictions can and will achieve the nutrient and sediment reductions necessary to implement the TMDL within their respective boundaries.

MDE worked with the other Maryland Bay agencies and many partners in local jurisdictions to develop Phase II Watershed Implementation Plans with more detailed reduction targets and specific strategies to further ensure that the water quality goals of the Bay TMDL will be met. The Phase II Plan was completed, submitted to, and approved by EPA in 2012. (See Maryland’s Development Support for the Chesapeake Bay Phase II WIP webpage.) To promote and measure progress for restoring the Chesapeake Bay, EPA requires states to identify milestones to be reached in two-year increments.

Prince George’s County is actively working with the area’s wastewater treatment plants, the Environmental Protection Agency’s Chesapeake Bay Program and the State of Maryland to develop policies to reduce the loadings of nitrogen and phosphorus to the Chesapeake Bay. These efforts continue to be the goal of the County through its participation in the Chesapeake Bay Agreements of 1987, 1992, 2000 and 2012.

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Consistent with the Maryland strategy for reducing nutrient loads from the treatment of wastewater, WSSC has upgraded all three of their major wastewater treatment plants to achieve enhanced nutrient reduction (ENR) and each is meeting the performance goals established by MDE for nitrogen and phosphorous. Western Branch was completed in 2015 and Parkway and Piscataway were completed in 2013.

The City of Bowie WWTP completed construction of its upgrade to achieve ENR performance in 2010. Similarly, the wastewater treatment facilities that treat County wastewater but are located outside of the County have been upgraded to ENR. The Mattawoman WWTP in Charles County was upgraded in 2007. The upgrade of the DC Water Blue Plains AWWTP to achieve enhanced nutrient removal is ongoing. As of 2017, major components of the ENR upgrade have been completed and the plant is meeting ENR performance requirements in accordance with its discharge permit.

Consistent with the County's Watershed Implementation Plans, further nutrient reductions will be necessary by reducing runoff from such non-point sources as highways, other developed areas, and agricultural sources; but, these efforts are beyond the scope of this Plan.

The 2012 legislative session, House Bill 446, doubled the Bay Restoration Fee for most users served by wastewater treatment plants and those on On-site sewage disposal (septic) systems to \$5.00 per month per household/equivalent dwelling unit (EDU). HB 446 also requires that BRF fee billing authorities develop a financial hardship fee waiver plan for low income households. See "*Guidance Documents*" and "*Frequently Asked Questions*" found at:

<http://mde.maryland.gov/programs/Water/BayRestorationFund/Pages/guidancedocs.aspx>

<http://mde.maryland.gov/programs/Water/BayRestorationFund/Pages/faqs.aspx>

Effective July 1, 2012 a \$5.00 monthly fee is collected from each home served by a wastewater treatment plant. Commercial and industrial users are charged at the rate of \$5.00 per month per equivalent dwelling unit (EDU). Fees from wastewater treatment plant users generate an estimated \$100 million per year. This fee will continue to be collected and used to finance the debt incurred to fund a portion of the ENR upgrade of major WWTPs and other programs related to nutrient reductions for the Bay such as septic tank upgrades to Best Available Technology (BAT) and the cover crop program. Moving forward the fee will also be used to fund the upgrade of certain minor wastewater treatment facilities, to support the connection of existing septic systems to ENR wastewater treatment plants and among other initiatives to reduce nutrients to the Bay.

4.3.3 Industrial Discharge

The Federal Pretreatment Regulations (40 CFR Part 403) require the WSSC to operate a program to control industrial discharges to the sewage collection and treatment systems. The goal of these regulations is to prevent the introduction of pollutants to the sanitary sewer. The pollutants of special concern are those that will:

- Inhibit or interfere with the biological treatment processes employed at wastewater treatment plants;

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- Pass through the treatment plants, causing violations of NPDES permits and water quality standards, or otherwise be incompatible with the treatment plants; and
- Restrict biosolids disposal options and wastewater recycling options because of excessive levels of toxic substances.

WSSC requires industries comply with the requirements set forth in Chapter 8 – Industrial and Special Waste of WSSC’s Plumbing & Fuel Gas Code. If an industry’s wastewater is treated at a non-WSSC wastewater treatment plant, then the industry is required to comply with the more stringent discharge requirement. Industrial users that are classified as significant are also required to monitor their industrial discharges to determine compliance with discharge regulations. WSSC also performs its own monitoring of industrial discharges and inspection of industrial users to determine industry compliance independently.

The primary objective of the Industrial Discharge Control Program is to protect the overall integrity of the WSSC wastewater system through the systematic and equitable application of the WSSC Plumbing Regulations and specific administrative procedures. Nevertheless, the County and WSSC also receive benefits from the implementation of an industrial waste control program. These benefits are:

- More efficient operation of WSSC wastewater treatment plants and continued NPDES permit compliance by reducing toxic pollutants that inhibit and interfere with treatment processes.
- More numerous biosolids management and disposal alternatives because of a reduction of heavy metal concentrations and other toxic pollutants.
- The reduction of maintenance costs and manpower requirements for the upkeep of the WSSC wastewater system.
- The prevention of illegal discharges of industrial wastes to the wastewater systems through manholes and direct connections to the sanitary sewer.
- The recovery of maintenance and treatment costs in cases where an industrial user is responsible for pretreatment.
- Rapid response to industrial waste spills which have a potential to cause serious harm to the WSSC wastewater system, public health, or the environment.

4.3.4 Sanitary Sewer Overflows (SSO)

A sanitary sewer overflow (SSO) occurs when sewers become blocked and wastewater backs up in the line and eventually overflows from a manhole. There are a number of other possible causes of SSOs, including pipe deterioration or a break in the sewer main, undersized sewer lines, excess infiltration or inflow of stormwater, naturally occurring problems such as tree roots and grease blockages, and power outages at sewage pumping stations. It is impossible to completely eliminate SSOs. Even in a properly designed, constructed, operated and maintained sewer system, there will always be a certain number of unavoidable overflows due to blockages, unusual natural events, and power failures.

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Historically, the U.S. Environmental Protection Agency (EPA) has worked with the municipal community and other groups to address SSOs. Draft regulations that would have required utilities to develop a “Capacity, Management, Operation, and Maintenance” (CMOM) program were released in 1999, but subsequently withdrawn in January 2001. Since then, the EPA has undertaken numerous enforcement actions nationwide to insure that utilities experiencing SSOs develop a comprehensive program for collection system operation, maintenance, rehabilitation, and capacity analysis to minimize future overflows. In August 2004, the EPA reported to Congress on the current extent of combined sewer overflows (CSOs) and SSOs, including the impact on environmental and human health, technologies used to address these problems, and resources spent by municipalities to address these impacts. The report also identifies many structural and non-structural technologies for CSO and SSO control.

In calendar year 2004, the peak capacity of the Anacostia pumping station was exceeded during extreme wet weather conditions on July 4 and July 27. WSSC contracted a hydraulic study, completed on October 31, 2005, that recommended improved operation of the station, sewer system rehabilitation and repair, and a capital project to address the overflow situation. Alternatives proposed include increased pumping and participation in the DC Water Long Term Control Plan, in-line storage and off-line storage. As a result of this hydraulic study, a new 7-million gallon capacity storage facility, located at WSSC’s Anacostia Number 2 Wastewater Storage Facility, was constructed and placed into service in June 2013. Its 2017 statistics are herein outlined:

| Transmission statistics (mgd) | Peak | 2017 | 2017 |
|--------------------------------------|------------------------|--------------------|--------------------|
| | Instantaneous Capacity | Average Daily Flow | Maximum Daily Flow |
| Anacostia Pumping Station | 199.0 | 49.84 | 63.59 |

WSSC has re-evaluated the overall operations of its collection system in conjunction with discussions with the EPA regarding past SSOs (Note: WSSC does not have combined sewers in its service areas). In December 2005, WSSC entered into a Consent Decree after Clean Water Act litigation was brought by the United States, the State of Maryland, and a coalition of environmental groups as a result of the Anacostia pumping station overflow.

WSSC signed the Consent Decree on December 7, 2005 for its collection system with the Department of Justice, Environmental Protection Agency, Maryland Department of the Environment and four conservation groups. This Consent Decree addresses capacity, maintenance and operation of the WSSC collection system, fats, oils and grease (FOG) collection system evaluation and modeling, Sewer Basin Repair, Replacement, Rehabilitation, Performance Assessments and Emergency Response Plans, including all major transmission mains and wastewater pumping stations. WSSC is in year thirteen of the Consent Decree. The agreement estimates approximately \$1.6 billion in improvements to the WSSC’s wastewater collection system.

WSSC has allocated additional resources, developed a comprehensive schedule for future studies of the collection system, committed to improvements in operation and maintenance procedures, and identified related program enhancements to be initiated to minimize the number of SSOs that occur in the future.

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Beginning in 2006, WSSC developed, calibrated, and evaluated 21 sewer basin dynamic hydraulic models in its Sanitary District under the Consent Decree's Article V requirements. The calibrated models are used to evaluate capacity of the existing and future sanitary sewer system to convey flows under wet weather conditions under a 2-year (total storm volume of 3.11 inches over 24 hours) and a 10-year design storm (total storm volume of 4.78 inches over 24 hours) events.

The models were built using WSSC asset information in its Sewer Model Database and populated in its Geographic Information System. Once, the model network was verified, the models were calibrated for existing dry weather flows based on WSSC flow data. The model network flows were calibrated to two historic wet weather events and then verified using a third independent verification event. Future flows using dry weather conditions were developed based on demographic projections of sewer household and employment increases and applied WSSC unit wastewater flow factors. The models were then applied using the synthetic design storms as set in the Consent Decree requirements and the modeling reports noted the observed results from the model simulations.

In 2009, WSSC reevaluated the 21 sewer basin hydraulic models using an actual event storm distribution, from a wet weather event experienced in the WSSC Service Area occurring on May 8, 2008. This rainfall event caused significant flooding in various areas of the county and is currently being used for the 2-year and 10-year design storms of record for WSSC hydraulic modeling studies.

WSSC developed a procedure using the hydraulic model and "WSSC" design storms (Standard Procedure ENG 09-02) for reviews conducted as part of Hydraulic Planning Analyses (HPA) conducted under WSSC Development Services Process, effective May 2009. The procedure is used to evaluate the impact of significant development on the downstream capital size (15 inches in diameter and above) sewer system and wastewater conveyance facilities under significant wet weather conditions. This procedure was superseded in September 2016 by Regulation 11.165.

Currently, listed below are Prince George's County sewer basin model simulations indicating areas/locations increased risk of overflow:

1. Broad Creek (2-year WSSC design storm) - Henson Creek (projects upstream of the Broad Creek WWPS are dependent on completion of CIP project number S-43.02, the Broad Creek Sewer Augmentation currently under construction)
2. Northeast Branch (2-year WSSC design storm) - Greenbelt Branch

Other areas indicated in the model simulations for lower risk of overflows are being evaluated as development proposals are evaluated through Regulation 11.165 as part of the WSSC Development Services review process.

COMAR requires WSSC to report all SSOs to MDE and the respective County Health Department within 24 hours of occurrence, as well as the need to notify the public whenever an SSO has any significant potential to affect public health or the environment. MDE has drafted guidance suggesting that wastewater utilities work closely with local environmental and health departments to identify any such potential impacts and to notify the public when warranted.

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The parties to the Consent Decree have entered a Second Amendment to the Consent Decree to provide a schedule for completion of Delayed Rehabilitation work due to permitting issues with National Park Service, Army Corp of Engineers, County Agencies, MDE and Department of Natural Resources. The deadline for completion of delayed work is February 9, 2022. The Second Amendment was lodged with the U.S. District Court and approved on June 29, 2016.

In 2018, which was the wettest year of-record there were a total of 115 sanitary sewer overflows. Of these, 14 were caused by excess flow from infiltration and inflow. Some of WSSC's Consent Decree accomplishments include: 403 submissions to the Regulatory Agencies; completed 24 Collection System Evaluations (nine were Sewer System Evaluation Surveys); prepared 23 Sewer Repair, Replacement and Rehabilitation Plans; completed 1,876 miles of Trunk Walk; completed 2,685 miles of Sewer Cleaning and Closed Circuit Television; completed the Collection System Modeling; completed the Anacostia WWPS Storage Facility; completed five Performance Assessments; completed the Supplemental Environmental Improvement Projects; 21 rounds of Water Quality Monitoring; implemented a Modified FOG Program; and completed two rounds of WWPS Capacity Reevaluations.

4.3.5 Unserved and Underserved Areas

Located within the defined Sewer Envelope in Prince George's County (and Montgomery County) are numerous properties served by septic systems – not connected to the public sewer system. Many of these unserved and underserved areas are within proximity to existing sewer mains, were approved for construction of sewer main extensions, and, were ultimately to be serviced by public sewer. However, the extensions of service to these properties – even in relatively short distances – are too expensive and “prohibitive” for individual, residential landowners to fund connection. These properties typically stock older homes that were constructed prior to development of modern design criteria and regulations. Consequently, individual interim septic systems were constructed on these lots.

The issue of unserved and underserved areas has been growing as septic systems age and fail. Typically, the operating life of septic systems is estimated to be 30+ years. In these areas, the homes average 50+ years; well over the lifespan of its septic system. The cost of extending new sewer mains to serve these properties is expensive, and in most cases, prohibitive to an individual homeowner. Prior to 2001, WSSC constructed and financed water and sewer lines via an assessed front foot benefit charge (FFBC) to homeowners. This system took advantage of “economies of scale” by spreading infrastructure costs over a large number of properties resulting in an average front foot benefit assessment that was affordable. Subsequent to 2001, construction and financing of public water and sewer lines became the obligation of developers of subdivisions and landowners. This shift eliminated the benefits of the “economies of scale,” and for those landowners (now homeowners) absent sewer lines, no public means to finance extensions, even when necessary to alleviate a failed septic system.

The Bi-County Infrastructure Working Group (the Working Group) was established in 2010 to identify alternatives or less costly sources of revenue or methods of funding for operational and capital requirements in the context of the growing need to rehabilitate, upgrade and replace water and wastewater infrastructure and related facilities. The Working Group is comprised of

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representatives from the executive and legislative branches of Prince George’s and Montgomery Counties, one WSSC Commissioner from each County, and WSSC managerial and finance staff. One of the policy issues identified for study by the Working Group is the extension of public water and sewer service to unserved and underserved areas in Prince George’s and Montgomery Counties. Excerpts of that study, including approximate data and mapping of identified areas, may be found as **Appendix G** to this plan. While no final outcomes have been determined, the study and its effects are still under assessment and evaluation.

4.4 BIOSOLIDS MANAGEMENT

Biosolids are the solids recovered during the wastewater treatment process that contains nutrient-rich organic matter and micronutrients. Research supported by the EPA has determined that the land application of biosolids in accordance with regulations and in appropriate rates enriches the soil and is beneficial to the environment. Biosolids improve agricultural yields while reducing the need for chemical fertilizers that can be harmful when carried by rainfall into streams, rivers and the Chesapeake Bay.

The EPA has established regulations for the use of biosolids to protect human health, plant life, livestock, wildlife, and water quality. The Clean Water Act required that these regulations protect human health and the environment from any reasonably anticipated adverse effects of pollutants and pathogens in the biosolids. Biosolids generated from municipal wastewater treatment plants are monitored for pollutants and cannot be applied to the land if they exceed the EPA limits.¹

4.4.1 Biosolids Production

The Blue Plains Wastewater Treatment Plant is the largest advanced wastewater treatment facility of its type in the United States. Although other plants may have larger capacities, Blue Plains provides the highest level of treatment with its nitrification and filtration processes. Treatment consists of preliminary treatment, primary treatment, secondary treatment, nitrification, denitrification, effluent filtration, chlorination/dechlorination and post-aeration. The solids treatment processes are comprised of thickening and dewatering for primary sludge, secondary waste activated sludge, and nitrification/denitrification waste activated sludge. This will result in approximately 50% solids reduction, a Class A pathogen-free product, and enough methane, after thermal hydrolysis and anaerobic digestion, to generate approximately one third of the plant’s electricity demand. Plants operated in Prince George’s County by WSSC use traditional methods for recovering and treating biosolids, although the Piscataway Water Resource Recovery Facility employs thermal hydrolysis and anaerobic digestion to generate electricity for plant demand after the Bio-Energy Project is completed at the facility tentatively by early 2023.

Once treated, biosolids become a viable product recycled in the form of natural fertilizers and land applied. It may also be disposed of at landfills. **Table 4-3** reflects the production, reuse, and disposal methods for biosolids from the Blue Plains WWTP and treatment facilities located in Prince George’s County.

¹ District of Columbia Water and Sewer Authority, “Biosolids Recycling-Preserving Agriculture and Protecting the Chesapeake Bay”

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4.4.2 Regulatory Requirements

MDE is the primary agency that regulates the application of biosolids. A biosolids contractor must file and be permitted by MDE in order to apply biosolids to any site approved by the County. The application and permitting process assures that all regulatory requirements are met, assuring that use on land is safe for humans and the environment.² MDE, WSSC, and the County's Health Department inspect the site both during and after biosolids applications. The following is a list of requirements and restrictions that relate to the land application of biosolids:

- Pathogen Control
- Heavy Metals
- Pretreatment
- Buffer Zones
- Slope Requirements
- Application Rates
- Frozen Ground Restrictions
- Nutrient Management Plans
- Time Restrictions
- Monitoring Records
- Site Inspections

² Maryland Department of the Environment, Factsheet, Sewage Sludge, Website: www.mde.state.md.us, January, 2001.

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Table 4-3 Biosolids Production and Reuse

| Treatment Plant Name (Existing or Planned) | Sludge Generation (Dry tons / Day) | | | | | | | Chemical Solids | Solids Contents | Biosolids Facility Planned Expansion and/or Upgrading: Dates and Processes | Present Utilization Method(s) and Site(s) | Site Life Expectancy | Future Plans for Sludge Management |
|---|------------------------------------|------|------|------|------|------|------|-------------------------------|--------------------|---|---|---|---|
| | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2015 | | | | | | |
| Blue Plains (Wash. D.C.) ³ | 380 | 380 | 380 | 380 | 380 | 380 | 190 | Ferric Cl. Polymer Lime | 28% | Anaerobic Digestion and Combined Heat and Power, complete mid- 2014 | Prince George's County Share- Land Application | Hauling Contract Renewed in 2014 | Anaerobic Digestion Land Application |
| Prince George's County Pro-rata Share ⁴ | 82.9 | 82.9 | 82.9 | 82.9 | 82.9 | 82.9 | 82.9 | | | | | | |
| Parkway | 8.2 | 8.4 | 8.3 | 8.4 | 9.7 | 9.7 | 9.7 | Polymer Aluminum Lime | | | | 2014 | |
| Western | 10.5 | 12.6 | 15.8 | 17.5 | 12.4 | 12.4 | 12.4 | Polymer | | | | N/A | |
| Piscataway | 29.6 | 30.0 | 27.5 | 27.6 | 23.9 | 23.9 | 23.9 | Lime | 26% | Off-Site Land Application | 5 Year Contract | 2014 | |
| Mattawoman (Charles Co., MD) ⁵ | | | | | | | | Ferric Cl. Lime | 20% 25% | 201 Facilities Plan Study in | No biosolids have been received | N/A | Under Study |

³ The District of Columbia Government has completed a feasibility study for the attainment of effluent limitations continued in NPDES Permit No. DC0021199 and a long-range Blue Plains biosolids management plan.

⁴ The Prince George's County pro-rata share is managed pursuant to the 1985 Blue Plains Intermunicipal Agreement.

⁵ The operation of the Mattawoman Sewage Treatment Plant (STP) is the responsibility of the Charles County Government. The agreement between the WSSC and the Charles County Government governing the Mattawoman STP provides that the WSSC shall dispose of its proportionate share of the total sludge generated by the Plant outside the geographical boundaries of Charles County. The projection of the amount of sludge for the forecast period is under study by the WSSC. The results of this study will be incorporated at a later date.

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The land application of biosolids is considered an acceptable and beneficial management method and is now considered the centerpiece of a diverse management plan that also includes incineration and landfilling. The County Executive and County Council, pursuant to Section 21-108 of the County Code, must approve sites that are selected for the land application of stabilized biosolids. Land application sites need not be included in the County's Comprehensive Water and Sewer Plan, since the actual application of biosolids on a particular site is of short duration. **Table 4-4** lists companies permitted to apply biosolids in Prince George's County, the facility name, permit number and expiration dates for land application or site reclamation. The locations of the permitted land area sites are found on **Map 4-2**.

The land application contract requires the contractors to provide storage facilities to manage the disposal of biosolids produced daily at the Wastewater Treatment Plants. The storage facilities are used during inclement weather or other conditions that may prevent land application. One biosolids storage lagoon is located in Prince George's County. The Cedarville lagoon is operated by Synagro Central LLC and has a capacity of 8,750 dry tons. The lagoon must be emptied once a year.

4.4.3 Land Application

Biosolids are applied to the land in amounts specific to the type of soil, crop to be grown and proximity to roads or streams. Subsurface soil injection involves injection, under pressure, of liquid biosolids beneath the soil surface. The second method, surface application with incorporation (tilling in), involves spreading the biosolids on the surface of the soil and tilling the soil to incorporate the biosolids with the soil.

The suitability of a site for biosolids land application is a function of potential crops, the physical, chemical and mineralogical characteristics of the soil as determined by laboratory analyses, and site considerations for each field. Nutrient level, texture, micronutrients and macronutrients, soil alkalinity (pH) and any other soil properties that will influence application rates are considered. Other factors considered are landscape features (e.g., slope), proximity to surface waters and groundwater, soil parent materials, density and moisture-holding capacity. Setback from these features are mandated by State law and strictly enforced by onsite inspection.

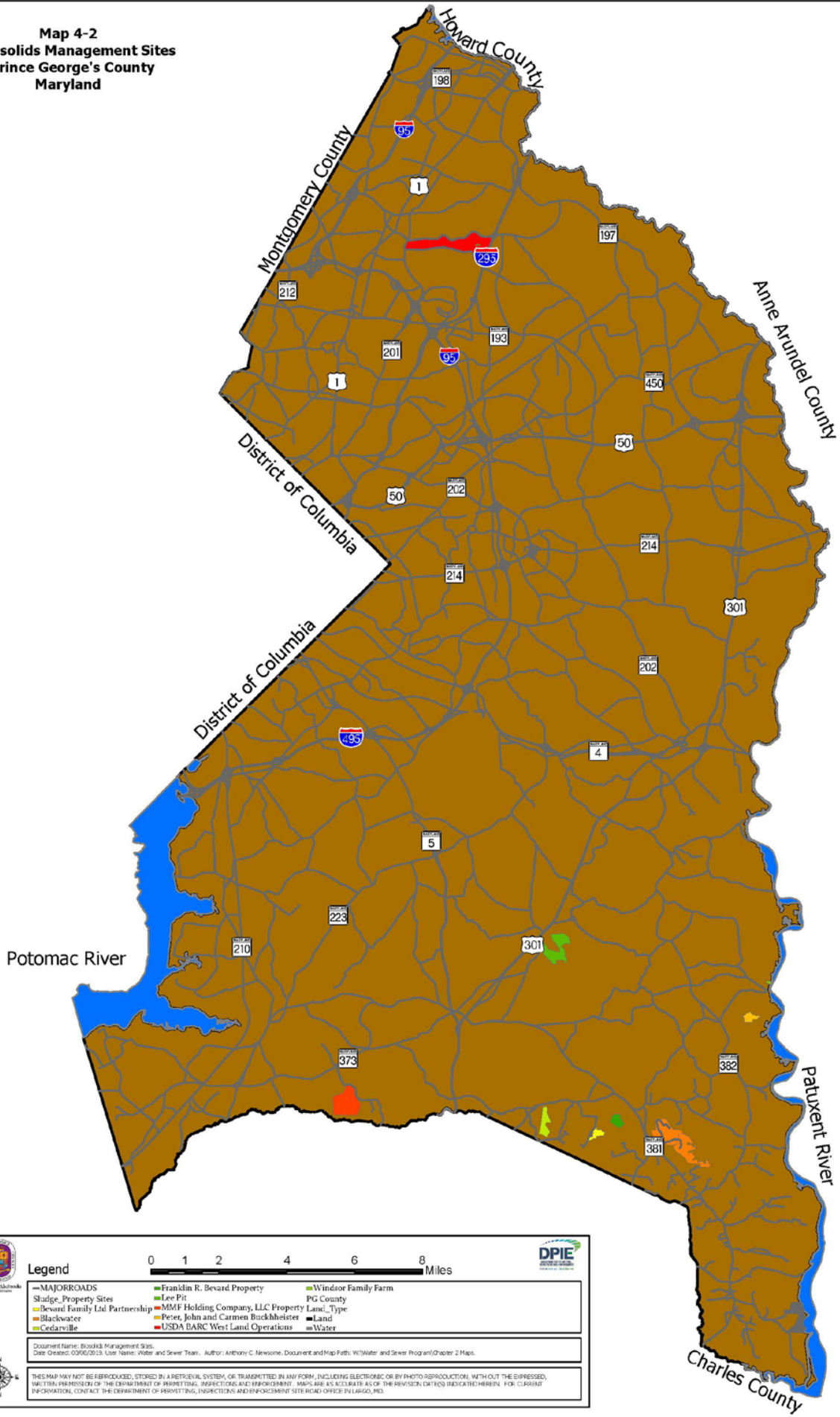
The annual rate of application for biosolids application is carefully determined and is usually based on meeting the nitrogen requirement of the crop to be grown. This avoids leaching of nitrate-nitrogen into groundwater and surface waters since the crop will quickly absorb the needed nitrogen contained in the biosolids. Silviculture is used in the County where biosolids are land applied. Fast-growing trees are planted above the biosolids, utilizing the nutrient to grow. The following biosolids parameters are required to develop recommendations for application rates on agricultural soils: percent solids, total nitrogen (N), ammonia (NH₃), nitrate (NO₃), phosphorus (P), potassium (K), copper (Cu), zinc (Zn), nickel (Ni), lead (Pb) and cadmium (Cd). With all nutrients, (except phosphorus), specific upper level limits of soil accumulation are avoided to protect both the environment and public health. Recent legislation by the State will implement phosphorus limits.

Sewage Sludge Utilization Permits
Prince George's County Sites

Table 4-4

| Site Name | AKA | Site Number | Permit Number | Issue Date | Expir Date | Issued to: | Acres | Council Dist |
|---|--|-------------|------------------|------------|------------|------------------------------|----------|--------------|
| A. H. Smith Jr. Property | Brandywine Farm | PG 137 | S-02-16-4917-A | 12/16/2002 | 12/15/2007 | Synagro - WWTP, Inc. | 0.00 | 9- |
| A.H. Smith Jr. Property | Percontee/Gudelski Materials and Rockhill Sand & Gravel | PG 187 | 2016-SAG-5940 | 3/7/2017 | 3/6/2022 | Synagro Central, LLC | 448.14 | 9- |
| A.H. Smith Property | AH Smith Bowie Farm | | S-97-16-4232-A | 5/12/1997 | 5/11/2002 | Browning-Ferris, Inc. | 448.14 | 9- |
| Andrew & Patricia Metroka Property | "No additional sludge may be applied" per ltr dated 7/18/2005 | PG 192 | S-04-16-5031-A | 1/8/2004 | 1/7/2009 | Synagro Mid-Atlantic, Inc | 15.00 | 9- |
| Andrews Air Force Base | AAFB recvg sludge from Davidsonville Transmitter | | S-05-16-5146-T | 11/17/2005 | 11/16/2010 | 89 CES/CEV | 49.50 | 9- |
| Associates Limited Partnership | Permit voided 1/31/01 | PG 97A | S-96-16-4195-ABE | | | Synagro - WWTP, Inc | 0.00 | 9- |
| At Last Farm, LLC | Brandywine/North Keys Pit | PG 191 | S-04-16-5013-A | 5/19/2004 | 5/18/2009 | Synagro Mid-Atlantic, Inc | 239.30 | 9- |
| Bardon/E.L. Gardner | Queen Estates Acres | PG 7 | S-04-16-2888-M | 5/21/2004 | 5/20/2009 | Synagro - WWTP, Inc | 450.00 | 9- |
| Bardon/H.P. Queen Estates | BARC (Sludge Transport Permit) | PG 189 | S-03-16-4962-M | 5/12/2003 | 5/11/2008 | Synagro Mid-Atlantic, Inc. | 1,284.30 | 9- |
| Beltsville Agricultural Research Center | BARC | | 2012-STR-4488 | 3/8/2013 | 3/7/2018 | USDA | 0.00 | 1- |
| Beltsville Agricultural Research Center | Bevard Pit/ Cedarville Compost Facility | PG 193 | S-02-16-4345-A | 7/27/2002 | 7/26/2007 | USDA - BARC | 22.00 | 1- |
| Bevard Family Limited Partnership | | PG 200 | 2012-SRC-50 | 6/13/2012 | 6/12/2017 | Synagro Central, LLC | 202.36 | 9- |
| Blackwater Preservation LLC Property | Pre-treatment Facility | | 2012-STR-5708 | 10/22/2012 | 10/21/2012 | Synagro Central, LLC | 548.40 | 9- |
| Brown Station Rd Municipal Landfill | Pre-Treatment Facility | | 2012-STR-5709 | 11/7/2012 | 11/6/2017 | MD Environmental Service | 0.00 | |
| Brown Station Rd Municipal Landfill | The Lagoon | | S-01-16-959-S | 3/29/2001 | 3/28/2006 | Synagro - WWTP, Inc. | 5.20 | 9- |
| Cedarville Lagoon Storage Facility | Application Inactive - no owner consent | PG 186 | S-01-16-4799-A | | | Synagro - WWTP, Inc. | 95.50 | 9- |
| Cheltenham Property LLC | City of Bowie WWTP | | 2014-STR-5829 | 12/8/2014 | 12/7/2019 | City of Bowie | 0.00 | 4 |
| City of Bowie/Entzian Farm | Entzian Tract | | S-00-16-2994-A1 | 12/11/1995 | 7/30/2000 | Maryland Envir. Service | 94.90 | 4- |
| Dept. of Natural Resources | Downing Tract | PG 182 | S-05-16-4550-A | 5/12/2005 | 5/11/2010 | Synagro Mid-Atlantic, Inc | 81.60 | 9- |
| Dept. of Natural Resources | Merkle Trueman Wildlife Tract | PG 111 | S-05-16-4554-A | 3/22/2005 | 3/21/2010 | Synagro Mid-Atlantic, Inc. | 282.60 | 9- |
| Dept. of Natural Resources | Peed Tract | PG 37 | S-05-16-4555-A1 | 5/11/2005 | 5/10/2005 | Synagro Mid-Atlantic, Inc. | 89.20 | 9- |
| Dept. of Natural Resources | Sasser Tract | PG 154 | S-99-16-4552-A1 | 2/22/1999 | 2/21/2004 | Synagro - WWTP, Inc | 30.50 | 9- |
| ERCO, Inc. | ERCO Tree Farm | | S-01-16-809-H | 1/8/2001 | 1/7/2006 | ERCO, Incorporated | 122.00 | 9- |
| ERCO, Inc. | ERCO Tree Farm | | S-02-16-4863-R1 | 2/22/2002 | 2/21/2007 | ERCO, Incorporated | 0.00 | 9- |
| Ford-Rooney Pit - Percontee, Inc | Rockhill Sand & Gravel | PG 180 | 2015-SAG-5934 | 8/9/2016 | 8/8/2021 | Synagro Central, LLC | 206.30 | 9- |
| Franklin B. Bevard Property | Applic filed 7/7/2010; ok for Field 2R (15 acres) | PG 198 | 2010-SRC-5576 | 6/11/2006 | | Synagro Central, LLC | 67.68 | 9- |
| George Windsor Property | | PG 185 | S-01-16-4755-A | 8/2/2006 | 8/1/2011 | Synagro Mid-Atlantic, Inc | 73.80 | 9- |
| John W. Bond Jr. | | PG 176 | S-97-16-4294-M1 | | | Synagro - WWTP, Inc | 0.00 | |
| John, Peter & Carmen Buchheister Property | Buchheister Brothers Property | PG 190 | Pending | | | Synagro - WWTP, Inc | 51.20 | 9- |
| Leonard F. Hanson | | PG 178 | S-97-16-4114-A1 | | | Synagro - WWTP, Inc | 0.00 | |
| Limited Partnership Associates | | PG 97 | S-98-16-1142-M1 | | | Synagro - WWTP, Inc | 0.00 | |
| Mirant Chalk Point LLC | **PENDING*** per ltr 1/14/2004 | | S-01-16-4741-T | | | Mirant Chalk Point, LLC | 0.00 | 9- |
| Mirant Chalk Point, LLC | Authorizing transport of sludge from Chalk Pt. | | S-04-16-5040-T | 1/30/2004 | 1/29/2009 | Mirant Chalk Point, LLC | 0.00 | 9- |
| Nancy Walker | | PG 12 | S-96-16-4182-A1 | | | Synagro - WWTP, Inc | 0.00 | |
| NRG Chalk Point LLC | Chalk Point Generating Station WWTP | | 2013-STR-5040 | 11/8/2013 | 11/7/2018 | NRG Chalk Point LLC | 0.00 | |
| NRG Chalk Point, LLC | Sludge transport from Chalk Pt to WSSC Ritchie Rd Sewage Pumping Station | | 2015-STR-5902 | 11/20/2015 | 11/19/2025 | NRG Chalk Point, LLC | 0.00 | 9- |
| Parkway WWTP | WSSC - Parkway WWTP | | 2014-STR-5827 | 12/8/2014 | 12/7/2019 | WSSC | 0.00 | 1 |
| Patuxent Wildlife Research Center WWTP | U.S. Fish and Wildlife Service - to transport to WSSC Tanglewood Station | | S-05-16-5111-T | 4/15/2005 | 4/15/2010 | U.S. Fish & Wildlife Service | 0.00 | 1- |
| PEPCO | | PG 177 | S-97-16-4209-M1 | | | Synagro - WWTP, Inc | 0.00 | |
| Percontee, Inc - Benfield Pit | | PG 172 | S-01-16-3782-M | | | Synagro - WWTP, Inc. | 0.00 | |
| Percontee, Inc. | Permit voided 1/31/01 | PG 144 | S-96-16-4023-A | | | Synagro - WWTP, Inc | 0.00 | |
| Percontee, Inc. - Bryan Pit | | PG 174 | S-01-16-3781-M | | | Synagro - WWTP, Inc. | 0.00 | |
| Percontee, Inc. - Duley Pit | | PG 171 | S-01-16-3801-M1 | | | Synagro - WWTP, Inc. | 0.00 | |
| Percontee, Inc. - Lee Pit | | PG 175 | 2016-SAG-5939 | 3/7/2017 | 3/6/2022 | Synagro Central, LLC | 251.00 | 9- |
| Piscataway WWTP | WSSC - Piscataway WWTP | | 2014-STR-5828 | 12/8/2014 | 12/7/2019 | WSSC | 0.00 | 8 |
| Preston Windsor | | PG 184 | S-00-16-4675-A1 | 5/10/2000 | 5/9/2005 | Synagro - WWTP, Inc | 30.30 | 9- |
| Reeder Corporation | | PG 183 | S-00-16-4630-M1 | 3/20/2000 | 3/19/2000 | Synagro - WWTP, Inc | 0.00 | |
| Robert & Tamara Petty | Permit voided 1/31/01 | PG 179 | S-97-16-4344-A | | | Synagro - WWTP, Inc | 0.00 | |
| Robert Young | | PG 52 | S-97-16-4295-A1 | | | Synagro - WWTP, Inc | 0.00 | |
| Smith, Alfred & Harry | AH Smith Assoc. Limited Partnership Property | PG 124R | S-00-16-4654-AM2 | 6/11/2002 | 2/15/2005 | Synagro - WWTP, Inc | 0.00 | |
| Southstar Limited Partnership | Chaney Enterprises | PG 188 | S-02-16-4890-M | 8/26/2002 | 8/25/2007 | Synagro - WWTP, Inc | 170.36 | 9- |
| Synagro Central | AH Smith Assoc. | PG 124R | S-06-16-5131-M | 4/7/2006 | 4/6/2011 | Synagro | 70.72 | 9- |
| Synagro4 | Blackwater | PG 194 | | | | Synagro | 0.00 | |
| The MMF Holding Company LLC Property | Meinhardt/ Brandywine Properties | PG 147 | 2012-SRC-5156 | 6/15/2012 | 6/14/2017 | Synagro Central, LLC | 120.20 | |
| | | | | | | | 196.31 | |

**Map 4-2
Biosolids Management Sites
Prince George's County
Maryland**



| | | | | | |
|--|---|---|--|--|--|
| | Legend | | | | |
| | <ul style="list-style-type: none"> — MAJOR ROADS ■ Sludge Property Sites ■ Beward Family Ltd Partnership ■ Blackwater ■ Cedarville | <ul style="list-style-type: none"> ■ Franklin R. Bevard Property ■ Lee Pitt ■ MFM Holding Company, LLC Property ■ Peter, John and Carmen Buckhelter ■ USDA BARC West Land Operations | <ul style="list-style-type: none"> ■ Windsor Family Farm ■ PG County ■ Land Type ■ Land ■ Water | <p>Document Name: Biosolids Management Sites Date Created: 03/06/2013, User Name: Water and Sewer Team, Author: Anthony C. Newsome, Document and Map Paths: W:\Water and Sewer Program\Chapter 2 Maps</p> | |
| <p>THIS MAP MAY NOT BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM, OR TRANSMITTED IN ANY FORM, INCLUDING ELECTRONIC OR BY PHOTO REPRODUCTION, WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE DEPARTMENT OF PERMITTING, INSPECTIONS AND ENFORCEMENT. MAPS ARE AS ACCURATE AS OF THE REVISION DATE(S) INDICATED HEREIN. FOR CLARITY INFORMATION, CONTACT THE DEPARTMENT OF PERMITTING, INSPECTIONS AND ENFORCEMENT SITE ROAD OFFICE IN LARGO, MD.</p> | | | | | |

ADOPTED 2018 WATER AND SEWER PLAN

Generally, biosolids produced in Prince George's County are extremely low in metals. As an extra precaution, however, MDE restricts the number of applications that can be made on agricultural land for any biosolids that contain heavy metals such as copper, zinc, nickel, lead or cadmium.

DC Water is participating in a pilot project for small scale composting technology. This pilot project, currently operating offsite from Blue Plains produces Class A product. DC Water unveiled the product and its new brand, Bloom™ in 2016, announcing a pilot program for distribution with local soil blenders and landscapers.

4.5 FINANCIAL PLANNING

Financing of all WSSC CIP is reviewed by the two County Executives and approved annually by the Prince George's and Montgomery county councils. Each CIP covers a six-year period. The Prince George's County Council adopts the CIP as part of the County's Comprehensive Water and Sewer Plan. The CIP is divided into three categories for both water and sewer projects: Prince George's County projects, Montgomery County projects, and Bi-County projects. **Appendix 4-2** of this chapter lists the current sewer projects for the Bi-County area and for Prince George's County.

System improvement projects under the CIP are financed with funds from the Water Supply and Sewage Disposal Bond Funds. The funds are repaid to bond holders over a period of 30 years by annual principal and interest payments known as debt service. System improvement projects related to State environmental regulations are funded in part through grants from the regulatory agency. WSSC has also utilized the Water Quality State Revolving Loan Fund Program. Growth-related projects are paid through System Development Charges and developer contributions.

DC Water also submits a budget for review by Prince George's County as a signatory to the IMA. The DC Water budget includes costs related to the County's share of its allocated flow at the Blue Plains WWTP through WSSC. The DC Water Board of Directors is comprised of 11 members; two of the members are from Prince George's County. The Board sets policy, oversees bond issues, and approves the operating and capital budgets.

The City of Bowie is required to prepare and adopt a formal budget, appropriating funds for the operation, including plant improvements, of the water and sewer system. The City Council formally adopts the budget each year. Rates are established based upon the "cash needs approach." The rate structure must provide not only funds for operation and maintenance, but principal and interest payments on long-term debt, plant additions, and renewals and replacements.

In recent years, the City of Bowie has utilized the Water Quality State Revolving Loan Fund Program to finance its Wastewater Plant improvements. It has also used a pay as you go system to finance some of its improvements, as well as issuing general obligation bonds. Additional information concerning the financial management plan for the City of Bowie's Water and Sewer system may be obtained by contacting the finance director.

***MDE DISCHARGE PERMITS
PRINCE GEORGES COUNTY***

ADOPTED 2018 WATER AND SEWER PLAN

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Prince George's County
Discharge Permits 2017

| Facility Name | Watershed | State Num. | NPDES Num. | Type | Last Issued | Effective End Date |
|---|--------------------------------------|------------|------------|-----------------------|-------------|--------------------|
| A & B Trucking, LLC | | 12SW3157 | MDR003157 | General Permit | 3/9/2017 | 12/31/2018 |
| ABC Distribution LLC | Piscataway Creek - 02140203 | 12SR3062 | MDR003062 | General Permit | 8/25/2015 | 12/31/2018 |
| Accokeek Auto Parts | Mattawoman Creek - 02140111 | 12SW0667 | MDR000667 | General Permit | 10/16/2014 | 12/31/2018 |
| Aggregate & Dirt Solutions | Anacostia River - 02140205 | 10MM9920 | MDG499920 | General Permit | 8/30/2016 | 12/24/2017 |
| Aggregate Industries - Bladensburg Aggregate | Anacostia River - 02140205 | 10MM0772 | MDG490772 | General Permit | 12/3/2010 | 12/15/2017 |
| Aggregate Industries - Bladensburg Ready-Mix Concrete & Hot Mix Asphalt Plant | Anacostia River - 02140205 | 10MM3577 | MDG493577 | General Permit | 8/21/2012 | 12/15/2017 |
| Aggregate Industries - Kirby Road Asphalt Plant | Upper Tidal Potomac River - 02140201 | 10MM1036 | MDG491036 | General Permit | 11/30/2010 | 12/15/2017 |
| Aggregate Industries - Queen Sand & Gravel | Mattawoman Creek - 02140111 | 10MM9762 | MDG499762 | General Permit | 12/8/2010 | 12/15/2017 |
| Aggregate Industries-Accokeek (gaslight) Sand and Gravel | Mattawoman Creek - 02140111 | 10MM8011 | MDG498011 | General Permit | 12/6/2010 | 12/15/2017 |
| Airgas East, Inc. | Anacostia River - 02140205 | 12SR0008 | MDR000008 | General Permit | 5/15/2015 | 12/31/2018 |
| Aliant Techsystems Inc - Space Systems Division | | 12NE2087 | MDR002087 | General Permit | 5/26/2015 | 5/25/2020 |
| Allant Techsystems, Inc., Space Systems Div (ATK-SSD) | | 12NE2086 | MDR002086 | General Permit | 5/26/2015 | 5/25/2020 |
| Anchor Construction - 2300 Beaver Road | | 12SW3056 | MDR003056 | General Permit | 8/5/2015 | 12/31/2018 |
| Andrews Air Force Base | Piscataway Creek - 02140203 | 10MM8034 | MDG498034 | General Permit | 11/10/2010 | 12/15/2017 |
| Andrews Air Force Base Water Supply System | Piscataway Creek - 02140203 | 11HT9475 | MDG679475 | General Permit | 4/15/2013 | 12/25/2017 |
| Aquasco Materilas LLC | Patuxent River Area - 02131100 | 10MM8049 | MDG498049 | General Permit | 10/24/2011 | 12/15/2017 |
| Arcal Chemicals, Inc | Western Branch - 02131103 | 12SW2344 | MDR002344 | General Permit | 9/16/2014 | 12/31/2018 |
| ATK Space Systems, Inc | | 12NE2233 | MDR002233 | General Permit | 5/21/2015 | 5/20/2020 |
| Atlantic Contracting Batch Plant - AAFB | | 10MM8079 | MDG498079 | General Permit | 3/11/2014 | 12/15/2017 |
| B & B Auto Salvage, Ltd. | Upper Patuxent River - 02131104 | 12SR1120 | MDR001120 | General Permit | 3/17/2015 | 12/31/2018 |
| Bardon, Inc. - Kirby Road Sand And Gravel | Piscataway Creek - 02140203 | 10MM0511 | MDG490511 | General Permit | 12/3/2010 | 12/15/2017 |
| Barnabas Road Associates, LLC | Upper Tidal Potomac River - 02140201 | 10MM1720 | MDG491720 | General Permit | 4/1/2015 | 12/15/2017 |
| Belair Bath And Tennis | | 12SI6542 | MDG766542 | General Permit | 4/5/2013 | 11/29/2017 |
| Beltsville Ready-Mix Concrete (RMC) | Anacostia River - 02140205 | 10MM3602 | MDG493602 | General Permit | 5/20/2013 | 12/15/2017 |
| Beltway Used Auto Parts LLC | Anacostia River - 02140205 | 12SW1464 | MDR001464 | General Permit | 11/20/2014 | 12/31/2018 |
| Beretta U S A Corp | Mattawoman Creek - 02140111 | 12SR0590 | MDR000590 | General Permit | 4/15/2015 | 12/31/2018 |
| Best Western Capitol Beltway | | 12SI7140 | MDG767140 | General Permit | 3/29/2013 | 11/29/2017 |
| Bowie Sport Fit | Upper Patuxent River - 02131104 | 12SI6165 | MDG766165 | General Permit | 1/16/2013 | 11/29/2017 |
| Bowie Used Auto Parts, Inc | Upper Patuxent River - 02131104 | 12SR0846 | MDR000846 | General Permit | 5/18/2015 | 12/31/2018 |
| BRAC Administration Facility/Jones Bldg | | 12SW3055 | MDR003055 | General Permit | 9/15/2015 | 12/31/2018 |
| Brandywine Auto Parts, Inc. | Mattawoman Creek - 02140111 | 12SR0847 | MDR000847 | General Permit | 5/19/2015 | 12/31/2018 |
| Brandywine Ent/cross Trails Operation/ | Patuxent River Middle - 02131102 | 10MM8042 | MDG498042 | General Permit | 4/7/2011 | 12/15/2017 |
| Brandywine Flyash Site | Patuxent River Middle - 02131102 | 07DP1389 | MD0054836 | Industrial Individual | 11/1/2016 | 10/31/2021 |

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|---|--------------------------------------|----------|-----------|---------------------|------------|------------|
| Brandywine Flyash Site | Patuxent River Middle - 02131102 | 12SR3258 | MDR003258 | General Permit | 5/26/2017 | 12/31/2018 |
| Brown Station Road Sanitary Landfill | Western Branch - 02131103 | 12SW0401 | MDR000401 | General Permit | 7/14/2015 | 12/31/2018 |
| Carrollon Manor | | 12SI7106 | MDG767106 | General Permit | 3/25/2013 | 11/29/2017 |
| Cedarville Mobile Home Park | Zekiah Swamp - 02140108 | 10DP3264 | MD3264Q98 | To Groundwater | 12/1/2010 | 12/19/2017 |
| Cedarville State Forest | | 11HT5139 | MDG675139 | General Permit | 6/4/2012 | 12/25/2017 |
| Central Small Car Salvage | Upper Patuxent River - 02131104 | 12SR0841 | MDR000841 | General Permit | 3/30/2015 | 12/31/2018 |
| Chaney Enterprises - Seat Pleasant | Anacostia River - 02140205 | 10MM9867 | MDG499867 | General Permit | 11/23/2010 | 12/15/2017 |
| Chaney Enterprises - Seat Pleasant | Anacostia River - 02140205 | 15MP9867 | MDG499867 | General Permit | 11/2/2017 | 4/30/2022 |
| Chaney Enterprises - Upper Marlboro | Western Branch - 02131103 | 10MM9873 | MDG499873 | General Permit | 12/8/2010 | 12/15/2017 |
| Chaney Enterprises - Upper Marlboro | Western Branch - 02131103 | 15MP9873 | MDG499873 | General Permit | 11/3/2017 | 4/30/2022 |
| Cheltenham Boy's Village WWTP & WTP | Piscataway Creek - 02140203 | 08DP0755 | MD0023931 | Municipal (Surface) | 6/1/2010 | 12/16/2017 |
| Cheltenham Boy's Village WWTP & WTP | Piscataway Creek - 02140203 | 11HT9452 | MDG679452 | General Permit | 6/13/2012 | 12/25/2017 |
| Chestnut Hill Apartments | Oxon Creek - 02140204 | 12SI6593 | MDG766593 | General Permit | 3/20/2013 | 11/29/2017 |
| Chuck's Used Auto Parts | | 12SW3123 | MDR003123 | General Permit | 4/5/2016 | 12/31/2018 |
| Chucks Used Auto Parts, Inc | Oxon Creek - 02140204 | 12SW1112 | MDR001112 | General Permit | 9/17/2015 | 12/31/2018 |
| City Of Bowie Ms4 | | 12SW3250 | MDR003250 | General Permit | 4/24/2017 | 12/31/2018 |
| City Of Bowie Water System | Upper Patuxent River - 02131104 | 11HT9557 | MDG679557 | General Permit | 2/15/2013 | 12/25/2017 |
| City of Bowie WWTP | Upper Patuxent River - 02131104 | 12SW2525 | MDR002525 | General Permit | 1/30/2015 | 12/31/2018 |
| City of Bowie WWTP | Upper Patuxent River - 02131104 | 14DP0697 | MD0021628 | Municipal (Surface) | 6/1/2016 | 5/31/2021 |
| City of Bowie, Parks and Grounds Facility | | 12SW3251 | MDR003251 | General Permit | 4/27/2017 | 12/31/2018 |
| City of College Park DPW | Anacostia River - 02140205 | 12SW2148 | MDR002148 | General Permit | 3/2/2015 | 12/31/2018 |
| City of District Heights | Western Branch - 02131103 | 12NE3240 | MDR003240 | General Permit | 3/23/2017 | 3/22/2022 |
| City of Greenbelt-Greenbelt Lake | | 12SW2145 | MDR002145 | General Permit | 2/27/2015 | 12/31/2018 |
| City of Hyattsville | Anacostia River - 02140205 | 12SW2150 | MDR002150 | General Permit | 3/2/2015 | 12/31/2018 |
| City of Laurel DPW Maintenance Facility | Patuxent River Middle - 02131102 | 12SW1841 | MDR001841 | General Permit | 3/2/2015 | 12/31/2018 |
| City of Seat Pleasant | Upper Tidal Potomac River - 02140201 | 12SW2143 | MDR002143 | General Permit | 3/2/2015 | 12/31/2018 |
| Clagett Farm Chesapeake Bay Foundaton | | 13DP3784 | MD3784Q13 | To Groundwater | 6/1/2013 | 5/31/2018 |
| Clean Earth of Greater Washington, LLC | | 12SR2343 | MDR002343 | General Permit | 4/27/2015 | 12/31/2018 |
| Cohen Recycling | | 12SW3138 | MDR003138 | General Permit | 3/2/2017 | 12/31/2018 |
| Columbia Park | Anacostia River - 02140205 | 12SI6594 | MDG766594 | General Permit | 3/20/2013 | 11/29/2017 |
| Corporate Press | | 12NE3040 | MDR003040 | General Permit | 6/9/2015 | 6/8/2020 |
| D C Materials | Anacostia River - 02140205 | 12SW1745 | MDR001745 | General Permit | 9/9/2014 | 12/31/2018 |
| D.C. Materials Daisy Lane Yard | | 12SW2310 | MDR002310 | General Permit | 9/18/2014 | 12/31/2018 |
| Deerfield Run Apartments | Upper Patuxent River - 02131104 | 12SI6591 | MDG766591 | General Permit | 3/14/2013 | 11/29/2017 |
| DEiamond Transit - CSC #7044 Temple Hills | | 12SW3283 | MDR003283 | General Permit | 8/31/2017 | 12/31/2018 |
| East-West Motors | Anacostia River - 02140205 | 12SW3130 | MDR003130 | General Permit | 4/20/2016 | 12/31/2018 |
| Eaton Corporation | Anacostia River - 02140205 | 12SR0316 | MDR000316 | General Permit | 1/16/2015 | 12/31/2018 |
| EP Henry | Anacostia River - 02140205 | 12SR2155 | MDR002155 | General Permit | 4/13/2015 | 12/31/2018 |

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|---|---------------------------------------|-----------|------------|-----------------------|------------|------------|
| Eppley Recreation Center | | 12SI7192 | MDG767192 | General Permit | 4/15/2014 | 11/29/2017 |
| Fairlands Sports & Aquatic Complex | | 12SI7250 | MDG767250 | General Permit | 9/14/2017 | 11/29/2017 |
| FDA - Center For Veterinary Medicine | Anacostia River - 02140205 | 08DP3215 | MD3215Q03 | Industrial Individual | 12/1/2011 | 12/25/2017 |
| First Transit, Inc #55440 - Capitol Heights | | 12SW2382 | MDR002382 | General Permit | 10/17/2014 | 12/31/2018 |
| Ford/Rooney Pit-Percontee | Lower Patuxent River - 02131101 | 10MM0171 | MDG490171 | General Permit | 2/29/2012 | 12/15/2017 |
| Foreign Car Parts, Inc. | Western Branch - 02131103 | 12SW0844 | MDR000844 | General Permit | 2/25/2015 | 12/31/2018 |
| Forest Hills Apts | | 12SI7141 | MDG767141 | General Permit | 3/29/2013 | 11/29/2017 |
| Forestville Asphalt Company | Western Branch - 02131103 | 10MM9911 | MDG499911 | General Permit | 1/6/2016 | 12/27/2017 |
| Forestville Asphalt Company | Western Branch - 02131103 | 15MP9911 | MDG499911 | General Permit | 11/15/2017 | 4/30/2022 |
| Fort Washington Marina | Piscataway Creek - 02140203 | 10MA9119 | MDG999119 | General Permit | 7/15/2011 | 12/19/2017 |
| Fort Washington Pool Association | Piscataway Creek - 02140203 | 12SI6265 | MDG766265 | General Permit | 3/7/2013 | 11/29/2017 |
| Gateway Square Apartments | Oxon Creek - 02140204 | 12SI6595 | MDG766595 | General Permit | 3/25/2013 | 11/29/2017 |
| Grant County Mulch Laurel Facility | Anacostia River - 02140205 | 12SR2125o | MDR002125 | General Permit | 4/9/2015 | 12/31/2018 |
| Greyhound Lines, Inc #320012 | Anacostia River - 02140205 | 12SW2330 | MDR002330 | General Permit | 11/25/2014 | 12/31/2018 |
| Griffith Energy Services, Inc. - Cheverly | Anacostia River - 02140205 | 12SW1380 | MDR001380 | General Permit | 9/10/2014 | 12/31/2018 |
| Halle Enterprises, Inc. | Anacostia River - 02140205 | 12SW1829 | MDR001829 | General Permit | 1/7/2015 | 12/31/2018 |
| Hampton Inn - Laurel | Upper Patuxent River - 02131104 | 12SI6698 | MDG766698 | General Permit | 3/6/2013 | 11/29/2017 |
| Hard Bargain Farm | Middle Tidal Potomac River - 02140102 | 12DP3515A | MD3515Q05A | To Groundwater | 11/1/2013 | 12/25/2017 |
| Heather Hills Apartments | | 12SI6875 | MDG766875 | General Permit | 4/1/2014 | 11/29/2017 |
| Heritage Square | Anacostia River - 02140205 | 12SI6596 | MDG766596 | General Permit | 3/25/2013 | 11/29/2017 |
| Howard Johnson's - Cheverly | | 12SI7149 | MDG767149 | General Permit | 4/18/2013 | 11/29/2017 |
| Huntsman Pigments | Anacostia River - 02140205 | 11HT5200 | MDG675200 | General Permit | 12/17/2014 | 12/25/2017 |
| Huntsman Pigments | Anacostia River - 02140205 | 12SW1926A | MDR001926 | General Permit | 2/1/2016 | 12/31/2018 |
| Insurance Auto Auctions, Inc. | Patuxent River Middle - 02131102 | 12SR1750 | MDR001750 | General Permit | 1/9/2015 | 12/31/2018 |
| Intercounty Connector (ICC) Eastern Operations Facility | | 12SW2415 | MDR002415 | General Permit | 8/20/2014 | 12/31/2018 |
| Jiffy John Company, Inc. | Anacostia River - 02140205 | 12NE1299 | MDR001299 | General Permit | 2/27/2015 | 2/26/2020 |
| Joint Base Andrews Drainage Repair Plan | | 12SW3055 | MDR003055 | General Permit | 9/15/2015 | 12/31/2018 |
| Joint Base Andrews Drainage Repair Plan | | 12SW3066 | MDR003066 | General Permit | 9/15/2015 | 12/31/2018 |
| Joint Base Andrews Drainage Repair Plan | | 12SW3067 | MDR003067 | General Permit | 9/15/2015 | 12/31/2018 |
| Joint Base Andrews-Air Force Road | | 12SW3066 | MDR003066 | General Permit | 9/15/2015 | 12/31/2018 |
| Joseph Smith & Sons, Inc | Anacostia River - 02140205 | 12SR0654A | MDR000654 | General Permit | 10/5/2016 | 12/31/2018 |
| Kenilworth Foreign Car Parts | Anacostia River - 02140205 | 12SW1366 | MDR001366 | General Permit | 3/27/2015 | 12/31/2018 |
| Kenilworth Towers East | Anacostia River - 02140205 | 12SI6597 | MDG766597 | General Permit | 3/25/2013 | 11/29/2017 |
| Keys Energy Center, LLC Facility and Natural Gas Pipeline | | 11HT9617 | MDG679617 | General Permit | 9/13/2016 | 12/25/2017 |
| KMC Thermo-Brandywine Power Facility | Mattawoman Creek - 02140111 | 12SR1173 | MDR001173 | General Permit | 2/19/2015 | 12/31/2018 |
| Landover Bus Garage & Maintenance Division | Anacostia River - 02140205 | 12SR2457 | MDR002457 | General Permit | 7/25/2014 | 12/31/2018 |

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|--|--------------------------------------|-----------|-----------|-----------------------|------------|------------|
| Laney Materials, LLC | Anacostia River - 02140205 | 10MM1754 | MDG491754 | General Permit | 12/7/2010 | 12/15/2017 |
| Laney Materials, LLC | Anacostia River - 02140205 | 15MP1754 | MDG491754 | General Permit | 11/15/2017 | 4/30/2022 |
| Lansdowne Village | Anacostia River - 02140205 | 12SI6599 | MDG766599 | General Permit | 3/25/2013 | 11/29/2017 |
| Laurel Asphalt Crushing Plant | Anacostia River - 02140205 | 10MM8039 | MDG498039 | General Permit | 9/29/2011 | 12/15/2017 |
| Laurel Concrete Crushing Plant | Anacostia River - 02140205 | 10MM8040 | MDG498040 | General Permit | 9/29/2011 | 12/15/2017 |
| Laurel Ready Mix Concrete | Anacostia River - 02140205 | 10MM9755 | MDG499755 | General Permit | 11/30/2010 | 12/15/2017 |
| Laurel Ready Mix Concrete | Anacostia River - 02140205 | 15MP9755 | MDG499755 | General Permit | 10/16/2017 | 4/30/2022 |
| Lawrence Street Industry, LLC | Anacostia River - 02140205 | 12SW1093 | MDR001093 | General Permit | 3/10/2015 | 12/31/2018 |
| Lee Pit, PG-175 | Patuxent River Middle - 02131102 | 10MM0170 | MDG490170 | General Permit | 2/29/2012 | 12/15/2017 |
| Maier, Ernest, Inc. | Anacostia River - 02140205 | 10MM2092 | MDG492092 | General Permit | 12/11/2014 | 12/15/2017 |
| Marlboro Auto Parts | Western Branch - 02131103 | 12SW1933 | MDR001933 | General Permit | 11/10/2014 | 12/31/2018 |
| Marlton Community Pool | | 12SI7111 | MDG767111 | General Permit | 2/27/2013 | 11/29/2017 |
| Martz/GoldLine, Inc | Anacostia River - 02140205 | 12SR1083 | MDR001083 | General Permit | 11/1/2016 | 12/31/2018 |
| Marva Maid Landover, LLC | Anacostia River - 02140205 | 12SR2022 | MDR002022 | General Permit | 4/23/2015 | 12/31/2018 |
| Maryland Reclamation, LLC - Hammett Property | Western Branch - 02131103 | 10MM8014 | MDG498014 | General Permit | 6/23/2011 | 12/15/2017 |
| Megabus Northeast LLC | | 12SW3266 | MDR003266 | General Permit | 7/10/2017 | 12/31/2018 |
| Melwood Horticultural Training Center | | 12NE3072 | MDR003072 | General Permit | 1/15/2016 | 1/14/2021 |
| Meridian at Bowie | | 12SI6463 | MDG766463 | General Permit | 3/18/2014 | 11/29/2017 |
| Metro Re-Uz-It Company, Inc. | Anacostia River - 02140205 | 12SW1357 | MDR001357 | General Permit | 1/12/2015 | 12/31/2018 |
| Metropolitan Meat, Seafood and Poultry | | 12SR2559 | MDR002559 | General Permit | 3/27/2015 | 12/31/2018 |
| Missouri Avenue Convenience Center | | 12SW2466 | MDR002466 | General Permit | 10/1/2015 | 12/31/2018 |
| MNCPPC - J. Franklin Bourne Swimming Pool | Anacostia River - 02140205 | 12SI7005 | MDG767005 | General Permit | 3/7/2013 | 11/29/2017 |
| MNCPPC - Lane Manor Splash Pool | Anacostia River - 02140205 | 12SI6432 | MDG766432 | General Permit | 3/7/2013 | 11/29/2017 |
| Mount Vernon Printing | | 12NE3214 | MDR003214 | General Permit | 1/10/2017 | 1/9/2022 |
| Moyaone Community Swimming Pool | Upper Tidal Potomac River - 02140201 | 12SI6574 | MDG766574 | General Permit | 12/1/2014 | 11/29/2017 |
| Murray Tract | | 15MM9937 | MDG499937 | General Permit | 10/25/2017 | 4/30/2022 |
| NASA Goddard Space Flight Center | Anacostia River - 02140205 | 08DP3156A | MD0067482 | Industrial Individual | 5/1/2015 | 12/27/2017 |
| NASA Goddard Space Flight Center | Anacostia River - 02140205 | 11HT5092 | MDG675092 | General Permit | 5/21/2012 | 12/25/2017 |
| National Wildlife Visitor Center | Upper Patuxent River - 02131104 | 09DP2831 | MD0065358 | Municipal (Surface) | 5/1/2012 | 12/26/2017 |
| Nestle Waters North America Home and Office Distribution | | 12SW3206 | MDR003206 | General Permit | 1/3/2017 | 12/31/2018 |
| New Carrollton Public Works | Anacostia River - 02140205 | 12SW2144 | MDR002144 | General Permit | 3/2/2015 | 12/31/2018 |
| New Carrollton Recreation Club, Inc. | Anacostia River - 02140205 | 12SI6884 | MDG766884 | General Permit | 1/31/2013 | 11/29/2017 |
| New Dawn Manufacturing | | 12NE3178 | MDR003178 | General Permit | 11/2/2017 | 11/1/2022 |
| NRG Chalk Point Generating Station | Lower Patuxent River - 02131101 | 06DP0627 | MD0002658 | Industrial Individual | 7/1/2009 | 12/11/2017 |
| NVA Properties, LLC | Patuxent River Middle - 02131102 | 13DP1143 | MD0052680 | Municipal (Surface) | 9/1/2017 | 8/31/2022 |
| O & A Used Auto Parts | Piscataway Creek - 02140203 | 12SW0981 | MDR000981 | General Permit | 1/9/2015 | 12/31/2018 |
| Oakcrest Towers | | 12SI7112 | MDG767112 | General Permit | 3/29/2013 | 11/29/2017 |

Prince George's County
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|---|---------------------------------------|-----------|-----------|-----------------------|------------|------------|
| Office and Equipment Maintenance Facility | | 12SW2528 | MDR002528 | General Permit | 1/29/2015 | 12/31/2018 |
| Parkway WWTP | Upper Patuxent River - 02131104 | 12SR0118 | MDR000118 | General Permit | 2/27/2015 | 12/31/2018 |
| Parkway WWTP | Upper Patuxent River - 02131104 | 14DP0631 | MD0021725 | Municipal (Surface) | 6/1/2016 | 5/31/2021 |
| Patuxent River 4-H Center Foundation, Inc. | Upper Patuxent River - 02131104 | 09DP1499 | MD1499Q84 | To Groundwater | 4/1/2012 | 12/26/2017 |
| PCM Construction, Inc | | 12SW2221 | MDR002221 | General Permit | 9/8/2014 | 12/31/2018 |
| Pepsi Bottling Group, LLC | Anacostia River - 02140205 | 12SR1897 | MDR001897 | General Permit | 3/11/2015 | 12/31/2018 |
| Pg County Public Works-Northern Ave | Anacostia River - 02140205 | 12SW1222 | MDR001222 | General Permit | 2/11/2015 | 12/31/2018 |
| Piscataway Wastewater Treatment Plant | Upper Tidal Potomac River - 02140201 | 12SR0119 | MDR000119 | General Permit | 3/2/2015 | 12/31/2018 |
| Piscataway Wastewater Treatment Plant | Upper Tidal Potomac River - 02140201 | 14DP0667 | MD0021539 | Municipal (Surface) | 7/1/2016 | 6/30/2021 |
| Post Park | | 12SI7144 | MDG767144 | General Permit | 3/29/2013 | 11/29/2017 |
| Potomac Airfield | Piscataway Creek - 02140203 | 12SR0161 | MDR000161 | General Permit | 10/7/2014 | 12/31/2018 |
| Potomac Knolls Community Center | | 12SI7230 | MDG767230 | General Permit | 6/17/2015 | 11/29/2017 |
| Pr. Geo. County Dept. Of Public Works - Brandywine | Mattawoman Creek - 02140111 | 12SW1223 | MDR001223 | General Permit | 2/11/2015 | 12/31/2018 |
| Prince George's Community College | Western Branch - 02131103 | 12SI6058 | MDG766058 | General Permit | 1/13/2014 | 11/29/2017 |
| Prince George's County - Recycling Facility | Western Branch - 02131103 | 12SW1224 | MDR001224 | General Permit | 7/14/2015 | 12/31/2018 |
| Prince George's County Central Services - Fleet Vm | Middle Tidal Potomac River - 02140102 | 12SW2173 | MDR002173 | General Permit | 7/18/2014 | 12/31/2018 |
| Prince George's County DPW & Transportation | Western Branch - 02131103 | 12SW0521 | MDR000521 | General Permit | 2/13/2015 | 12/31/2018 |
| Prince George's County Vehicle Audit Unit | Western Branch - 02131103 | 12SW0312 | MDR000312 | General Permit | 7/14/2015 | 12/31/2018 |
| Prince George's County Yard Waste Composting Facility | Patuxent River Middle - 02131102 | 12DP2792 | MD0065111 | Industrial Individual | 11/1/2015 | 10/31/2020 |
| Prince George's Scrap, Inc. | Anacostia River - 02140205 | 12SR0648A | MDR000648 | General Permit | 2/28/2017 | 12/31/2018 |
| Prince George's Sports & Learning Complex | | 12SI7098 | MDG767098 | General Permit | 2/6/2013 | 11/29/2017 |
| Princeton Estates Limited Partnership | | 12SI6390 | MDG766390 | General Permit | 4/1/2013 | 11/29/2017 |
| PSEG Keys Energy Center | | 11HT9622 | MDG679622 | General Permit | 3/8/2017 | 2/28/2018 |
| QTG CDS - Landover | Little Patuxent River - 02131105 | 12SW2246 | MDR002246 | General Permit | 6/9/2014 | 12/31/2018 |
| Ramblewood HOA | | 12SI7145 | MDG767145 | General Permit | 3/29/2013 | 11/29/2017 |
| Recycle One Processing & Transfer Station | | 12SW2352 | MDR002352 | General Permit | 3/28/2014 | 12/31/2018 |
| Reddy Ice Group #427 - Landover | Anacostia River - 02140205 | 12NE1901 | MDR001901 | General Permit | 9/19/2014 | 9/18/2019 |
| Republic Services of Washington Metro | Western Branch - 02131103 | 12SW1092 | MDR001092 | General Permit | 7/15/2014 | 12/31/2018 |
| Ripples Service, Inc. | Western Branch - 02131103 | 12SW1064A | MDR001064 | General Permit | 6/29/2017 | 12/31/2018 |
| Ritchie Land Reclamation, LLC | Western Branch - 02131103 | 12SR3169 | MDR003169 | General Permit | 7/13/2016 | 12/31/2018 |
| Riverside Plaza Apartments | | 12SI6598 | MDG766598 | General Permit | 3/25/2013 | 11/29/2017 |
| Robin Dale Sand and Gravel | Zekiah Swamp - 02140108 | 10MM8033 | MDG498033 | General Permit | 12/20/2010 | 12/15/2017 |
| Rockhill Sand & Gravel Corp - Holsinger North Pit | | 10MM8068 | MDG498068 | General Permit | 8/28/2013 | 12/15/2017 |
| Rockhill Sand and Gravel Corp / Gudelsky Materials | Patuxent River Middle - 02131102 | 10MM3000A | MDG493000 | General Permit | 2/21/2013 | 12/15/2017 |

Prince George's County
Discharge Permits 2017

| | | | | | | |
|--|--------------------------------------|-----------|-----------|----------------|------------|------------|
| Rockville Fuel & Feed Co., Inc | | 10MM8070 | MDG498070 | General Permit | 9/9/2013 | 12/15/2017 |
| Rockville Fuel & Feed Co., Inc | | 15MP8070 | MDG498070 | General Permit | 11/1/2017 | 4/30/2022 |
| Rodgers Brothers Service, Inc. | Anacostia River - 02140205 | 12SW2002 | MDR002002 | General Permit | 9/1/2016 | 12/31/2018 |
| Rolling Frito-Lay Sales - Beltsville DC | Anacostia River - 02140205 | 12SR1864 | MDR001864 | General Permit | 1/14/2015 | 12/31/2018 |
| Saddlebrook West | Upper Patuxent River - 02131104 | 12SI7076 | MDG767076 | General Permit | 1/31/2013 | 11/29/2017 |
| Safeway Eastern Distribution Center | | 12SR2499 | MDR002499 | General Permit | 1/8/2015 | 12/31/2018 |
| Sandy Hill Municipal Landfill | Upper Patuxent River - 02131104 | 12SW0314A | MDR000314 | General Permit | 4/11/2016 | 12/31/2018 |
| Save More Used Parts, Inc | Upper Tidal Potomac River - 02140201 | 12SR0839 | MDR000839 | General Permit | 6/19/2015 | 12/31/2018 |
| Seven Knolls Gravel Pit | | 10MM9919 | MDG499919 | General Permit | 8/30/2016 | 12/24/2017 |
| SHA - Laurel Maintenance Facility | | 12SW1324 | MDR001324 | General Permit | 8/12/2014 | 12/31/2018 |
| SHA - Marlboro Shop | Western Branch - 02131103 | 11HT5093 | MDG675093 | General Permit | 12/5/2012 | 12/25/2017 |
| SHA - Marlboro Shop | Western Branch - 02131103 | 12SW1325 | MDR001325 | General Permit | 8/14/2014 | 12/31/2018 |
| Shadygrove Recycling | | 12NE3276 | MDR003276 | General Permit | 8/3/2017 | 8/2/2022 |
| Sheriff Road Asphalt | | 10MM8072 | MDG498072 | General Permit | 12/30/2013 | 12/15/2017 |
| Sheriff Road Processing Facility & Transfer Station | Anacostia River - 02140205 | 10MM9916 | MDG499916 | General Permit | 8/3/2016 | 12/27/2017 |
| Sheriff Road Processing Facility & Transfer Station | Anacostia River - 02140205 | 15MM9916 | MDG499916 | General Permit | 10/4/2017 | 4/30/2022 |
| Sherwin-Williams - Beltsville | Anacostia River - 02140205 | 12SR0466 | MDR000466 | General Permit | 7/9/2015 | 12/31/2018 |
| Silver Hill Materials II, LLC - Cedarville Sand & Gravel | Zekiah Swamp - 02140108 | 10MM9757 | MDG499757 | General Permit | 12/3/2010 | 12/15/2017 |
| Six Flags America | Western Branch - 02131103 | 12SI7093 | MDG767093 | General Permit | 11/29/2012 | 11/29/2017 |
| Six Flags America | Western Branch - 02131103 | 12SR2323 | MDR002323 | General Permit | 5/20/2015 | 12/31/2018 |
| Soil Safe, Inc. | Mattawoman Creek - 02140111 | 12SR1681 | MDR001681 | General Permit | 1/29/2015 | 12/31/2018 |
| Stephens Pipe & Steel | | 12NE3275 | MDR003275 | General Permit | 8/2/2017 | 8/1/2022 |
| Stone Industrial Precision Products | Anacostia River - 02140205 | 12NE0007 | MDR000007 | General Permit | 2/5/2015 | 2/4/2020 |
| Storm Oil, LLC | | 12SW3292 | MDR003292 | General Permit | 11/20/2017 | 12/31/2018 |
| Sun Services on Somerset Ave | | 12SW2530A | MDR002530 | General Permit | 11/2/2016 | 12/31/2018 |
| Takoma Landing | | 12SI7114 | MDG767114 | General Permit | 2/27/2013 | 11/29/2017 |
| Temple Hills Swim Club | Upper Tidal Potomac River - 02140201 | 12SI6469 | MDG766469 | General Permit | 3/29/2013 | 11/29/2017 |
| The Bechdon Company, Inc | Upper Patuxent River - 02131104 | 12NE0511 | MDR000511 | General Permit | 9/24/2014 | 9/23/2019 |
| The Gardens Ice House | Anacostia River - 02140205 | 11HT5223 | MDG675223 | General Permit | 9/28/2015 | 12/25/2017 |
| The Hanover Apartments | | 12SI7248 | MDG767548 | General Permit | 8/18/2017 | 11/29/2017 |
| The Lighthouse At Twin Lakes | Anacostia River - 02140205 | 12SI6927 | MDG766927 | General Permit | 3/29/2013 | 11/29/2017 |
| The Ryland Group | | 12SI7218 | MDG767218 | General Permit | 6/15/2015 | 11/29/2017 |
| Theresa Banks Memorial Aquatic Center | | 12SI7099 | MDG767099 | General Permit | 2/6/2013 | 11/29/2017 |
| Top of The Hill Apartments | | 12SI7117 | MDG767117 | General Permit | 3/25/2013 | 11/29/2017 |
| Town of Cheverly | Anacostia River - 02140205 | 12SW0197 | MDR000197 | General Permit | 2/11/2015 | 12/31/2018 |
| Town of Riverdale Park DPW | Anacostia River - 02140205 | 12SW2146 | MDR002146 | General Permit | 3/27/2015 | 12/31/2018 |
| Tremendo Towing and Repair, LLC | | 12SW1393 | MDR001393 | General Permit | 4/2/2015 | 12/31/2018 |

Prince George's County
Discharge Permits 2017

| | | | | | | |
|--|--------------------------------------|----------|-----------|-----------------------|-----------|------------|
| U.S. Postal Service - Southern VMF | Western Branch - 02131103 | 12SW0937 | MDR000937 | General Permit | 9/8/2014 | 12/31/2018 |
| United Parcel Service | Upper Patuxent River - 02131104 | 12SW0857 | MDR000857 | General Permit | 9/5/2014 | 12/31/2018 |
| United Parcel Service | Upper Patuxent River - 02131104 | 12SR0859 | MDR000859 | General Permit | 5/27/2015 | 12/31/2018 |
| United Parcel Service - Landover | Anacostia River - 02140205 | 12SR0740 | MDR000740 | General Permit | 5/27/2015 | 12/31/2018 |
| United Parcel Service - Landover #2 | Anacostia River - 02140205 | 12SR0858 | MDR000858 | General Permit | 5/28/2015 | 12/31/2018 |
| University of Maryland, College Park | | 12SW3281 | MDR003281 | General Permit | 9/8/2017 | 12/31/2018 |
| University of Maryland | Anacostia River - 02140205 | 08DP2618 | MD0063801 | Industrial Individual | 11/1/2012 | 11/30/2017 |
| UPS Freight | Anacostia River - 02140205 | 12SR1065 | MDR001065 | General Permit | 5/27/2015 | 12/31/2018 |
| US Postal Service - Riverdale VMF | Anacostia River - 02140205 | 12SW1103 | MDR001103 | General Permit | 9/8/2014 | 12/31/2018 |
| USDA East Side WWTP | Anacostia River - 02140205 | 15DP2525 | MD0020842 | Municipal (Surface) | 9/1/2016 | 8/31/2021 |
| USDA West Side WWTP | Anacostia River - 02140205 | 11DP2787 | MD0020851 | Municipal (Surface) | 12/1/2012 | 11/30/2017 |
| Veolia Transportation | | 12SR2432 | MDR002432 | General Permit | 6/10/2014 | 12/31/2018 |
| Walker Mill Business Park, Lot 4 | | 12SW2561 | MDR002561 | General Permit | 3/16/2015 | 12/31/2018 |
| Western Branch WWTP | Patuxent River Middle - 02131102 | 12SR0121 | MDR000121 | General Permit | 3/2/2015 | 12/31/2018 |
| Western Branch WWTP | Patuxent River Middle - 02131102 | 15DP0632 | MD0021741 | Municipal (Surface) | 9/1/2016 | 8/31/2021 |
| Westland Printers | | 12NE3215 | MDR003215 | General Permit | 1/10/2017 | 1/9/2022 |
| White Glove Mchining Inc | | 12NE2507 | MDR002507 | General Permit | 9/24/2014 | 9/23/2019 |
| Whitehall Pool & Tennis Club | Patuxent River Middle - 02131102 | 12SI6138 | MDG766138 | General Permit | 7/16/2014 | 11/29/2017 |
| Whitehall Square Apartments | | 12SI6592 | MDG766592 | General Permit | 3/20/2013 | 11/29/2017 |
| Williams & Heintz Map Corporation | | 12NE2177 | MDR002177 | General Permit | 7/31/2014 | 7/30/2019 |
| WMATA - Carmen Turner Facility | | 12SR2534 | MDR002534 | General Permit | 2/20/2015 | 12/31/2018 |
| WMATA - Greenbelt Rail Yard | Anacostia River - 02140205 | 12SR1242 | MDR001242 | General Permit | 2/20/2015 | 12/31/2018 |
| WMATA - Largo Operations Building | Western Branch - 02131103 | 16DP3559 | MD0069774 | Industrial Individual | 7/1/2017 | 6/30/2022 |
| Wmata - New Carrollton Yard | Anacostia River - 02140205 | 12SR0328 | MDR000328 | General Permit | 2/20/2015 | 12/31/2018 |
| Wmata - Southern Avenue Annex | Oxon Creek - 02140204 | 12SR2458 | MDR002458 | General Permit | 7/25/2014 | 12/31/2018 |
| WMATA Branch Ave Rail Yard | Upper Tidal Potomac River - 02140201 | 12SR1709 | MDR001709 | General Permit | 2/20/2015 | 12/31/2018 |
| Woodmore Towne Center HOA | | 12SI7229 | MDG767229 | General Permit | 7/16/2015 | 11/29/2017 |
| World Recycling Company | Anacostia River - 02140205 | 12SW1365 | MDR001365 | General Permit | 3/10/2015 | 12/31/2018 |
| WSSC - Anacostia Equipment Shop | Anacostia River - 02140205 | 12SR1735 | MDR001735 | General Permit | 3/2/2015 | 12/31/2018 |
| WSSC - Anacostia Garage | Anacostia River - 02140205 | 12SR1736 | MDR001736 | General Permit | 3/2/2015 | 12/31/2018 |
| WSSC - Temple Hills Garage | Piscataway Creek - 02140203 | 12SR1740 | MDR001740 | General Permit | 3/2/2015 | 12/31/2018 |
| Yellow Transportation, Inc. - Landover | Anacostia River - 02140205 | 12SW1936 | MDR001936 | General Permit | 7/15/2014 | 12/31/2018 |
| Zantzinger | | 10MM9918 | MDG499918 | General Permit | 8/30/2016 | 12/24/2017 |

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***BI-COUNTY AND PRINCE GEORGE'S COUNTY
SEWER PROJECTS
2019 - 2024
CAPITAL IMPROVEMENT PROGRAM***

ADOPTED 2018 WATER AND SEWER PLAN

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Section 4 - Bi-County Sewer Projects

FINANCIAL SUMMARY

(ALL FIGURES IN THOUSANDS)

DATE: October 1, 2017
REVISED: February 21, 2018

BI-COUNTY SEWER PROJECTS

| AGENCY NUMBER | PROJECT NAME | EST. TOTAL COST | EXPEND THRU 17 | EST. EXPEND 18 | TOTAL SIX YEARS | EXPENDITURE SCHEDULE | | | | | | BEYOND SIX YEARS | PAGE NUM |
|---------------|--|-----------------|----------------|----------------|-----------------|----------------------|---------|---------|---------|---------|---------|------------------|----------|
| | | | | | | YR 1 19 | YR 2 20 | YR 3 21 | YR 4 22 | YR 5 23 | YR 6 24 | | |
| S-22.06 | Blue Plains WWTP: Liquid Train Projects, Part 2 | 192,823 | 0 | 10,500 | 122,401 | 17,471 | 21,282 | 21,635 | 25,189 | 20,068 | 16,756 | 59,922 | 4-3 |
| S-22.07 | Blue Plains WWTP: Biosolids Management, Part 2 | 40,688 | 0 | 6,355 | 33,623 | 7,890 | 10,274 | 8,660 | 4,964 | 1,106 | 729 | 710 | 4-4 |
| S-22.09 | Blue Plains WWTP: Plant-wide Projects | 110,265 | 0 | 6,616 | 82,112 | 8,206 | 9,815 | 17,829 | 18,969 | 16,660 | 10,633 | 21,537 | 4-5 |
| S-22.10 | Blue Plains WWTP: Enhanced Nutrient Removal | 404,480 | 340,782 | 30,335 | 13,779 | 8,345 | 1,563 | 869 | 758 | 1,159 | 1,085 | 19,584 | 4-6 |
| S-22.11 | Blue Plains: Pipelines & Appurtenances | 147,842 | 0 | 22,173 | 108,360 | 23,393 | 14,408 | 22,805 | 17,104 | 16,064 | 14,586 | 17,309 | 4-7 |
| S-103.02 | Piscataway WWTP Bio-Energy Project | 248,677 | 6,871 | 8,873 | 232,933 | 40,310 | 76,251 | 73,553 | 34,566 | 8,253 | 0 | 0 | 4-8 |
| S-170.08 | Septage Discharge Facility Planning & Implementation | 30,494 | 4,492 | 382 | 25,620 | 5,229 | 15,136 | 5,255 | 0 | 0 | 0 | 0 | 4-10 |
| S-170.09 | Trunk Sewer Reconstruction Program | 440,073 | 0 | 141,557 | 298,516 | 81,615 | 65,376 | 58,500 | 30,397 | 31,004 | 31,624 | 0 | 4-11 |
| S-203.00 | Land & Rights-Of-Way Acquisition - Bi-County Sewer | 490 | 0 | 320 | 170 | 95 | 15 | 15 | 15 | 15 | 15 | 0 | 4-12 |
| TOTALS | | 1,615,832 | 352,145 | 227,111 | 917,514 | 192,554 | 214,120 | 209,121 | 131,962 | 94,329 | 75,428 | 119,062 | |

BLUE PLAINS WASTEWATER TREATMENT PLANT PROJECTS
(costs in thousands)

| PROJECT NUMBER | PROJECT NAME | ADOPTED FY'18 TOTAL COST | ADOPTED FY'19 TOTAL COST | CHANGE \$ | CHANGE % | SIX-YEAR COST | COMPLETION DATE (est) |
|----------------|---|-----------------------------|-----------------------------|--------------|-------------|------------------|--------------------------|
| S-22.06 | Blue Plains WWTP: Liquid Train Projects, Part 2 | \$173,026 | \$192,823 | \$19,797 | 11.4% | \$122,401 | On-Going |
| S-22.07 | Blue Plains WWTP: Biosolids Management, Part 2 | 36,101 | 40,688 | 4,587 | 12.7% | 33,623 | On-Going |
| S-22.09 | Blue Plains WWTP: Plant-wide Projects | 98,436 | 110,265 | 11,829 | 12.0% | 82,112 | On-Going |
| S-22.10 | Blue Plains WWTP: Enhanced Nutrient Removal | 381,788 | 404,480 | 22,692 | 5.9% | 13,779 | On-Going |
| S-22.11 | Blue Plains: Pipelines & Appurtenances | 98,924 | 147,842 | 48,918 | 49.5% | 108,360 | On-Going |
| | TOTALS | \$788,275 | \$896,098 | \$107,823 | 13.7% | \$360,275 | |

Summary: These five projects, with an estimated total cost of \$896.1 million, provide funding for the upgrade, expansion, and enhancement of wastewater treatment and solids handling facilities at the Regional Blue Plains Wastewater Treatment Plant, located in the District of Columbia. Whereas typical WSSC projects encompass planning, design, construction, and start-up for a single project, with defined starting and ending dates, the Blue Plains projects are comprised of many sub-projects and are “open-ended.” As the Blue Plains Facility Plans move forward and new sub-projects are approved, the costs of these new sub-projects are added to the appropriate existing Blue Plains project. The expenditures displayed represent the WSSC’s calculated share. There are four main funding divisions: liquid treatment train (S-22.06); biosolids management (S-22.07); plant-wide projects (S-22.09); and, pipelines & appurtenances (S-22.11). Project S-22.10 Enhanced Nutrient Removal (ENR) will achieve nutrient removal levels surpassing Biological Nutrient Removal (BNR) as determined in the Tributary Strategy process of 2005 in order to meet Chesapeake Bay water quality targets.

Cost Impact: These five Blue Plains projects, which comprise one of the largest groups of expenditures in the CIP, represent 18% of the Six-Year WSSC CIP program. The figures shown above are derived from the latest available spending projections provided by the District of Columbia Water and Sewer Authority (DCWASA). Spending at the DCWASA staff-proposed rate in future years may challenge the WSSC’s ability to stay within County-established spending affordability limits. It is, therefore, recommended that the coordination of development and approval of the DCWASA’s and WSSC’s CIPs be sustained in order that the economic development and environmental objectives of the region be met, without causing a rapid increase in WSSC customers’ bills. An explanation of the cost changes for each project is included on the individual project description forms that immediately follow this summary page.

Blue Plains WWTP: Liquid Train Projects, Part 2

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-22.06 | 954811 | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | Feb. 21, 2018 |

| | |
|-----------------|---------------|
| Pressure Zones | |
| Drainage Basins | Bi-County 30; |
| Planning Areas | Bi-County; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|----------------|------------|----------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Planning, Design & Supervision | 37,934 | | 2,305 | 21,493 | 3,398 | 2,769 | 3,795 | 3,678 | 2,446 | 5,407 | 14,136 |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 152,980 | | 8,091 | 99,696 | 13,900 | 18,302 | 17,626 | 21,262 | 17,423 | 11,183 | 45,193 |
| Other | 1,909 | | 104 | 1,212 | 173 | 211 | 214 | 249 | 199 | 166 | 593 |
| Total | 192,823 | | 10,500 | 122,401 | 17,471 | 21,282 | 21,635 | 25,189 | 20,068 | 16,756 | 59,922 |

C. Funding Schedule (000's)

| | | | | | | | | | | |
|-------------------|---------|-------|---------|--------|--------|--------|--------|--------|--------|--------|
| WSSC Bonds | 182,238 | 9,924 | 115,681 | 16,512 | 20,114 | 20,447 | 23,806 | 18,966 | 15,836 | 56,633 |
| City of Rockville | 10,585 | 576 | 6,720 | 959 | 1,168 | 1,188 | 1,383 | 1,102 | 920 | 3,289 |

D. Description & Justification

DESCRIPTION
 This project provides funding for WSSC's share of Blue Plains liquid train projects for which construction began after June 30, 1993. Major projects include: Dual Purpose Sedimentation Basins Rehabilitation, Filtration/Disinfection Facilities Phases I&II, and Grit Chamber Buildings 1&2.

JUSTIFICATION
 This is a continuation of the DCWASA's upgrading of the Blue Plains Wastewater Treatment Plant.
 The Blue Plains Intermunicipal Agreement of 2012; the DCWASA Master Plan (1998); and the DCWASA Approved FY 2018 Capital Improvements Program.

COST CHANGE
 Not applicable.

OTHER
 The project scope has remained the same. Project costs are derived from the DCWASA Capital & Operating Budget 10-year forecast of spending and DCWASA's latest project management data, and fully reflect DCWASA's current cost estimates and expenditure schedules. Given the open-ended nature of the Blue Plains projects, this PDF does not fully reflect the total project costs. These projects are, in fact, expected to continue indefinitely. As new sub-projects are added to the Blue Plains facility plans, the associated costs will be added to this project. The funding schedule also indicates the calculated Rockville share of the cost. Life to date expenditures for this program are approximately \$370 million.

COORDINATION
 Coordinating Agencies: District of Columbia Water and Sewer Authority; (responsible for design and construction); City of Rockville; (responsible for a share of funding)
 Coordinating Projects: S-22.10-Blue Plains WWTP: Enhanced Nutrient Removal;

E. Annual Operating Budget Impact (000's)

| | | FY of Impact |
|--------------------------------|----------|--------------|
| Staff | | |
| Maintenance | | |
| Other Project Costs | | |
| Debt Service | \$11,855 | |
| Total Cost | \$11,855 | |
| Impact on Water and Sewer Rate | \$0.27 | |

F. Approval and Expenditure Data (000's)

| | |
|------------------------------|---------|
| Date First in Program | FY 95 |
| Date First Approved | FY 95 |
| Initial Cost Estimate | |
| Cost Estimate Last FY | 173,026 |
| Present Cost Estimate | 192,823 |
| Approved Request Last FY | 13,154 |
| Total Expense & Encumbrances | |
| Approval Request Year 1 | 17,471 |

G. Status Information

| | |
|---------------------|----------------|
| Land Status | Not Applicable |
| Project Phase | On-Going |
| Percent Complete | |
| Est Completion Date | On-Going |

| | |
|--------------------------|---------|
| Growth | |
| System Improvement | 100% |
| Environmental Regulation | |
| Population Served | |
| Capacity | 370 MGD |

H. Map

MAP NOT AVAILABLE

Blue Plains WWTP: Biosolids Management, Part 2

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-22.07 | 954812 | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | Feb. 21, 2018 |

| | |
|-----------------|---------------|
| Pressure Zones | |
| Drainage Basins | Bi-County 30; |
| Planning Areas | Bi-County; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|---------------|------------|----------------|---------------|--------------|---------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 7,506 | | 1,317 | 5,486 | 814 | 1,490 | 1,352 | 875 | 483 | 472 | 703 |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 32,779 | | 4,975 | 27,804 | 6,998 | 8,682 | 7,222 | 4,040 | 612 | 250 | 0 |
| Other | 403 | | 63 | 333 | 78 | 102 | 86 | 49 | 11 | 7 | 7 |
| Total | 40,688 | | 6,355 | 33,623 | 7,890 | 10,274 | 8,660 | 4,964 | 1,106 | 729 | 710 |

C. Funding Schedule (000's)

| | | | | | | | | | | |
|-------------------|--------|-------|--------|-------|-------|-------|-------|-------|-----|-----|
| WSSC Bonds | 38,455 | 6,006 | 31,778 | 7,457 | 9,710 | 8,185 | 4,692 | 1,045 | 689 | 671 |
| City of Rockville | 2,233 | 349 | 1,845 | 433 | 564 | 475 | 272 | 61 | 40 | 39 |

D. Description & Justification

| |
|--|
| <p>DESCRIPTION</p> <p>This project provides funding for WSSC's share of the Blue Plains biosolids handling projects for which construction began after June 30, 1993. Major projects include: new Digestion Facilities; Gravity Thickener Facilities; and Solids Processing Building/Dewatered Sludge Loading Facility.</p> <p>JUSTIFICATION</p> <p>This project is needed to implement a set of facilities which will provide a permanent biosolids management program for Blue Plains.</p> <p>The Blue Plains Intermunicipal Agreement of 2012; the DCWASA Master Plan (1998); EPMC IV Facility Plan, CH2MHILL (2001); the Biosolids Management at DCWASA Blue Plains Wastewater Treatment Plant Phase II - Design and Cost Considerations for Treatment Alternatives Report (December 2007); and the DCWASA Approved FY 2018 Capital Improvement Program.</p> <p>COST CHANGE</p> <p>Not applicable.</p> <p>OTHER</p> <p>The project scope has remained the same. Project costs are derived from the DCWASA Capital & Operating Budget 10-year forecast of spending and DCWASA's latest project management data, and fully reflect DCWASA's current cost estimates and expenditure schedules. Given the open-ended nature of the Blue Plains projects, this PDF does not fully reflect the total project costs. These projects are, in fact, expected to continue indefinitely. As new sub-projects are added to the Blue Plains facility plans, the associated costs will be added to this project. Portions of the program have been financed by low interest loans through the Maryland Department of the Environment's Water Quality Administration State Revolving Loan Program. The funding schedule also indicates the calculated Rockville share of the cost. Life to date expenditures for this program are approximately \$410 million.</p> <p>COORDINATION</p> <p>Coordinating Agencies: City of Rockville; (responsible for a share of funding); District of Columbia Water and Sewer Authority; (responsible for design and construction)</p> <p>Coordinating Projects: Not Applicable</p> |
|--|

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|---------|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | | |
| Other Project Costs | | |
| Debt Service | \$2,502 | |
| Total Cost | \$2,502 | |
| Impact on Water and Sewer Rate | \$0.06 | |

F. Approval and Expenditure Data (000's)

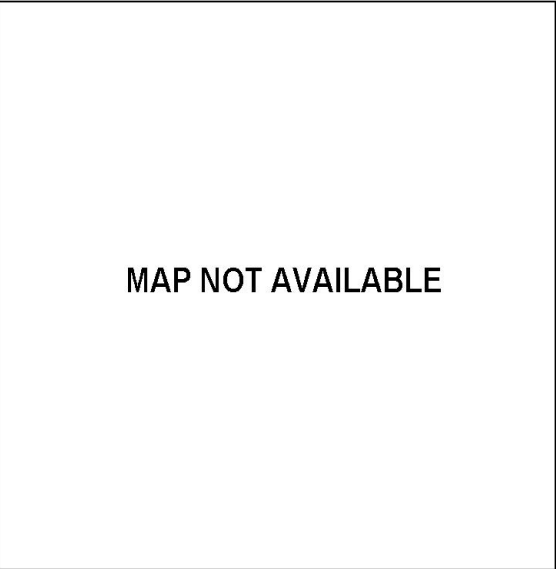
| | |
|------------------------------|--------|
| Date First in Program | FY 95 |
| Date First Approved | FY 95 |
| Initial Cost Estimate | |
| Cost Estimate Last FY | 36,101 |
| Present Cost Estimate | 40,688 |
| Approved Request Last FY | 2,557 |
| Total Expense & Encumbrances | |
| Approval Request Year 1 | 7,890 |

G. Status Information

| | |
|---------------------|----------------|
| Land Status | Not Applicable |
| Project Phase | On-Going |
| Percent Complete | |
| Est Completion Date | On-Going |

| | |
|--------------------------|---------|
| Growth | |
| System Improvement | 100% |
| Environmental Regulation | |
| Population Served | |
| Capacity | 370 MGD |

H. Map



Blue Plains WWTP: Plant-wide Projects

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-22.09 | 023805 | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | Feb. 21, 2018 |

| | |
|-----------------|---------------|
| Pressure Zones | |
| Drainage Basins | Bi-County 30; |
| Planning Areas | Bi-County; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|----------------|------------|----------------|---------------|--------------|--------------|---------------|---------------|---------------|---------------|----------------|
| Planning, Design & Supervision | 22,038 | | 1,624 | 17,552 | 2,327 | 2,201 | 4,268 | 3,774 | 3,046 | 1,936 | 2,862 |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 87,135 | | 4,926 | 63,747 | 5,798 | 7,517 | 13,384 | 15,007 | 13,449 | 8,592 | 18,462 |
| Other | 1,092 | | 66 | 813 | 81 | 97 | 177 | 188 | 165 | 105 | 213 |
| Total | 110,265 | | 6,616 | 82,112 | 8,206 | 9,815 | 17,829 | 18,969 | 16,660 | 10,633 | 21,537 |

C. Funding Schedule (000's)

| | | | | | | | | | | |
|-------------------|---------|-------|--------|-------|-------|--------|--------|--------|--------|--------|
| WSSC Bonds | 104,212 | 6,253 | 77,604 | 7,756 | 9,276 | 16,850 | 17,928 | 15,745 | 10,049 | 20,355 |
| City of Rockville | 6,053 | 363 | 4,508 | 450 | 539 | 979 | 1,041 | 915 | 584 | 1,182 |

D. Description & Justification

DESCRIPTION
 This project provides funding for WSSC's share of Blue Plains plant-wide projects for which construction began after June 30, 1993. Major projects include: Plant-wide Fine Bubble Aeration, Plant-wide Painting of Steel Pipes, Process Computer Control System, and Miscellaneous Projects.

JUSTIFICATION
 This is a continuation of the DCWASA's upgrading of the Blue Plains Wastewater Treatment Plant.
 The Blue Plains Intermunicipal Agreement of 2012; the WASA Master Plan (1998); and the DCWASA Approved FY 2018 Capital Improvement Program.

COST CHANGE
 Not applicable.

OTHER
 The project scope has remained the same. Project costs are derived from the DCWASA Capital & Operating Budget 10-year forecast and latest project management data, and reflect DCWASA's current expenditure estimates and schedules. Given the open-ended nature of the project, this PDF does not fully reflect the total project costs. These projects are, in fact, expected to continue indefinitely. As new sub-projects are added to the Blue Plains facility plans, the associated costs will be added to this project. The funding schedule also indicates the calculated Rockville share of the cost. Life to date expenditures for this program are approximately \$210 million.

COORDINATION
 Coordinating Agencies: City of Rockville; (responsible for a share of funding); District of Columbia Water and Sewer Authority; (responsible for design and construction)
 Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|---------|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | | |
| Other Project Costs | | |
| Debt Service | \$6,779 | |
| Total Cost | \$6,779 | |
| Impact on Water and Sewer Rate | \$0.16 | |

F. Approval and Expenditure Data (000's)

| | |
|------------------------------|---------|
| Date First in Program | FY 95 |
| Date First Approved | FY 02 |
| Initial Cost Estimate | |
| Cost Estimate Last FY | 98,436 |
| Present Cost Estimate | 110,265 |
| Approved Request Last FY | 7,021 |
| Total Expense & Encumbrances | |
| Approval Request Year 1 | 8,206 |

G. Status Information

| | |
|---------------------|----------------|
| Land Status | Not Applicable |
| Project Phase | On-Going |
| Percent Complete | |
| Est Completion Date | On-Going |

| | |
|--------------------------|---------|
| Growth | |
| System Improvement | 100% |
| Environmental Regulation | |
| Population Served | |
| Capacity | 370 MGD |

H. Map

MAP NOT AVAILABLE

Blue Plains WWTP: Enhanced Nutrient Removal

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-22.10 | 083800 | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | Feb. 21, 2018 |

| | |
|-----------------|---------------|
| Pressure Zones | |
| Drainage Basins | Bi-County 30; |
| Planning Areas | Bi-County; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|----------------|----------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 108,555 | 88,248 | 8,280 | 9,848 | 5,224 | 888 | 848 | 746 | 1,083 | 1,059 | 2,179 |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 295,294 | 252,534 | 21,755 | 3,794 | 3,038 | 660 | 12 | 4 | 65 | 15 | 17,211 |
| Other | 631 | | 300 | 137 | 83 | 15 | 9 | 8 | 11 | 11 | 194 |
| Total | 404,480 | 340,782 | 30,335 | 13,779 | 8,345 | 1,563 | 869 | 758 | 1,159 | 1,085 | 19,584 |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|-------------------|---------|---------|--------|-------|-------|-----|-----|-----|-----|-----|--------|
| WSSC Bonds | 174,541 | 129,184 | 20,469 | 6,938 | 3,991 | 700 | 358 | 309 | 861 | 719 | 17,950 |
| State Aid | 221,703 | 205,998 | 8,677 | 6,437 | 4,122 | 822 | 490 | 431 | 248 | 324 | 591 |
| City of Rockville | 8,236 | 5,600 | 1,189 | 404 | 232 | 41 | 21 | 18 | 50 | 42 | 1,043 |

D. Description & Justification

DESCRIPTION
 This project provides funding for WSSC's share of the Blue Plains Enhanced Nutrient Removal projects required to achieve nutrient removal to levels below BNR levels to meet the Chesapeake Bay water quality targets determined in the 2005 Tributary Strategies Process and DC Water's 2010 NPDES permit. Major projects include: Enhanced Nitrogen Removal North, Enhanced Clarification Facilities, Enhanced Nitrogen Removal Facilities, Biosolids Filtrate Treatment Facilities, Combined Heat & Power as Back-up Power, Biosolids Blending Development Center, ENR Program Management, and Wet Weather Mitigation, Diversion at Bolling and Tunnel Dewatering Pump Station.

JUSTIFICATION
 The funding schedule reflects the final cost sharing agreement with the Maryland Department of the Environment.
 Chesapeake Bay Program Tributary Strategies Process (2005); Blue Plains Strategic Process Study, Metcalf & Eddy (2005); Selection of the Enhanced Nitrogen Removal Process Alternative for the Blue Plains Advanced Wastewater Treatment Facility, Metcalf & Eddy (2009); DCWASA Approved FY 2018 Capital Improvement Program, and the Blue Plains Intermunicipal Agreement of 2012.

COST CHANGE
 Not applicable.

OTHER
 The project scope has remained the same. Project costs are derived from the DCWASA Capital & Operating Budget 10-year forecast and latest project management data, and reflect DCWASA's current expenditure estimates and schedules. Total Nitrogen Secondary Treatment Upgrades will take place after 2021. Projects extending beyond those supported by State Aid include rehabilitation and upgrades to older projects. Portions of the program have been financed by low interest loans through the Maryland Department of the Environment's Water Quality Administration State Revolving Loan Program. The funding schedule also indicates the calculated Rockville share of the cost.

COORDINATION
 Coordinating Agencies: Maryland Department of the Environment; U.S. Environmental Protection Agency, Region III; District of Columbia Water and Sewer Authority; (responsible for design and construction); City of Rockville; (responsible for a share of funding)
 Coordinating Projects: S-22.06-Blue Plains WWTP: Liquid Train Projects, Part 2;

E. Annual Operating Budget Impact (000's)

| | | FY of Impact |
|--------------------------------|----------|--------------|
| Staff | | |
| Maintenance | | |
| Other Project Costs | | |
| Debt Service | \$11,354 | |
| Total Cost | \$11,354 | |
| Impact on Water and Sewer Rate | \$0.26 | |

F. Approval and Expenditure Data (000's)

| | |
|------------------------------|---------|
| Date First in Program | FY 08 |
| Date First Approved | FY 07 |
| Initial Cost Estimate | 648 |
| Cost Estimate Last FY | 381,788 |
| Present Cost Estimate | 404,480 |
| Approved Request Last FY | 28,619 |
| Total Expense & Encumbrances | 340,782 |
| Approval Request Year 1 | 8,345 |

G. Status Information

| | |
|---------------------|----------------|
| Land Status | Not Applicable |
| Project Phase | Construction |
| Percent Complete | 86% |
| Est Completion Date | FY 2026 |

| | |
|--------------------------|---------|
| Growth | |
| System Improvement | |
| Environmental Regulation | 100% |
| Population Served | |
| Capacity | 370 MGD |

H. Map

MAP NOT AVAILABLE

Blue Plains: Pipelines & Appurtenances

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-22.11 | 113804 | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | Feb. 21, 2018 |

| | |
|-----------------|---------------|
| Pressure Zones | |
| Drainage Basins | Bi-County 30; |
| Planning Areas | Bi-County; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|----------------|------------|----------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Planning, Design & Supervision | 24,248 | | 4,438 | 18,568 | 3,833 | 3,066 | 4,053 | 3,440 | 2,781 | 1,395 | 1,242 |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 122,130 | | 17,515 | 88,719 | 19,328 | 11,199 | 18,526 | 13,495 | 13,124 | 13,047 | 15,896 |
| Other | 1,464 | | 220 | 1,073 | 232 | 143 | 226 | 169 | 159 | 144 | 171 |
| Total | 147,842 | | 22,173 | 108,360 | 23,393 | 14,408 | 22,805 | 17,104 | 16,064 | 14,586 | 17,309 |

C. Funding Schedule (000's)

| | | | | | | | | | | |
|-------------------|---------|--------|---------|--------|--------|--------|--------|--------|--------|--------|
| WSSC Bonds | 140,202 | 21,329 | 104,118 | 22,573 | 14,076 | 22,393 | 16,426 | 15,146 | 13,504 | 14,755 |
| City of Rockville | 7,640 | 844 | 4,242 | 820 | 332 | 412 | 678 | 918 | 1,082 | 2,554 |

D. Description & Justification

| |
|---|
| <p>DESCRIPTION</p> <p>This project provides funding for WSSC's share of Blue Plains-associated projects which are "outside the fence" of the treatment plant. Major projects include: A new headquarters building; Potomac Interceptor Rehabilitation; Upper Potomac Interceptor; Potomac Sewage Pumping Station Rehabilitation; Influent Sewers Rehabilitation; and projects associated with the Combined Sewer Overflow (CSO) Long Term Control Plan (Clean Rivers Program) (e.g. Anacostia Tunnel).</p> <p>JUSTIFICATION</p> <p>This is a continuation of DCWASA's upgrading of the Blue Plains-associated projects outside the fence.</p> <p>The Blue Plains Intermunicipal Agreement of 2012; the WASA Master Plan (1998); Technical Memorandum No. 1, Multi-Jurisdictional Use Facilities Capital Cost Allocation, (June 2013); and the DCWASA Approved FY 2018 Capital Improvement Program.</p> <p>COST CHANGE</p> <p>The expenditure schedule has been updated to reflect the latest estimates for the Long Term Control Plan projects.</p> <p>OTHER</p> <p>The project scope has remained the same. Project costs are derived from the DC-WASA Capital & Operating Budget 10-year forecast and latest project management data, and reflect WASA's current expenditure estimates and schedules. Given the open-ended nature of the project, this PDF does not fully reflect the total project costs. These projects are, in fact, expected to continue indefinitely. As new sub-projects are added to the Blue Plains facility plans, the associated costs will be added to this project. The funding schedule also indicates the calculated Rockville share of the cost which varies by project based on the City's relative share of WSSC's flow as derived in the Multijurisdiction Use Facilities Study. Life to date expenditures for this program are approximately \$125 million.</p> <p>COORDINATION</p> <p>Coordinating Agencies: City of Rockville; (responsible for a share of funding); District of Columbia Water and Sewer Authority; (responsible for design and construction)</p> <p>Coordinating Projects: Not Applicable</p> |
|---|

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|---------|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | | |
| Other Project Costs | | |
| Debt Service | \$9,120 | |
| Total Cost | \$9,120 | |
| Impact on Water and Sewer Rate | \$0.21 | |

F. Approval and Expenditure Data (000's)

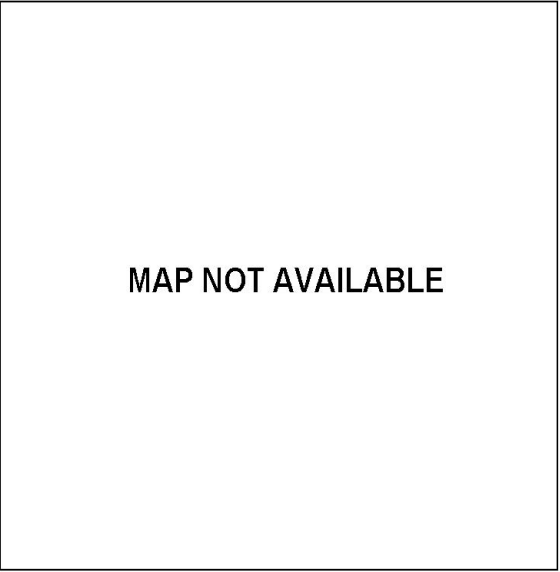
| | |
|------------------------------|---------|
| Date First in Program | FY 11 |
| Date First Approved | FY 02 |
| Initial Cost Estimate | |
| Cost Estimate Last FY | 98,924 |
| Present Cost Estimate | 147,842 |
| Approved Request Last FY | 12,926 |
| Total Expense & Encumbrances | |
| Approval Request Year 1 | 23,393 |

G. Status Information

| | |
|---------------------|----------------|
| Land Status | Not Applicable |
| Project Phase | On-Going |
| Percent Complete | |
| Est Completion Date | On-Going |

| | |
|--------------------------|-----|
| Growth | |
| System Improvement | 45% |
| Environmental Regulation | 55% |
| Population Served | |
| Capacity | |

H. Map



Piscataway WWTP Bio-Energy Project

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-103.02 | 153802 | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | Feb. 21, 2018 |

| | |
|-----------------|------------|
| Pressure Zones | |
| Drainage Basins | |
| Planning Areas | Bi-County; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|----------------|--------------|----------------|----------------|---------------|---------------|---------------|---------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 41,161 | 6,871 | 6,250 | 28,040 | 12,700 | 9,820 | 4,550 | 920 | 50 | | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 196,000 | | 2,200 | 193,800 | 25,700 | 62,800 | 65,500 | 32,000 | 7,800 | | |
| Other | 11,516 | | 423 | 11,093 | 1,910 | 3,631 | 3,503 | 1,646 | 403 | | |
| Total | 248,677 | 6,871 | 8,873 | 232,933 | 40,310 | 76,251 | 73,553 | 34,566 | 8,253 | | |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|-------------|---------|-------|-------|---------|--------|--------|--------|--------|-------|--|--|
| WSSC Bonds | 244,607 | 6,301 | 8,873 | 229,433 | 38,310 | 74,751 | 73,553 | 34,566 | 8,253 | | |
| Federal Aid | 570 | 570 | | | | | | | | | |
| State Aid | 3,500 | | | 3,500 | 2,000 | 1,500 | | | | | |

D. Description & Justification

DESCRIPTION
 This project will develop a comprehensive program for the engineering, design, construction, maintenance, and monitoring and verification necessary to add sustainable energy equipment and systems to produce biogas and electricity at Piscataway WWTP. It will provide a reduction in operations, maintenance, chemicals, biosolids transportation, and biosolids disposal costs. It will also enhance existing operating conditions and reliability while continuing to meet all permit requirements, and ensure a continued commitment to environmental stewardship at WSSC sites. The scope of work includes, but is not limited to, the addition of anaerobic digestion equipment; thermal hydrolysis pretreatment equipment; gas cleaning, storage and upgrade systems; tanks; piping; valves; pumps; biosolids pre- and post dewatering; cake receiving and blending; cake storage; effluent disinfection systems; instrumentation; flow metering; power measurement; and combined heat and power generation systems.

JUSTIFICATION
 In March 2009, the WSSC received approval for a federal Department of Energy grant of \$570,900 for the feasibility study/conceptual design phase. On June 16, 2010, the WSSC awarded the study contract to AECOM Technical Services, Inc., of Laurel, Maryland. The study was completed in December 2011, and the Thermal Hydrolysis/Mesophilic Anaerobic Digestion/Combined Heat & Power facility was recommended to be constructed and was presented to the Commission in April 2012.
 The EPA is urging wastewater utilities to utilize this commercially available technology (anaerobic digestion) to produce power at a cost below retail electricity, displace purchased fuels for thermal needs, produce renewable fuel for green power programs, enhance power reliability for the wastewater treatment plant to prevent sanitary sewer overflows, reduce biosolids production and improve the health of the Chesapeake Bay, and to reduce greenhouse gas (GHG) and other air pollutants. In April 2009, the EPA announced that greenhouse gases contributed to air pollution that may endanger public health or welfare, and began proceedings to regulate CO2 under the Clean Air Act. In June 2014, the EPA announced a proposed rule to reduce carbon emissions from power plants by 30% by 2030, compared to the levels in 2005. Based on AECOM's feasibility study work as of May 2011, a regional/centralized plant at a location to be determined based on a Thermal Hydrolysis/Mesophilic Anaerobic Digestion/Combined Heat & Power (TH/MAD/CHP) process supplemented by restaurant grease fuel design was recommended.
 The environmental benefits are estimated as follows: Recover approximately 2 MW of renewable energy from wastewater biomass; reduce Greenhouse Gas production by 11,800 tons/year; reduce biosolids output by 50 - 55% of current output; reduce lime demand by 4,100 tons/year; maintain permitted nutrient load limits to the Chesapeake Bay; reduce 5 million gallons/year of grease discharge to sewers; produce pathogen-free Class A Biosolids.
 The economic benefits are estimated as follows: Recover more than \$1.5 million of renewable energy costs/year; reduce biosolids disposal costs by ~ \$1.7 million/year; reduce chemical costs by ~ \$500,000/year; hedge against rising costs of power fuel and chemicals; provide a net payback over time.

E. Annual Operating Budget Impact (000's)

| | | FY of Impact |
|--------------------------------|----------|--------------|
| Staff | | |
| Maintenance | | |
| Other Project Costs | | |
| Debt Service | \$15,912 | 24 |
| Total Cost | \$15,912 | 24 |
| Impact on Water and Sewer Rate | \$0.37 | 24 |

F. Approval and Expenditure Data (000's)

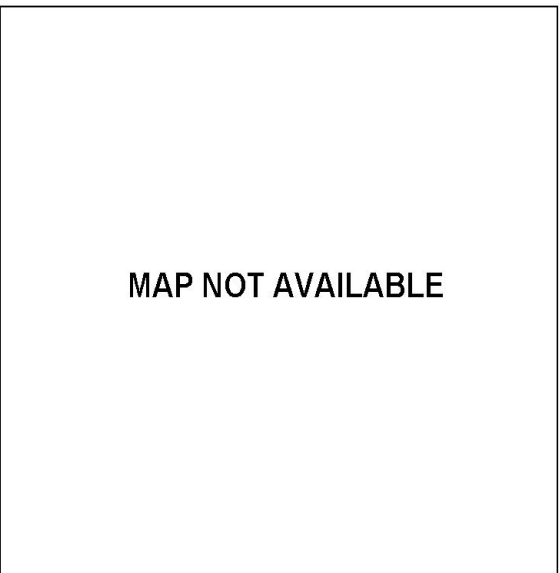
| | |
|------------------------------|---------|
| Date First in Program | FY 15 |
| Date First Approved | FY 10 |
| Initial Cost Estimate | 345 |
| Cost Estimate Last FY | 162,190 |
| Present Cost Estimate | 248,677 |
| Approved Request Last FY | 3,990 |
| Total Expense & Encumbrances | 6,871 |
| Approval Request Year 1 | 40,310 |

G. Status Information

| | Public/Agency owned land |
|---------------------|--------------------------|
| Land Status | |
| Project Phase | Design |
| Percent Complete | 10% |
| Est Completion Date | July 2022 |

| | |
|--------------------------|------|
| Growth | |
| System Improvement | 100% |
| Environmental Regulation | |
| Population Served | |
| Capacity | |

H. Map



Piscataway WWTP Bio-Energy Project

Plans & Studies: Appel Consultants, Urban Waste Grease Resource Assessment-NREL (November 1998); Environmental Protection Agency (EPA), Opportunities For and Benefits Of Combined Heat and Power at Wastewater Treatment Facilities (December 2006); Brown & Caldwell, Anaerobic Digestion and Electric Generation Options for WSSC (November 2007); Metcalf & Eddy, WSSC Sludge Digestion Study for Piscataway and Seneca (December 2007); Black & Veatch, WSSC Digester Scope and Analysis (December 2007); JMT, Prince George's County Septage (FOG) Discharge Facility Study (February 2008); JMT, Western Research Institute (WRI) Biogas Feasibility Study Scope of Work - WSSC (April 2008); JMT, Montgomery County Septage (FOG) Discharge Facility Study (January 2010); Facility Plan for the Rock Creek Wastewater Treatment Plant (January 2010); AECOM Technical Services, Inc., Anaerobic Digestion/Combined Heat & Power Study (December 2011, Executive Summary Revised May 2013). HDR Inc. Design Development Report (March 2017).

COST CHANGE

Cost increased to reflect early design level estimate and inclusion of FOG Facility and Utility Water Upgrades from Piscataway WWTP Facility Plant, and biosolids transported from Western Branch WWTP.

OTHER

The project scope has changed to include a FOG Facility, Utility Water Upgrades at Piscataway Plant, and biosolids transported from Western Branch WWTP. The Commission has a defined scope and estimated capital cost, and is able to proceed with the detailed design and construction of the anerobic digestion, biomass, and combined heat and power generation system facilities for treating all biosolids from WSSC's Damascus, Seneca, Parkway, Western Branch and Piscataway WWTPs. The Montgomery and Prince George's County Councils were briefed and approved the project by resolution on November 25, 2014, and September 9, 2014, respectively. In April 2017 the Maryland Energy Administration notified WSSC of approval of grant funding up to \$500,000. In June 2017 WSSC was approved for a \$3 million grant through the Maryland Department of the Environment's Energy Water Infrastructure Program (EWIP). WSSC has also applied for grants from the local power utility. WSSC will continue to apply for other available funding sources. The Commission retained the following consulting services: in 2015 - Hawkins, Delafield and Wood - procurement; Raftelis Financial Consultants - financial; in 2016 - HDR Inc for program management and construction management for the Bio-Energy project. A portion of this project will be financed by low interest loans through the Maryland Department of the Environment's Water Quality Administration State Revolving Loan Program.

COORDINATION

Coordinating Agencies: Montgomery County Government; Prince George's County Government; Maryland-National Capital Park & Planning Commission; (Mandatory Referral Process); Montgomery County Department of Environmental Protection; Maryland Department of the Environment; Chesapeake Bay Critical Areas; Maryland Energy Administration Washington Gas Light Company;
Coordinating Projects: S-96.14-Piscataway WWTP Facility Upgrades; S-170.08-Septage Discharge Facility Planning & Implementation;

Septage Discharge Facility Planning & Implementation

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-170.08 | 103802 | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|------------|
| Pressure Zones | |
| Drainage Basins | |
| Planning Areas | Bi-County; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|---------------|--------------|----------------|---------------|--------------|---------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 4,175 | 3,564 | 347 | 264 | 53 | 158 | 53 | | | | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 25,088 | 928 | | 24,160 | 4,832 | 14,496 | 4,832 | | | | |
| Other | 1,231 | | 35 | 1,196 | 344 | 482 | 370 | | | | |
| Total | 30,494 | 4,492 | 382 | 25,620 | 5,229 | 15,136 | 5,255 | | | | |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|------------|--------|-------|-----|--------|-------|--------|-------|--|--|--|--|
| WSSC Bonds | 30,494 | 4,492 | 382 | 25,620 | 5,229 | 15,136 | 5,255 | | | | |
|------------|--------|-------|-----|--------|-------|--------|-------|--|--|--|--|

D. Description & Justification

| |
|---|
| <p>DESCRIPTION</p> <p>This project provides for the planning, design, and construction of a new Septage and Fats, Oils, Grease (FOG) discharge facility at the abandoned Rock Creek WWTP, and new Septage discharge facilities at Anacostia WWPS No 2 and Piscataway WWTP.</p> <p>JUSTIFICATION</p> <p>Currently septage waste is collected at three locations: Muddy Branch Road Disposal Site in Montgomery County, and Ritchie Road Disposal Site and Bladensburg Disposal Site in Prince George's County (the Temple Hills Road site was closed down on July 1, 2015). The types of waste collected are as follows: Septic Tank Pump-Out (Sludge), Waste Holding Tank Discharge (Gray Water); Grease Trap Pump Out (FOG), Bus Holding Tank Discharge (Sewage and Chemicals), and Small Food Service Providers (Low Volume FOG Waste). FOG wastes should not be discharged to the Commission's sewerage system without treatment.</p> <p>Septage Discharge Facility Study for Montgomery County: Final Report, JMT (July 2012); Septage Discharge Facility Study for Prince George's County: Final Report, JMT (July 2012).</p> <p>COST CHANGE</p> <p>The estimated construction cost of the three facilities has increased significantly based upon the final design submitted.</p> <p>OTHER</p> <p>The project scope has remained the same. The expenditures and schedule projections shown in Block B are estimates at the 100% design stage and may change based upon actual bid. The design and construction of the FOG Discharge Facility at the Piscataway WWTP has been moved to the Piscataway WWTP Bio-Energy Project.</p> <p>COORDINATION</p> <p>Coordinating Agencies: Montgomery County Government; Prince George's County Government; Maryland-National Capital Park & Planning Commission; (Mandatory Referral) Montgomery County Department of Environmental Protection; Maryland Department of Natural Resources; Maryland Department of the Environment; Prince George's County Department of Environmental Resources;</p> <p>Coordinating Projects: S-103.02-Piscataway WWTP Bio-Energy Project;</p> |
|---|

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|---------|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | | |
| Other Project Costs | | |
| Debt Service | \$1,984 | 22 |
| Total Cost | \$1,984 | 22 |
| Impact on Water and Sewer Rate | \$0.05 | 22 |

F. Approval and Expenditure Data (000's)

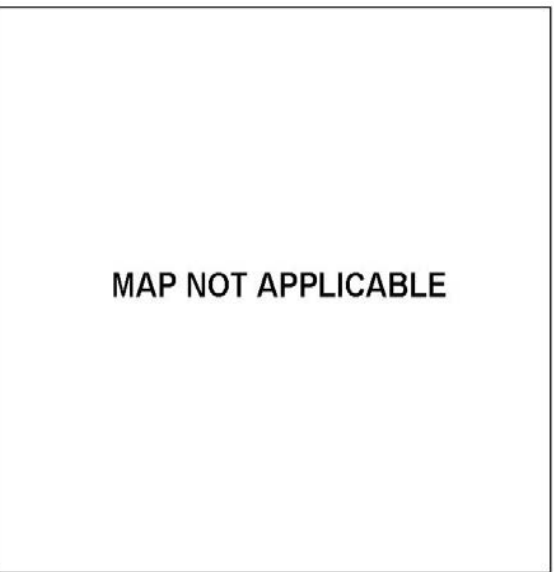
| | |
|------------------------------|--------|
| Date First in Program | FY 10 |
| Date First Approved | FY 10 |
| Initial Cost Estimate | 10,835 |
| Cost Estimate Last FY | 14,344 |
| Present Cost Estimate | 30,494 |
| Approved Request Last FY | 2,521 |
| Total Expense & Encumbrances | 4,492 |
| Approval Request Year 1 | 5,229 |

G. Status Information

| | |
|---------------------|--------------------------|
| Land Status | Public/Agency owned land |
| Project Phase | Design |
| Percent Complete | 100% |
| Est Completion Date | FY 2021 |

| | |
|--------------------------|------|
| Growth | |
| System Improvement | 100% |
| Environmental Regulation | |
| Population Served | |
| Capacity | |

H. Map



Trunk Sewer Reconstruction Program

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-170.09 | 113805 | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | Feb. 21, 2018 |

| | |
|-----------------|---------------|
| Pressure Zones | |
| Drainage Basins | Bi-County 30; |
| Planning Areas | Bi-County; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|----------------|------------|----------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| Planning, Design & Supervision | 101,445 | | 30,311 | 71,134 | 16,771 | 14,971 | 11,693 | 9,051 | 9,232 | 9,416 | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 298,461 | | 97,690 | 200,771 | 57,908 | 44,372 | 42,467 | 18,306 | 18,672 | 19,046 | |
| Other | 40,167 | | 13,556 | 26,611 | 6,936 | 6,033 | 4,340 | 3,040 | 3,100 | 3,162 | |
| Total | 440,073 | | 141,557 | 298,516 | 81,615 | 65,376 | 58,500 | 30,397 | 31,004 | 31,624 | |

C. Funding Schedule (000's)

| | | | | | | | | | |
|------------|---------|---------|---------|--------|--------|--------|--------|--------|--------|
| WSSC Bonds | 440,073 | 141,557 | 298,516 | 81,615 | 65,376 | 58,500 | 30,397 | 31,004 | 31,624 |
|------------|---------|---------|---------|--------|--------|--------|--------|--------|--------|

D. Description & Justification

| DESCRIPTION |
|---|
| <p>The Trunk Sewer Reconstruction Program provides for the inspection, evaluation, planning, design, and construction required for the rehabilitation of sewer mains and their associated manholes in environmentally sensitive areas (ESA). This includes both trunk sewers 15-inches in diameter and greater, along with associated smaller diameter pipe less than 15-inches in diameter. The smaller diameter pipe is included due to its location within the ESA. The Program also includes planning, design and construction for the prioritized replacement of force mains.</p> |
| JUSTIFICATION |
| <p>Under the terms of the Consent Decree the WSSC Trunk Sewer Inspection Program inspected all required sewers in 21 basins by December 2010 and completed Sewer System Evaluation Surveys (SSES) for 9 basins. WSSC shall conduct rainfall, groundwater and flow monitoring to determine Inflow/Infiltration (I/I) rates and identify areas of limited capacity through collection system modeling. Where appropriate, WSSC shall use additional means to identify sources of I/I, including CCTV, smoke and/or dye testing. All the Trunk Sewer Inspections, SSES work and other related collection system evaluations are complete. Due to the delay in receiving permits, as well as Right-of-Entry permissions and subcontractor availability, trunk sewer reconstruction work has been delayed. All USACE and MDE permits have been received. WSSC Sanitary Sewer Overflow Consent Decree (December 7, 2005). Second Amendment to WSSC Sanitary Sewer Overflow Consent Decree (December 4, 2015)</p> |
| COST CHANGE |
| <p>Program costs reflect the latest expenditure and schedule estimates.</p> |
| OTHER |
| <p>The project scope has remained the same. Reconstruction work will include: reduction of I/I; replacement of substandard sewer segments; in situ lining of sewer segments; pipeline and manhole protection; rebuilding of manholes; and correction of structural defects and poor alignment. The reconstruction work in each sewer basin will be prioritized to most effectively prevent SSOs and backups. A Second Amendment to the Consent Decree extending WSSC's deadline to FY 2022 was agreed to by the U.S. Environmental Protection Agency, U.S. Department of Justice, and Maryland Department of the Environment and was entered by the US District Court. All construction contracts for ESA work have been awarded and the approved amounts have been utilized in the current budget projections. As actual construction progresses the projections may be updated. Beginning in FY 2015, construction work increased in the ESAs as a majority of the work was released for construction. Most of the upfront costs are associated with the construction of access roads and by-pass pumping. After completion of a majority of the Priority 1 construction activities associated with the Consent Decree, Phase 2 work (Priority 2 & 3 plus any newly identified Priority 1) is programmed at roughly five miles per year beginning in FY 2022. Life to date expenditures for this program are approximately \$461 million. Land costs are included in WSSC Project S-203.00.</p> |
| COORDINATION |
| <p>Coordinating Agencies: Maryland State Highway Administration; Montgomery County Department of Public Works and Transportation; Maryland-National Capital Park & Planning Commission; National Park Service; Maryland Department of the Environment; Maryland Department of Natural Resources; (Critical Area Commission, FSD Approval Forest Conservation/Reforestation Rare, Threatened or Endangered Species) Prince George's County Department of Permitting Inspection and Enforcement; U.S. Army Corps of Engineers; U.S. Environmental Protection Agency, Region III; Maryland Historical Trust;</p> <p>Coordinating Projects: S-1.01-Sewer Reconstruction Program;</p> |

E. Annual Operating Budget Impact (000's)

| | | FY of Impact |
|--------------------------------|----------|--------------|
| Staff | | |
| Maintenance | \$459 | 25 |
| Other Project Costs | | |
| Debt Service | \$28,627 | 25 |
| Total Cost | \$29,086 | 25 |
| Impact on Water and Sewer Rate | \$0.67 | 25 |

F. Approval and Expenditure Data (000's)

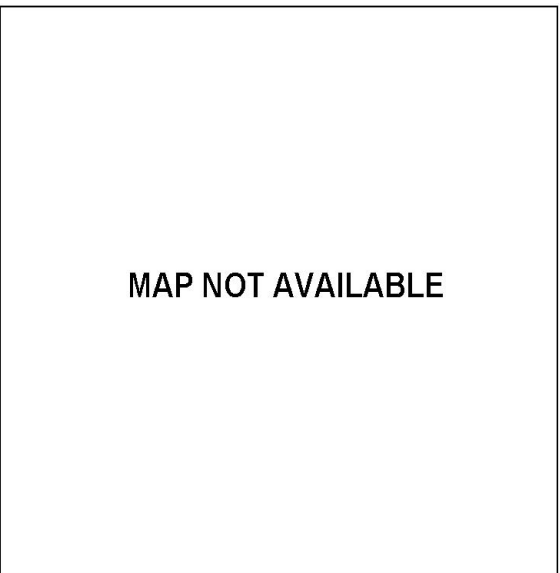
| | |
|------------------------------|---------|
| Date First in Program | FY 11 |
| Date First Approved | FY 11 |
| Initial Cost Estimate | |
| Cost Estimate Last FY | 504,500 |
| Present Cost Estimate | 440,073 |
| Approved Request Last FY | 148,900 |
| Total Expense & Encumbrances | |
| Approval Request Year 1 | 81,615 |

G. Status Information

| | |
|---------------------|-----------------------------|
| Land Status | Land and R/W to be acquired |
| Project Phase | On-Going |
| Percent Complete | |
| Est Completion Date | On-Going |

| | |
|--------------------------|------|
| Growth | |
| System Improvement | 100% |
| Environmental Regulation | |
| Population Served | |
| Capacity | |

H. Map



Land & Rights-of-Way Acquisition - Bi-County Sewer

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-203.00 | 163800 | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|------------|
| Pressure Zones | |
| Drainage Basins | |
| Planning Areas | Bi-County; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|------------|------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | | | | | | | | | | | |
| Land | 490 | | 320 | 170 | 95 | 15 | 15 | 15 | 15 | 15 | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | | | | | | | | | | | |
| Other | | | | | | | | | | | |
| Total | 490 | | 320 | 170 | 95 | 15 | 15 | 15 | 15 | 15 | |

C. Funding Schedule (000's)

| Funding Source | Total | FY'18 | FY'19 | FY'20 | FY'21 | FY'22 | FY'23 | FY'24 |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| WSSC Bonds | 250 | 95 | 155 | 80 | 15 | 15 | 15 | 15 |
| SDC | 180 | 180 | | | | | | |
| Contribution/Other | 60 | 45 | 15 | 15 | | | | |

D. Description & Justification

DESCRIPTION
 This PDF provides a consolidated estimate of funding for the acquisition of land and rights-of-way for sewer projects. Expenditures are programmed based upon anticipated schedules and are required for the completion of those specific projects. These costs do not include purchases which have already been completed.

JUSTIFICATION
 Consolidation of expenditures for land and rights-of-way acquisitions provides flexibility in expending funds in a specific fiscal year and permits the WSSC to respond to the uncertainty of project-specific implementation schedules. Other considerations include the accommodation of unpredictable delays which impact the timing of a planned purchase, unanticipated rights-of-way requirements due to minor alignment changes identified late in the design phase, and the need to assure the WSSC an equitable negotiation position by avoiding project-specific cost displays prior to contacting property owners.

Acquisition needs are determined by the WSSC and are based upon facility planning efforts, alignment studies, field surveys, realignments required by other agencies, or requirements identified within the Development Services Process.

COST CHANGE
 Not applicable.

OTHER
 The project scope has remained the same. Expenditure and schedule projections shown in Block B are estimates only and may change based upon actual negotiations. When purchases are complete, the actual cost will be displayed in the expenditure schedule on the appropriate project.

COORDINATION
 Coordinating Agencies: Not Applicable
 Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)

| | | FY of Impact |
|--------------------------------|------|--------------|
| Staff | | |
| Maintenance | | |
| Other Project Costs | | |
| Debt Service | \$16 | 25 |
| Total Cost | \$16 | 25 |
| Impact on Water and Sewer Rate | | |

F. Approval and Expenditure Data (000's)

| | |
|------------------------------|-------|
| Date First in Program | FY 98 |
| Date First Approved | FY 98 |
| Initial Cost Estimate | |
| Cost Estimate Last FY | 405 |
| Present Cost Estimate | 490 |
| Approved Request Last FY | 95 |
| Total Expense & Encumbrances | |
| Approval Request Year 1 | 95 |

G. Status Information

| | |
|--------------------------|-----------------------------|
| Land Status | Land and R/W to be acquired |
| Project Phase | Not Applicable |
| Percent Complete | |
| Est Completion Date | Not Applicable |
| Growth | 49% |
| System Improvement | 51% |
| Environmental Regulation | |
| Population Served | |
| Capacity | |

H. Map

MAP NOT APPLICABLE

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Section 6 - Prince George's County Sewer Projects

FINANCIAL SUMMARY

(ALL FIGURES IN THOUSANDS)

DATE: October 1, 2017

REVISED: May 10, 2018

PRINCE GEORGE'S COUNTY SEWER PROJECTS

| AGENCY NUMBER | PROJECT NAME | EST. TOTAL COST | EXPEND THRU 17 | EST. EXPEND 18 | TOTAL SIX YEARS | EXPENDITURE SCHEDULE | | | | | | BEYOND SIX YEARS | PAGE NUM |
|---------------|--|-----------------|----------------|----------------|-----------------|----------------------|---------|---------|---------|---------|---------|------------------|----------|
| | | | | | | YR 1 19 | YR 2 20 | YR 3 21 | YR 4 22 | YR 5 23 | YR 6 24 | | |
| S-27.08 | Westphalia Town Center Sewer Main | 850 | 207 | 460 | 183 | 124 | 47 | 12 | 0 | 0 | 0 | 0 | 6-3 |
| S-28.18 | Konterra Town Center East Sewer | 7,211 | 5,189 | 0 | 2,022 | 513 | 385 | 0 | 0 | 642 | 482 | 0 | 6-4 |
| S-43.02 | Broad Creek WWPS Augmentation | 182,490 | 143,172 | 17,325 | 21,993 | 15,225 | 6,768 | 0 | 0 | 0 | 0 | 0 | 6-5 |
| S-57.92 | Western Branch Facility Upgrade | 56,419 | 50,905 | 2,128 | 3,386 | 3,150 | 236 | 0 | 0 | 0 | 0 | 0 | 6-6 |
| S-68.01 | Landover Mall Redevelopment | 1,305 | 24 | 99 | 1,182 | 618 | 397 | 44 | 41 | 41 | 41 | 0 | 6-7 |
| S-75.19 | Brandywine Woods Wastewater Pumping Station | 315 | 7 | 177 | 131 | 67 | 64 | 0 | 0 | 0 | 0 | 0 | 6-8 |
| S-75.20 | Brandywine Woods WWPS Force Main | 123 | 15 | 41 | 67 | 67 | 0 | 0 | 0 | 0 | 0 | 0 | 6-9 |
| S-75.21 | Mattawoman WWTP Upgrades | 19,449 | 0 | 5,911 | 12,958 | 4,049 | 2,783 | 1,928 | 1,897 | 1,897 | 404 | 580 | 6-10 |
| S-77.20 | Parkway North Substation Replacement | 5,003 | 15 | 1,175 | 3,813 | 2,650 | 1,163 | 0 | 0 | 0 | 0 | 0 | 6-11 |
| S-86.19 | Karington Subdivision Sewer | 672 | 102 | 210 | 360 | 181 | 179 | 0 | 0 | 0 | 0 | 0 | 6-12 |
| S-96.14 | Piscataway WWTP Facility Upgrades | 143,294 | 8,241 | 4,290 | 130,763 | 31,115 | 39,591 | 24,810 | 24,278 | 10,969 | 0 | 0 | 6-13 |
| S-131.05 | Pleasant Valley Sewer Main, Part 2 | 877 | 43 | 199 | 635 | 393 | 165 | 77 | 0 | 0 | 0 | 0 | 6-14 |
| S-131.07 | Pleasant Valley Sewer Main, Part 1 | 1,750 | 98 | 464 | 1,188 | 970 | 218 | 0 | 0 | 0 | 0 | 0 | 6-15 |
| S-131.10 | Fort Washington Forest No. 1 WWPS Augmentation | 4,775 | 2,558 | 342 | 1,875 | 1,275 | 600 | 0 | 0 | 0 | 0 | 0 | 6-16 |
| | Projects Pending Close-Out | 4,845 | 2,312 | 2,533 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6-17 |
| | TOTALS | 429,378 | 212,888 | 35,354 | 180,556 | 60,397 | 52,596 | 26,871 | 26,216 | 13,549 | 927 | 580 | |

Prince George's County Sewer Projects
New Projects Listing
(costs in thousands)

| Agency Number | Project Name | Total Project Cost | Budget Year Cost | Page Number |
|----------------------|--------------------------------------|---------------------------|-------------------------|--------------------|
| S-77.20 | Parkway North Substation Replacement | \$5,003 | \$2,650 | 6-11 |
| | TOTALS | \$5,003 | \$2,650 | |

Westphalia Town Center Sewer Main

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-27.08 | | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|------------------------------|
| Pressure Zones | |
| Drainage Basins | Western Branch 14; |
| Planning Areas | Westphalia & Vicinity PA 78; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|------------|------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 88 | 22 | 32 | 34 | 19 | 10 | 5 | | | | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 678 | 185 | 368 | 125 | 89 | 31 | 5 | | | | |
| Other | 84 | | 60 | 24 | 16 | 6 | 2 | | | | |
| Total | 850 | 207 | 460 | 183 | 124 | 47 | 12 | | | | |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|--------------------|-----|-----|-----|-----|-----|----|----|--|--|--|--|
| Contribution/Other | 850 | 207 | 460 | 183 | 124 | 47 | 12 | | | | |
|--------------------|-----|-----|-----|-----|-----|----|----|--|--|--|--|

D. Description & Justification

DESCRIPTION
 This project provides for the planning, design, and construction of 4,550 feet of 15-inch, 18-inch, and 21-inch sanitary sewer main to serve the Westphalia Town Center.

JUSTIFICATION
 Westphalia Town Center Hydraulic Planning Analysis (June 2009).

COST CHANGE
 Not applicable.

OTHER
 The project scope has remained the same. The expenditure and schedule projections shown in Block B are based upon information provided by the developer. Design and construction will be performed by the developer under a System Extension Permit. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION
 Coordinating Agencies: Prince George's County Government; Maryland-National Capital Park & Planning Commission; Prince George's County Department of Environmental Resources; Prince George's County Department of Permitting Inspection and Enforcement; Local Community Civic Associations; (Interaction with state, county and regulatory staff)
 Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)

| | | FY of Impact |
|--------------------------------|------|--------------|
| Staff | | |
| Maintenance | \$79 | 22 |
| Other Project Costs | | |
| Debt Service | | |
| Total Cost | \$79 | 22 |
| Impact on Water and Sewer Rate | | |

F. Approval and Expenditure Data (000's)

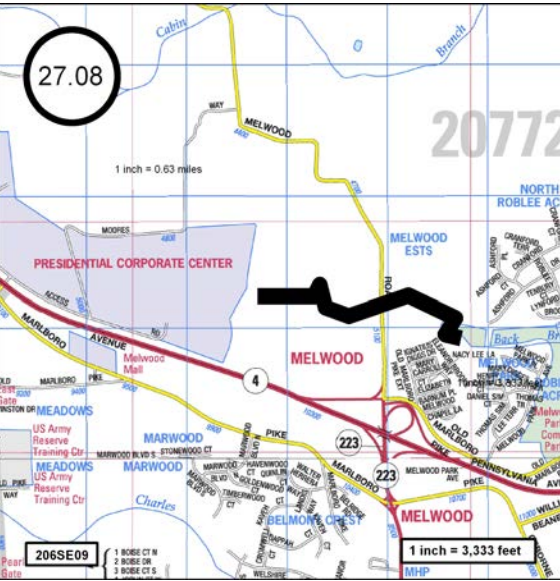
| | |
|------------------------------|-------|
| Date First in Program | FY 14 |
| Date First Approved | FY 14 |
| Initial Cost Estimate | 378 |
| Cost Estimate Last FY | 828 |
| Present Cost Estimate | 850 |
| Approved Request Last FY | 122 |
| Total Expense & Encumbrances | 207 |
| Approval Request Year 1 | 124 |

G. Status Information

| | |
|---------------------|---------------------|
| Land Status | Not Applicable |
| Project Phase | Construction |
| Percent Complete | 40% |
| Est Completion Date | Developer Dependent |

| | |
|--------------------------|---------|
| Growth | 100% |
| System Improvement | |
| Environmental Regulation | |
| Population Served | 7,600 |
| Capacity | 3.2 MGD |

H. Map



Konterra Town Center East Sewer

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-28.18 | | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|-----------------------------|
| Pressure Zones | |
| Drainage Basins | Northeast Branch Branch 08; |
| Planning Areas | Northwestern Area PA 60; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|--------------|--------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 2,634 | 2,404 | | 230 | 58 | 44 | | | 73 | 55 | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 4,313 | 2,785 | | 1,528 | 388 | 291 | | | 485 | 364 | |
| Other | 264 | | | 264 | 67 | 50 | | | 84 | 63 | |
| Total | 7,211 | 5,189 | | 2,022 | 513 | 385 | | | 642 | 482 | |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|--------------------|-------|-------|--|-------|-----|-----|--|--|-----|-----|--|
| Contribution/Other | 7,211 | 5,189 | | 2,022 | 513 | 385 | | | 642 | 482 | |
|--------------------|-------|-------|--|-------|-----|-----|--|--|-----|-----|--|

D. Description & Justification

DESCRIPTION
 This project provides for the planning, design, and construction of 14,000 feet of 15-inch to 24-inch diameter sewer main, 240 feet of 24-inch diameter steel sleeve for a 16-inch diameter water main (W-93.01), and 240 feet of 48-inch diameter steel sleeve for a 24-inch diameter sewer. The project serves the Konterra Town Center East development which is located in the area bound by Interstate 95, the Intercounty Connector and Konterra Drive.

JUSTIFICATION
 Letter of Findings DA4623Z07 (August 29, 2013).

COST CHANGE
 Not applicable.

OTHER
 The project scope has remained the same. The expenditure and schedule projections shown in Block B are based upon information provided by the developer. Design and construction will be performed by the developer under a System Extension Permit. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION
 Coordinating Agencies: Prince George's County Government;
 Coordinating Projects: W-93.01-Konterra Town Center East Water Main;

E. Annual Operating Budget Impact (000's)

| | | FY of Impact |
|--------------------------------|--------|--------------|
| Staff | | |
| Maintenance | \$252 | 21 |
| Other Project Costs | | |
| Debt Service | | |
| Total Cost | \$252 | 21 |
| Impact on Water and Sewer Rate | \$0.01 | 21 |

F. Approval and Expenditure Data (000's)

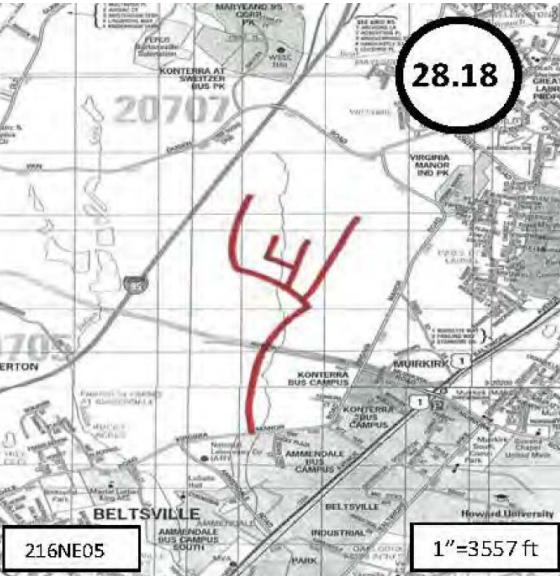
| | |
|------------------------------|-------|
| Date First in Program | FY 09 |
| Date First Approved | FY 09 |
| Initial Cost Estimate | 833 |
| Cost Estimate Last FY | 6,897 |
| Present Cost Estimate | 7,211 |
| Approved Request Last FY | 503 |
| Total Expense & Encumbrances | 5,189 |
| Approval Request Year 1 | 513 |

G. Status Information

| | |
|---------------------|---------------------|
| Land Status | Not Applicable |
| Project Phase | Construction |
| Percent Complete | 40% |
| Est Completion Date | Developer Dependent |

| | |
|--------------------------|----------|
| Growth | 100% |
| System Improvement | |
| Environmental Regulation | |
| Population Served | 11,300 |
| Capacity | 7.95 MGD |

H. Map



Broad Creek WWPS Augmentation

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-43.02 | | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|-----------------------------|
| Pressure Zones | |
| Drainage Basins | Broad Creek 11; |
| Planning Areas | South Potomac Sector PA 80; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|----------------|----------------|----------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 30,624 | 27,378 | 1,500 | 1,746 | 1,500 | 246 | | | | | |
| Land | 227 | 227 | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 149,767 | 115,567 | 15,000 | 19,200 | 13,000 | 6,200 | | | | | |
| Other | 1,872 | | 825 | 1,047 | 725 | 322 | | | | | |
| Total | 182,490 | 143,172 | 17,325 | 21,993 | 15,225 | 6,768 | | | | | |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|------------|---------|---------|--------|--------|--------|-------|--|--|--|--|--|
| WSSC Bonds | 31,023 | 24,339 | 2,945 | 3,739 | 2,588 | 1,151 | | | | | |
| SDC | 151,467 | 118,833 | 14,380 | 18,254 | 12,637 | 5,617 | | | | | |

D. Description & Justification

| |
|--|
| <p>DESCRIPTION</p> <p>This project provides for modifications to the Broad Creek Wastewater Pumping Station and Force Main system for conveying Broad Creek sewerage basin flows to the Piscataway Wastewater Treatment Plant. The Broad Creek WWPS Facility Plan included assessments of engineering, economic, environmental and local community impacts, and recommended the construction of a 48-inch diameter force main and capacity enhancing modifications at the pumping station. At the Piscataway WWTP a concrete storage facility was constructed in the upper existing polishing pond allowing intermittent storage of excess sewage until flows at the plant allow treatment. Implementation of this alternative was approved by the Environmental Protection Agency and the Maryland Department of the Environment (MDE). Construction costs shown above also provide for an emergency generator in the event of power outages. The emergency generators have been installed.</p> <p>JUSTIFICATION</p> <p>This project stems from the following litigation: Section V (Remedial Measures), Article 10, Section B.8 (Pump Stations - Broad Creek), Sanitary Sewer Overflows (SSO) Consent Order Decree (Civil Action PJM-04-3679), Judge Messite, December 7, 2005.</p> <p>The following plans/studies have been completed: Broad Creek Flow Monitoring and I/I Analysis (1996); Broad Creek SSES (1996 to 1999); Broad Creek I/I Analysis and SSES Phase II (2001 to 2005); Broad Creek Facility Plan, Delon Hampton & Associates, Inc. (January 2007); FY2012 Broad Creek WWPS Asset Management Plan, GHD, Inc. (March 2011).</p> <p>COST CHANGE</p> <p>Costs were increased for inflation and to address issues with yard piping and vault construction due to potentially high ground water at the site.</p> <p>OTHER</p> <p>The project scope has remained the same. The expenditures and schedule projections shown in Block B reflect the latest available estimates. Construction is being performed under four (4) contracts to expedite project completion. The National Park Service Permits, previously delaying the project, were obtained in April 2016. The final contract is in the construction phase.</p> <p>COORDINATION</p> <p>Coordinating Agencies: Maryland State Highway Administration; Prince George's County Government; Maryland-National Capital Park & Planning Commission; National Park Service; Maryland Department of the Environment; Maryland Department of Natural Resources; Prince George's County Department of Environmental Resources; U.S. Army Corps of Engineers; U.S. Environmental Protection Agency, Region III;</p> <p>Coordinating Projects: Not Applicable</p> |
|--|

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|---------|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | \$467 | 21 |
| Other Project Costs | | |
| Debt Service | \$2,018 | 21 |
| Total Cost | \$2,485 | 21 |
| Impact on Water and Sewer Rate | \$0.06 | 21 |

F. Approval and Expenditure Data (000's)

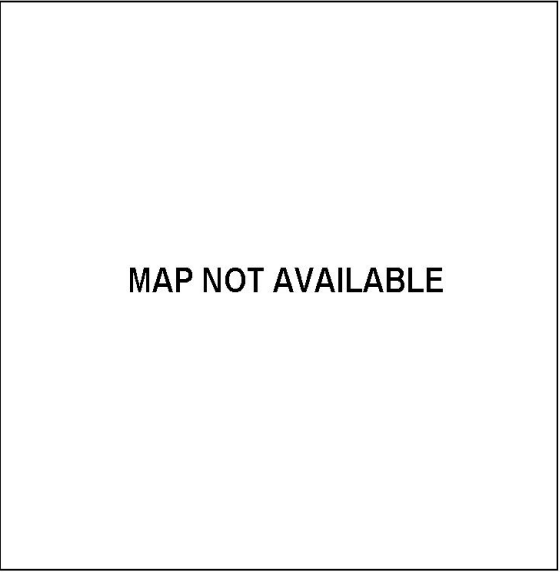
| | |
|------------------------------|---------|
| Date First in Program | FY 09 |
| Date First Approved | FY 09 |
| Initial Cost Estimate | 80,850 |
| Cost Estimate Last FY | 175,971 |
| Present Cost Estimate | 182,490 |
| Approved Request Last FY | 17,805 |
| Total Expense & Encumbrances | 143,172 |
| Approval Request Year 1 | 15,225 |

G. Status Information

| | |
|---------------------|--------------|
| Land Status | R/W acquired |
| Project Phase | Construction |
| Percent Complete | 70% |
| Est Completion Date | FY 2020 |

| | |
|--------------------------|-----|
| Growth | 83% |
| System Improvement | 17% |
| Environmental Regulation | |
| Population Served | |
| Capacity | |

H. Map



Western Branch Facility Upgrade

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-57.92 | | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|----------------------------------|
| Pressure Zones | |
| Drainage Basins | Western Branch 14; |
| Planning Areas | Upper Marlboro & Vicinity PA 79; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|---------------|---------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 14,811 | 14,266 | 320 | 225 | 200 | 25 | | | | | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 41,346 | 36,639 | 1,707 | 3,000 | 2,800 | 200 | | | | | |
| Other | 262 | | 101 | 161 | 150 | 11 | | | | | |
| Total | 56,419 | 50,905 | 2,128 | 3,386 | 3,150 | 236 | | | | | |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|------------|--------|--------|-------|-------|-------|-----|--|--|--|--|--|
| WSSC Bonds | 56,419 | 50,905 | 2,128 | 3,386 | 3,150 | 236 | | | | | |
|------------|--------|--------|-------|-------|-------|-----|--|--|--|--|--|

D. Description & Justification

DESCRIPTION
 This project provides for the planning, design, and construction of improvements at the Western Branch WWTP required to rehabilitate aging systems and to continue to meet all the terms of its NPDES discharge permit. Improvements include sludge thickener for waste activation, biosolids stabilization and storage facilities, a new scum removal system, raw sewage pump station upgrades, additional grit chambers, air blower replacements, HVAC, and electrical upgrades.

JUSTIFICATION
 The plant was originally designed in the 1970s. It is the only WSSC WWTP that does not utilize Biological Nitrogen Removal (BNR); instead, relying on the addition of methanol for nitrogen removal.
 Western Branch Facility Plan, Johnson, Mirmiran & Thompson (May 2005); ESP Project Number S-647.38, Western Branch WWTP Facility Plan; Western Branch Enhanced Nutrient Removal and Facility Upgrade Project - Evaluation Phase, Metcalf and Eddy (August 2007).

COST CHANGE
 Total project cost has increased based on the updated construction supervision cost estimate due to construction schedule delays.

OTHER
 The project scope has remained the same. Updated schedule and expenditure projections are shown in Block B. FY 19 and FY 20 cost projections are included as a placeholder for site restoration and projected system reliability and integration costs. The MDE construction permit was obtained in March 2011. The NTP was issued on October 31, 2011. This project is financed through a low interest loan from the MDE's Water Quality Administration State Revolving Loan Program.

COORDINATION
 Coordinating Agencies: Prince George's County Government; Maryland Department of the Environment; Prince George's County Department of Environmental Resources;
 Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|---------|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | | |
| Other Project Costs | | |
| Debt Service | \$3,670 | 21 |
| Total Cost | \$3,670 | 21 |
| Impact on Water and Sewer Rate | \$0.08 | 21 |

F. Approval and Expenditure Data (000's)

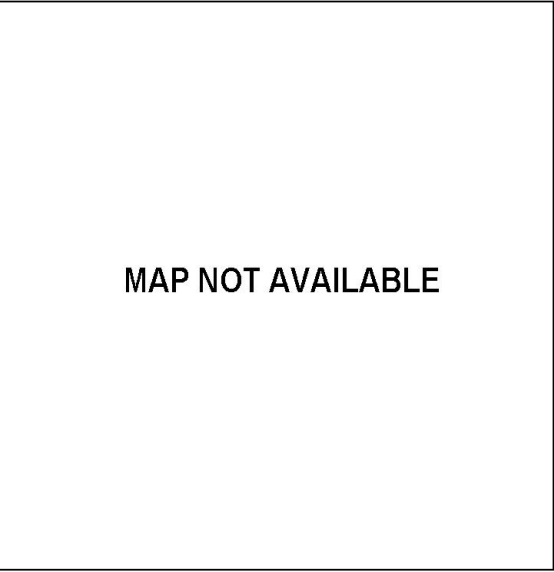
| | |
|------------------------------|--------|
| Date First in Program | FY 06 |
| Date First Approved | FY 06 |
| Initial Cost Estimate | 6,325 |
| Cost Estimate Last FY | 53,950 |
| Present Cost Estimate | 56,419 |
| Approved Request Last FY | 1,995 |
| Total Expense & Encumbrances | 50,905 |
| Approval Request Year 1 | 3,150 |

G. Status Information

| | |
|---------------------|----------------|
| Land Status | Not Applicable |
| Project Phase | Construction |
| Percent Complete | 98% |
| Est Completion Date | FY 2020 |

| | |
|--------------------------|----------|
| Growth | |
| System Improvement | 100% |
| Environmental Regulation | |
| Population Served | |
| Capacity | 30.6 MGD |

H. Map



Landover Mall Redevelopment

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-68.01 | | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|-------------------------|
| Pressure Zones | |
| Drainage Basins | Beaverdam Branch 3; |
| Planning Areas | Prince George's County; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|--------------|------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 227 | 24 | 35 | 168 | 76 | 46 | 13 | 11 | 11 | 11 | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 911 | 0 | 51 | 860 | 461 | 299 | 25 | 25 | 25 | 25 | |
| Other | 167 | | 13 | 154 | 81 | 52 | 6 | 5 | 5 | 5 | |
| Total | 1,305 | 24 | 99 | 1,182 | 618 | 397 | 44 | 41 | 41 | 41 | |

C. Funding Schedule (000's)

| | | | | | | | | | | |
|--------------------|-------|----|----|-------|-----|-----|----|----|----|----|
| Contribution/Other | 1,305 | 24 | 99 | 1,182 | 618 | 397 | 44 | 41 | 41 | 41 |
|--------------------|-------|----|----|-------|-----|-----|----|----|----|----|

D. Description & Justification

| |
|--|
| DESCRIPTION |
| This project provides 2,500 feet of 27-inch, 300 feet of 24-inch, and 1,450 feet of 18-inch diameter sewer main to provide service for the Landover Mall Redevelopment. |
| JUSTIFICATION |
| Hydraulic Planning Analysis (May 2009). |
| COST CHANGE |
| Not applicable. |
| OTHER |
| The project scope has remained the same. The expenditures and schedule projections shown in Block B are based on information provided by the developer. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project. |
| COORDINATION |
| Coordinating Agencies: Prince George's County Government; |
| Coordinating Projects: Not Applicable |

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|------|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | \$74 | 25 |
| Other Project Costs | | |
| Debt Service | | |
| Total Cost | \$74 | 25 |
| Impact on Water and Sewer Rate | | |

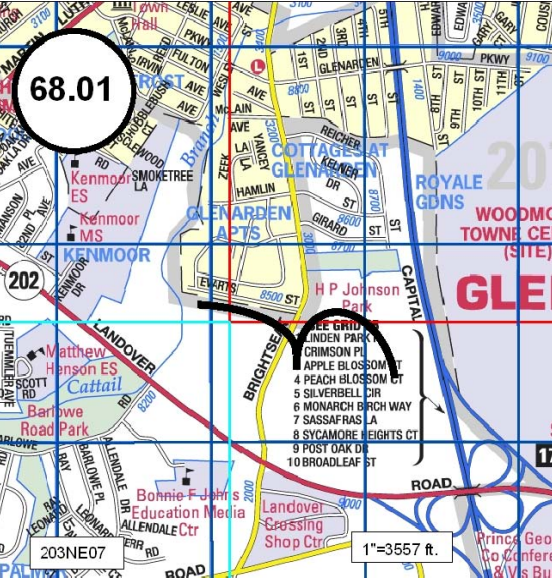
F. Approval and Expenditure Data (000's)

| | |
|------------------------------|-------|
| Date First in Program | FY 11 |
| Date First Approved | FY 11 |
| Initial Cost Estimate | 1,108 |
| Cost Estimate Last FY | 1,278 |
| Present Cost Estimate | 1,305 |
| Approved Request Last FY | 605 |
| Total Expense & Encumbrances | 24 |
| Approval Request Year 1 | 618 |

G. Status Information

| | |
|--------------------------|---------------------|
| Land Status | Not Applicable |
| Project Phase | Planning |
| Percent Complete | 20% |
| Est Completion Date | Developer Dependent |
| Growth | 100% |
| System Improvement | |
| Environmental Regulation | |
| Population Served | 3,347 |
| Capacity | 5.63 MGD |

H. Map



Brandywine Woods Wastewater Pumping Station

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-75.19 | | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|-------------------------------|
| Pressure Zones | |
| Drainage Basins | Mattawoman 21; |
| Planning Areas | Cedarville & Vicinity PA 85B; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|------------|------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 58 | 7 | 26 | 25 | 14 | 11 | | | | | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 217 | 0 | 128 | 89 | 44 | 45 | | | | | |
| Other | 40 | | 23 | 17 | 9 | 8 | | | | | |
| Total | 315 | 7 | 177 | 131 | 67 | 64 | | | | | |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|--------------------|-----|---|-----|-----|----|----|--|--|--|--|--|
| Contribution/Other | 315 | 7 | 177 | 131 | 67 | 64 | | | | | |
|--------------------|-----|---|-----|-----|----|----|--|--|--|--|--|

D. Description & Justification

DESCRIPTION
 This project provides for the planning, design, and construction of a new wastewater pumping station to provide service to the Brandywine Woods Property.

JUSTIFICATION
 Hydraulic Planning Analysis (March 2006).

COST CHANGE
 Not applicable.

OTHER
 The project scope has remained the same. The expenditures and schedule projections shown in Block B are based on information provided by the developer. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION
 Coordinating Agencies: Prince George's County Department of Permitting Inspection and Enforcement; Prince George's County Government;
 Coordinating Projects: S-75.20-Brandywine Woods WWPS Force Main;

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|--|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | | |
| Other Project Costs | | |
| Debt Service | | |
| Total Cost | | |
| Impact on Water and Sewer Rate | | |

F. Approval and Expenditure Data (000's)

| | |
|------------------------------|-------|
| Date First in Program | FY 08 |
| Date First Approved | FY 08 |
| Initial Cost Estimate | 247 |
| Cost Estimate Last FY | 308 |
| Present Cost Estimate | 315 |
| Approved Request Last FY | 65 |
| Total Expense & Encumbrances | 7 |
| Approval Request Year 1 | 67 |

G. Status Information

| | |
|--------------------------|---------------------|
| Land Status | Not Applicable |
| Project Phase | Planning |
| Percent Complete | 100% |
| Est Completion Date | Developer Dependent |
| Growth | 100% |
| System Improvement | |
| Environmental Regulation | |
| Population Served | 490 |
| Capacity | 0.28 MGD |

H. Map



Brandywine Woods WWPS Force Main

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-75.20 | | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|-------------------------------|
| Pressure Zones | |
| Drainage Basins | Mattawoman 21; |
| Planning Areas | Cedarville & Vicinity PA 85B; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|------------|------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 28 | 13 | 7 | 8 | 8 | 0 | | | | | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 81 | 2 | 29 | 50 | 50 | 0 | | | | | |
| Other | 14 | | 5 | 9 | 9 | 0 | | | | | |
| Total | 123 | 15 | 41 | 67 | 67 | 0 | | | | | |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|--------------------|-----|----|----|----|----|---|--|--|--|--|--|
| Contribution/Other | 123 | 15 | 41 | 67 | 67 | 0 | | | | | |
|--------------------|-----|----|----|----|----|---|--|--|--|--|--|

D. Description & Justification

DESCRIPTION
 This project provides for the planning, design, and construction of 1,600 feet of 4-inch diameter force main from the Brandywine Woods Wastewater Pumping Station to provide service to the Brandywine Woods Property.

JUSTIFICATION
 Hydraulic Planning Analysis (March 2006).

COST CHANGE
 Not applicable.

OTHER
 The project scope has remained the same. The expenditures and schedule projections shown in Block B are based on information provided by the developer. Estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION
 Coordinating Agencies: Prince George's County Department of Permitting Inspection and Enforcement; Prince George's County Government;
 Coordinating Projects: S-75.19-Brandywine Woods Wastewater Pumping Station;

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|------|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | \$28 | 20 |
| Other Project Costs | | |
| Debt Service | | |
| Total Cost | \$28 | 20 |
| Impact on Water and Sewer Rate | | |

F. Approval and Expenditure Data (000's)

| | |
|------------------------------|-------|
| Date First in Program | FY 08 |
| Date First Approved | FY 08 |
| Initial Cost Estimate | 100 |
| Cost Estimate Last FY | 121 |
| Present Cost Estimate | 123 |
| Approved Request Last FY | 38 |
| Total Expense & Encumbrances | 15 |
| Approval Request Year 1 | 67 |

G. Status Information

| | |
|--------------------------|---------------------|
| Land Status | Not Applicable |
| Project Phase | Planning |
| Percent Complete | 100% |
| Est Completion Date | Developer Dependent |
| Growth | 100% |
| System Improvement | |
| Environmental Regulation | |
| Population Served | 490 |
| Capacity | 0.28MGD |

H. Map



Mattawoman WWTP Upgrades

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-75.21 | | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|---|
| Pressure Zones | |
| Drainage Basins | Mattawoman 21; |
| Planning Areas | Piscataway & Vicinity PA 84; Cedarville & |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|---------------|------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | | | | | | | | | | | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 19,449 | | 5,911 | 12,958 | 4,049 | 2,783 | 1,928 | 1,897 | 1,897 | 404 | 580 |
| Other | | | | | | | | | | | |
| Total | 19,449 | | 5,911 | 12,958 | 4,049 | 2,783 | 1,928 | 1,897 | 1,897 | 404 | 580 |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|------------|--------|--|-------|--------|-------|-------|-------|-------|-------|-----|-----|
| WSSC Bonds | 19,449 | | 5,911 | 12,958 | 4,049 | 2,783 | 1,928 | 1,897 | 1,897 | 404 | 580 |
|------------|--------|--|-------|--------|-------|-------|-------|-------|-------|-----|-----|

D. Description & Justification

| |
|--|
| <p>DESCRIPTION</p> <p>This project provides for the WSSC's share of the evaluation, design, and construction of capital projects to upgrade and repair Charles County's Mattawoman Interceptor and Wastewater Treatment Plant. Current projects include: Influent/Effluent Pump Station Upgrades, Plant Automation, Electrical System Replacement, In-Plant Water System Improvement, Flow Equalization Study, Clarifier and Thickener Upgrades, Belt Filter Press Replacement, SCADA System Upgrade and Effluent PS Force Main Improvements.</p> <p>JUSTIFICATION</p> <p>Prior evaluations of equipment and structural facilities concluded the need existed for various upgrade, repair, and replacement projects. A further thorough evaluation of the Head Works, Influent/Effluent Pumps, and Influent Wet Well was also deemed necessary in order to identify the specific scope of hydraulic, control, capacity, and safety upgrades to the Influent/Effluent Pump Station. Plant automation will improve the efficiency of operation and maintenance, thereby minimizing resource utilization and avoiding costs.</p> <p>Agreement dated October 22, 1980; Agreement Addendum No. 1 dated April 15, 2004.</p> <p>COST CHANGE</p> <p>The expenditure schedule reflects the latest information provided by Charles County. A new project has been added "Primary Clarifiers #1-4 Demolition" and the estimated costs for the Influent/Effluent Pump Station Evaluation and the MWWTP Clarifier and Thickener Repairs have increased.</p> <p>OTHER</p> <p>The project scope has remained the same. Under the terms of the 1980 Agreement with Charles County, the WSSC has the use of 3 MGD of the WWTP's capacity, and pays a proportionate share of the capital expenses. As new upgrade sub-projects are added, the associated costs will be added to this project. Beginning in FY 2007, the total plant capacity increased to 20 MGD, and WSSC's proportionate cost share decreased to 15% under the terms of Agreement Addendum No.1. This project is expected to continue indefinitely. Life to date expenditures for this project are approximately \$6 million.</p> <p>COORDINATION</p> <p>Coordinating Agencies: Charles County Government; (Depts of Utilities, Planning & Growth Management, and Fiscal Services)</p> <p>Coordinating Projects: Not Applicable</p> |
|--|

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|---------|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | | |
| Other Project Costs | | |
| Debt Service | \$1,265 | |
| Total Cost | \$1,265 | |
| Impact on Water and Sewer Rate | \$0.03 | |

F. Approval and Expenditure Data (000's)

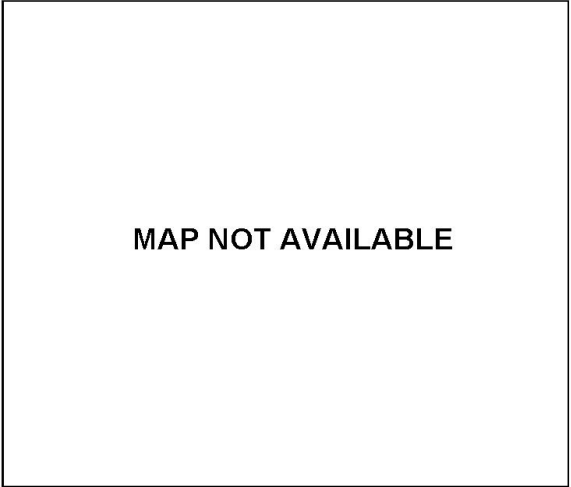
| | |
|------------------------------|--------|
| Date First in Program | FY 08 |
| Date First Approved | FY 08 |
| Initial Cost Estimate | 760 |
| Cost Estimate Last FY | 16,156 |
| Present Cost Estimate | 19,449 |
| Approved Request Last FY | 3,633 |
| Total Expense & Encumbrances | |
| Approval Request Year 1 | 4,049 |

G. Status Information

| | |
|---------------------|----------------|
| Land Status | Not Applicable |
| Project Phase | On-Going |
| Percent Complete | |
| Est Completion Date | On-Going |

| | |
|--------------------------|--|
| Growth | |
| System Improvement | 100% |
| Environmental Regulation | |
| Population Served | |
| Capacity | 3 MGD for WSSC in Total Plant Capacity of 20 MGD |

H. Map



Parkway North Substation Replacement

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-77.20 | | Add |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|--------------------------------|
| Pressure Zones | |
| Drainage Basins | Parkway 17; |
| Planning Areas | South Laurel-Montpelier PA 62; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|--------------|------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 642 | 15 | 195 | 432 | 300 | 132 | | | | | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 3,710 | | 830 | 2,880 | 2,000 | 880 | | | | | |
| Other | 651 | | 150 | 501 | 350 | 151 | | | | | |
| Total | 5,003 | 15 | 1,175 | 3,813 | 2,650 | 1,163 | | | | | |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|------------|-------|----|-------|-------|-------|-------|--|--|--|--|--|
| WSSC Bonds | 5,003 | 15 | 1,175 | 3,813 | 2,650 | 1,163 | | | | | |
|------------|-------|----|-------|-------|-------|-------|--|--|--|--|--|

D. Description & Justification

| |
|--|
| <p>DESCRIPTION This project provides for the planning, design and construction of electrical upgrades for the Parkway WWTP including the full replacement of the North Substation, Motor Control Cabinet #1 (MCC1) and a 480 volt substation. Temporary facilities must be provided to maintain operation of the treatment plant during construction.</p> <p>JUSTIFICATION Asset Management Program, CPNV #48, Business Case recommendation requires immediate replacement of electrical equipment to maintain level of services at the waste water treatment plant.</p> <p>COST CHANGE Not applicable.</p> <p>OTHER The present project scope was developed for the FY 2019 CIP and has a total estimated cost of \$5,003,000. The schedule and expenditure projections shown in Block B above are Order of Magnitude level estimates and may change based upon site conditions and design constraints. Preliminary planning work is currently underway under ESP project S-627.15, Parkway North Substation.</p> <p>COORDINATION Coordinating Agencies: Maryland Department of the Environment; Prince George's County Government; Prince George's County Department of Environmental Resources; Coordinating Projects:</p> |
|--|

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|--------|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | | |
| Other Project Costs | | |
| Debt Service | \$325 | 21 |
| Total Cost | \$325 | 21 |
| Impact on Water and Sewer Rate | \$0.01 | 21 |

F. Approval and Expenditure Data (000's)

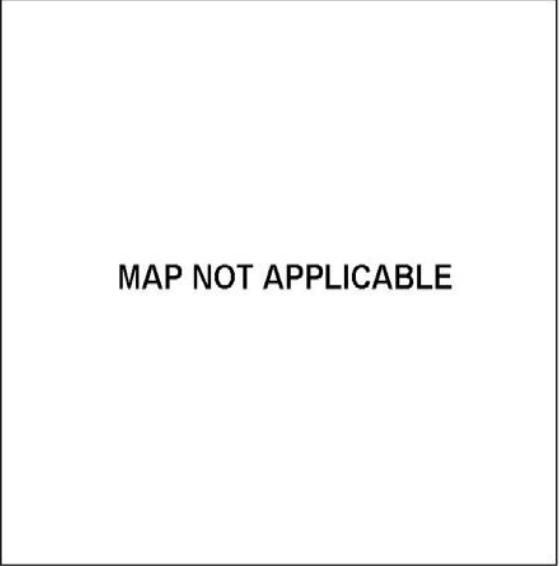
| | |
|------------------------------|-------|
| Date First in Program | FY19 |
| Date First Approved | FY19 |
| Initial Cost Estimate | 5,003 |
| Cost Estimate Last FY | |
| Present Cost Estimate | 5,003 |
| Approved Request Last FY | |
| Total Expense & Encumbrances | 15 |
| Approval Request Year 1 | 2,650 |

G. Status Information

| | |
|---------------------|--------------------------|
| Land Status | Public/Agency owned land |
| Project Phase | Planning |
| Percent Complete | 10% |
| Est Completion Date | March, 2020 |

| | |
|--------------------------|------|
| Growth | |
| System Improvement | 100% |
| Environmental Regulation | |
| Population Served | |
| Capacity | |

H. Map



Karington Subdivision Sewer

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-86.19 | | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|----------------------------------|
| Pressure Zones | |
| Drainage Basins | Western Branch 14; |
| Planning Areas | Mitchellville & Vicinity PA 74A; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|------------|------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 107 | 87 | 13 | 7 | 4 | 3 | | | | | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 491 | 15 | 170 | 306 | 153 | 153 | | | | | |
| Other | 74 | | 27 | 47 | 24 | 23 | | | | | |
| Total | 672 | 102 | 210 | 360 | 181 | 179 | | | | | |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|--------------------|-----|-----|-----|-----|-----|-----|--|--|--|--|--|
| Contribution/Other | 672 | 102 | 210 | 360 | 181 | 179 | | | | | |
|--------------------|-----|-----|-----|-----|-----|-----|--|--|--|--|--|

D. Description & Justification

DESCRIPTION
 This project provides for the planning, design, and construction of 970 feet of 15-inch and 20-inch diameter sewer main to serve the Karington Subdivision.

JUSTIFICATION
 Karington Hydraulic Planning Analysis (May 2006).

COST CHANGE
 Not applicable.

OTHER
 The project scope has remained the same. The expenditures and schedule projections shown in Block B are based on information provided by the developer. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION
 Coordinating Agencies: Prince George's County Government; Maryland-National Capital Park & Planning Commission; Maryland Department of the Environment;
 Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|------|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | \$17 | 21 |
| Other Project Costs | | |
| Debt Service | | |
| Total Cost | \$17 | 21 |
| Impact on Water and Sewer Rate | | |

F. Approval and Expenditure Data (000's)

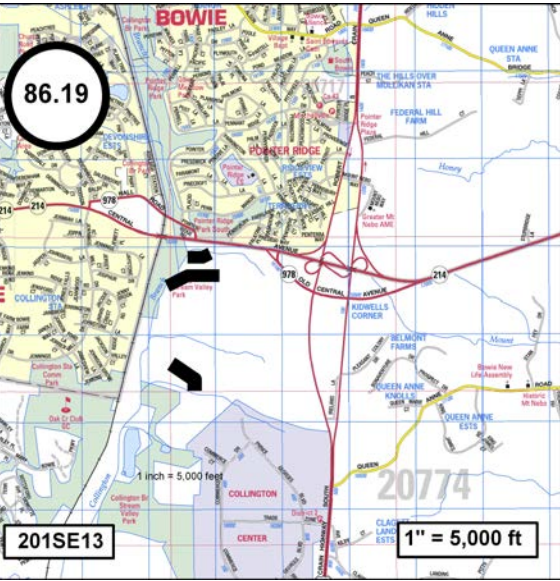
| | |
|------------------------------|-------|
| Date First in Program | FY 08 |
| Date First Approved | FY 08 |
| Initial Cost Estimate | 801 |
| Cost Estimate Last FY | 655 |
| Present Cost Estimate | 672 |
| Approved Request Last FY | 176 |
| Total Expense & Encumbrances | 102 |
| Approval Request Year 1 | 181 |

G. Status Information

| | |
|---------------------|---------------------|
| Land Status | Not Applicable |
| Project Phase | Design |
| Percent Complete | 100% |
| Est Completion Date | Developer Dependent |

| | |
|--------------------------|-----------------|
| Growth | 100% |
| System Improvement | |
| Environmental Regulation | |
| Population Served | 2,102 |
| Capacity | 1.7 to 2.87 MGD |

H. Map



Piscataway WWTP Facility Upgrades

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-96.14 | | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|---------------------|
| Pressure Zones | |
| Drainage Basins | Piscataway Creek 4; |
| Planning Areas | Accokeek PA 83; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|----------------|--------------|----------------|----------------|---------------|---------------|---------------|---------------|---------------|--------------|----------------|
| Planning, Design & Supervision | 20,242 | 8,241 | 2,804 | 9,197 | 2,898 | 3,491 | 1,730 | 678 | 400 | | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 116,622 | | 1,282 | 115,340 | 26,735 | 34,215 | 21,899 | 22,444 | 10,047 | | |
| Other | 6,430 | | 204 | 6,226 | 1,482 | 1,885 | 1,181 | 1,156 | 522 | | |
| Total | 143,294 | 8,241 | 4,290 | 130,763 | 31,115 | 39,591 | 24,810 | 24,278 | 10,969 | | |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|------------|---------|-------|-------|---------|--------|--------|--------|--------|--------|--|--|
| WSSC Bonds | 143,294 | 8,241 | 4,290 | 130,763 | 31,115 | 39,591 | 24,810 | 24,278 | 10,969 | | |
|------------|---------|-------|-------|---------|--------|--------|--------|--------|--------|--|--|

D. Description & Justification

| |
|--|
| <p>DESCRIPTION</p> <p>This project provides for the planning, design, and construction of improvements at the Piscataway WWTP Facility required to prevent plant overflows or permit violations which can occur during significant rainfall events. The work will remove bottlenecks within the plant process trains, address the physical capacity of the system, and rehabilitate existing equipment that has reached its expected service life ensuring the ability of the plant to achieve its permit-required level of service.</p> <p>JUSTIFICATION</p> <p>In the Asset Management Plan the condition assessment process identified several areas of concern within the plant process trains that could potentially result in capacity or level of service failures during significant rainfall events. The Facility Plan provided a more detailed study that included the development of a plant-wide hydraulic and biological process model, CCTV inspection of buried piping, analysis of soil borings, and Level 3 Condition Assessment of electrical systems. Projects within the Facility Plan were justified and prioritized using WSSC's Asset Management Strategy guidelines, based on life cycle costs, business risk exposure, and needs prioritization.</p> <p>FY 2012 Piscataway WWTP Asset Management Plan, GHD, Inc. (March 2011); Piscataway WWTP Facility Plan, AECOM (January 2014); FY 2019 Wastewater Treatment System Asset Management Plan (December 2016).</p> <p>COST CHANGE</p> <p>Cost estimates have increased for the required Electrical upgrades, the Raw Wastewater Pumping Station, and Secondary Clarifiers. The Plant Utility Water Upgrade has been moved from this project to the Piscataway WWTP Bio-Energy Project.</p> <p>OTHER</p> <p>The project scope has remained the same. Expenditure and schedule projections shown in Block B represent estimates at the 70% design stage for most projects, and may change based upon site conditions and design constraints. The Office of Asset Management has determined the priority of the recommended projects.</p> <p>COORDINATION</p> <p>Coordinating Agencies: Prince George's County Government; Maryland Department of the Environment; Prince George's County Department of Environmental Resources; U.S. Army Corps of Engineers; Maryland Department of Natural Resources;</p> <p>Coordinating Projects: S-43.02-Broad Creek WWPS Augmentation; S-170.08-Septage Discharge Facility Planning & Implementation; S-103.02-Piscataway WWTP Bio-Energy Project;</p> |
|--|

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|---------|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | | |
| Other Project Costs | | |
| Debt Service | \$9,321 | 24 |
| Total Cost | \$9,321 | 24 |
| Impact on Water and Sewer Rate | \$0.21 | 24 |

F. Approval and Expenditure Data (000's)

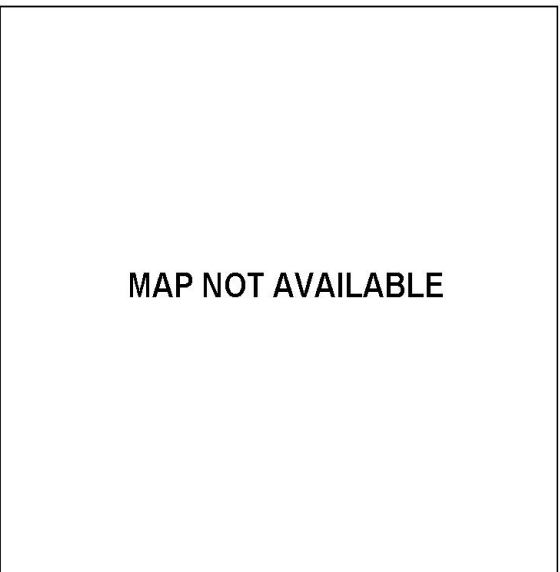
| | |
|------------------------------|---------|
| Date First in Program | FY 12 |
| Date First Approved | FY 12 |
| Initial Cost Estimate | 66,396 |
| Cost Estimate Last FY | 118,156 |
| Present Cost Estimate | 143,294 |
| Approved Request Last FY | 6,993 |
| Total Expense & Encumbrances | 8,241 |
| Approval Request Year 1 | 31,115 |

G. Status Information

| | |
|---------------------|----------------|
| Land Status | Not Applicable |
| Project Phase | Design |
| Percent Complete | 70% |
| Est Completion Date | FY 2023 |

| | |
|--------------------------|--------|
| Growth | |
| System Improvement | 100% |
| Environmental Regulation | |
| Population Served | |
| Capacity | 30 MGD |

H. Map



Pleasant Valley Sewer Main, Part 2

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-131.05 | | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|------------------------------|
| Pressure Zones | |
| Drainage Basins | Piscataway Creek 4; |
| Planning Areas | Piscataway & Vicinity PA 84; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|------------|------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 171 | 43 | 59 | 69 | 52 | 10 | 7 | | | | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 597 | | 114 | 483 | 290 | 133 | 60 | | | | |
| Other | 109 | | 26 | 83 | 51 | 22 | 10 | | | | |
| Total | 877 | 43 | 199 | 635 | 393 | 165 | 77 | | | | |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|--------------------|-----|----|-----|-----|-----|-----|----|--|--|--|--|
| Contribution/Other | 877 | 43 | 199 | 635 | 393 | 165 | 77 | | | | |
|--------------------|-----|----|-----|-----|-----|-----|----|--|--|--|--|

D. Description & Justification

DESCRIPTION
 This project provides for the planning, design, and construction of 2,750 feet of 21-inch diameter sewer main to provide service to the Estates of Pleasant Valley and the Ridges III Subdivisions.

JUSTIFICATION
 Estates of Pleasant Valley Hydraulic Planning Analysis (Amended March 2010).

COST CHANGE
 Not applicable.

OTHER
 The project scope has remained the same. Expenditure and schedule projections shown in Block B are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION
 Coordinating Agencies: Prince George's County Government; Maryland-National Capital Park & Planning Commission; Maryland Department of the Environment; Prince George's County Department of Permitting Inspection and Enforcement;
 Coordinating Projects: S-131.07-Pleasant Valley Sewer Main, Part 1;

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|------|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | \$48 | 22 |
| Other Project Costs | | |
| Debt Service | | |
| Total Cost | \$48 | 22 |
| Impact on Water and Sewer Rate | | |

F. Approval and Expenditure Data (000's)

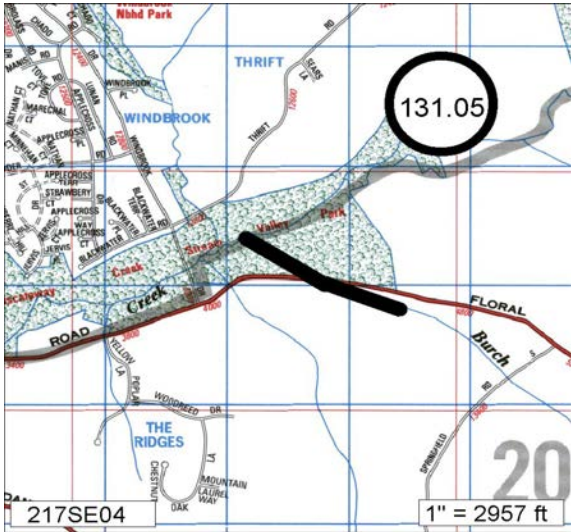
| | |
|------------------------------|-------|
| Date First in Program | FY 05 |
| Date First Approved | FY 05 |
| Initial Cost Estimate | 586 |
| Cost Estimate Last FY | 849 |
| Present Cost Estimate | 877 |
| Approved Request Last FY | 385 |
| Total Expense & Encumbrances | 43 |
| Approval Request Year 1 | 393 |

G. Status Information

| | |
|---------------------|---------------------|
| Land Status | R/W acquired |
| Project Phase | Design |
| Percent Complete | 60% |
| Est Completion Date | Developer Dependent |

| | |
|--------------------------|---------|
| Growth | 100% |
| System Improvement | |
| Environmental Regulation | |
| Population Served | 2000 |
| Capacity | 3.5 MGD |

H. Map



Pleasant Valley Sewer Main, Part 1

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-131.07 | | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|---------------------|
| Pressure Zones | |
| Drainage Basins | Piscataway Creek 4; |
| Planning Areas | Accokeek PA 83; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|--------------|------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 381 | 98 | 154 | 129 | 107 | 22 | | | | | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 1,154 | | 250 | 904 | 736 | 168 | | | | | |
| Other | 215 | | 60 | 155 | 127 | 28 | | | | | |
| Total | 1,750 | 98 | 464 | 1,188 | 970 | 218 | | | | | |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|--------------------|-------|----|-----|-------|-----|-----|--|--|--|--|--|
| Contribution/Other | 1,750 | 98 | 464 | 1,188 | 970 | 218 | | | | | |
|--------------------|-------|----|-----|-------|-----|-----|--|--|--|--|--|

D. Description & Justification

DESCRIPTION
 This project provides for the planning, design, and construction of 10,000 feet of 15-inch and 18-inch diameter sewer main to serve The Estates at Pleasant Valley Subdivision.

JUSTIFICATION
 Estates of Pleasant Valley Hydraulic Planning Analysis (Amended March 2010).

COST CHANGE
 Not applicable.

OTHER
 The project scope has remained the same. The expenditure and schedule projections shown in Block B are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC rate supported debt will be used for this project.

COORDINATION
 Coordinating Agencies: Potomac Electric Power Company; Prince George's County Government; Maryland-National Capital Park & Planning Commission;
 Coordinating Projects: S-131.05-Pleasant Valley Sewer Main, Part 2;

E. Annual Operating Budget Impact (000's)

| | | FY of Impact |
|--------------------------------|-------|--------------|
| Staff | | |
| Maintenance | \$174 | 21 |
| Other Project Costs | | |
| Debt Service | | |
| Total Cost | \$174 | 21 |
| Impact on Water and Sewer Rate | | |

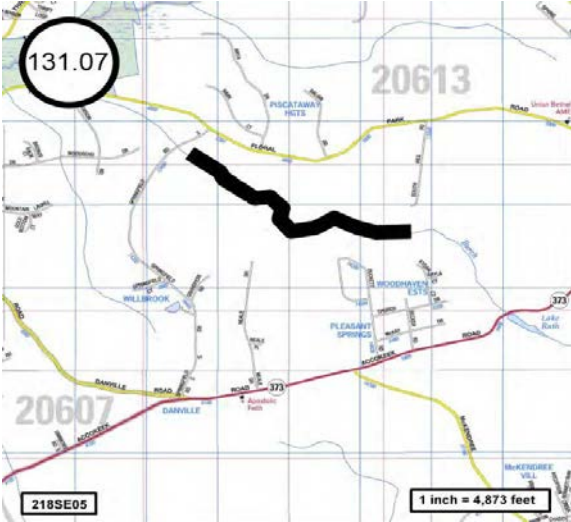
F. Approval and Expenditure Data (000's)

| | |
|------------------------------|-------|
| Date First in Program | FY 10 |
| Date First Approved | FY 10 |
| Initial Cost Estimate | 1,303 |
| Cost Estimate Last FY | 1,670 |
| Present Cost Estimate | 1,750 |
| Approved Request Last FY | 951 |
| Total Expense & Encumbrances | 98 |
| Approval Request Year 1 | 970 |

G. Status Information

| | |
|--------------------------|-----------------------------|
| Land Status | Land and R/W to be acquired |
| Project Phase | Design |
| Percent Complete | 80% |
| Est Completion Date | Developer Dependent |
| Growth | 100% |
| System Improvement | |
| Environmental Regulation | |
| Population Served | 2,800 |
| Capacity | 1.7 to 2.2 MGD |

H. Map



Fort Washington Forest No. 1 WWPS Augmentation

| A. Identification and Coding Information | | |
|--|----------------|-------------|
| Agency Number | Project Number | Update Code |
| S-131.10 | | Change |

| | |
|--------------|-----------------|
| PDF Date | October 1, 2017 |
| Date Revised | |

| | |
|-----------------|------------------------------|
| Pressure Zones | |
| Drainage Basins | Piscataway Creek 4; |
| Planning Areas | Piscataway & Vicinity PA 84; |

B. Expenditure Schedule (000's)

| Cost Elements | Total | Thru FY'17 | Estimate FY'18 | Total 6 Years | Year 1 FY'19 | Year 2 FY'20 | Year 3 FY'21 | Year 4 FY'22 | Year 5 FY'23 | Year 6 FY'24 | Beyond 6 Years |
|--------------------------------|--------------|--------------|----------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|
| Planning, Design & Supervision | 1,344 | 1,017 | 147 | 180 | 108 | 72 | | | | | |
| Land | | | | | | | | | | | |
| Site Improvements & Utilities | | | | | | | | | | | |
| Construction | 3,141 | 1,541 | 150 | 1,450 | 1,000 | 450 | | | | | |
| Other | 290 | | 45 | 245 | 167 | 78 | | | | | |
| Total | 4,775 | 2,558 | 342 | 1,875 | 1,275 | 600 | | | | | |

C. Funding Schedule (000's)

| | | | | | | | | | | | |
|------------|-------|-------|-----|-------|-------|-----|--|--|--|--|--|
| WSSC Bonds | 4,775 | 2,558 | 342 | 1,875 | 1,275 | 600 | | | | | |
|------------|-------|-------|-----|-------|-------|-----|--|--|--|--|--|

D. Description & Justification

| |
|--|
| <p>DESCRIPTION</p> <p>This project provides for the planning, design, and construction of the rehabilitation work required for the Fort Washington Forest No.1 WWPS and to upsize a 900 foot segment of failing 4-inch diameter force main to an 8-inch diameter force main. The rehabilitation will more than double the pumping station's capacity. In addition, approximately 2,700 feet of downstream 8-inch diameter gravity sewer will be upsized to 12-inch diameter to accommodate the additional flow. At the Fort Washington Estates WWPS facility, improvements will be planned, designed and constructed to improve its reliability and the existing force main and downstream gravity sewer will be upsized to accommodate the additional flow.</p> <p>JUSTIFICATION</p> <p>There have been additional overflows at both pumping stations since the original 2005 study. On January 22, 2013, the EPA approved a 180-Day Report, making Fort Washington Forest No. 1 part of the Consent Decree. On July 2, 2015, the 180-Day Report and Schedule for Corrective Measures at Fort Washington Estates WWPS was approved by the EPA. July 2005 Study by Ken Dixon, Planning Group, outlined work to be done on the Fort Washington Forest No. 1 WWPS and Fort Washington Estates WWPS.</p> <p>COST CHANGE</p> <p>Not applicable.</p> <p>OTHER</p> <p>The project scope has remained the same. The expenditure and schedule projections shown above may change based upon site conditions and actual bid for Fort Washington Estates WWPS. Planning began in March 2014 for the Fort Washington Estates WWPS with construction to start in FY 2018. Land costs are included in WSSC project S-203.00.</p> <p>COORDINATION</p> <p>Coordinating Agencies: Prince George's County Government; Maryland-National Capital Park & Planning Commission; Prince George's County Department of Environmental Resources; U.S. Environmental Protection Agency, Region III; Maryland Department of the Environment;</p> <p>Coordinating Projects: Not Applicable</p> |
|--|

E. Annual Operating Budget Impact (000's)

| | | |
|--------------------------------|--------|--------------|
| | | FY of Impact |
| Staff | | |
| Maintenance | \$127 | 21 |
| Other Project Costs | | |
| Debt Service | \$311 | 21 |
| Total Cost | \$438 | 21 |
| Impact on Water and Sewer Rate | \$0.01 | 21 |

F. Approval and Expenditure Data (000's)

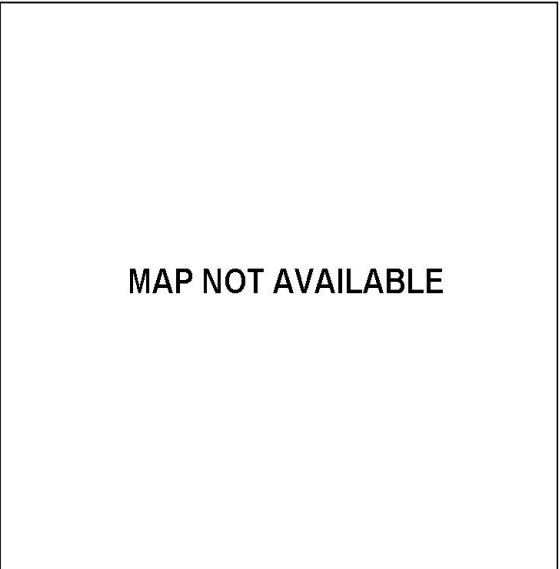
| | |
|------------------------------|-------|
| Date First in Program | FY 13 |
| Date First Approved | FY 13 |
| Initial Cost Estimate | 1,454 |
| Cost Estimate Last FY | 4,887 |
| Present Cost Estimate | 4,775 |
| Approved Request Last FY | 1,470 |
| Total Expense & Encumbrances | 2,558 |
| Approval Request Year 1 | 1,275 |

G. Status Information

| | |
|---------------------|-----------------------------|
| Land Status | Land and R/W to be acquired |
| Project Phase | Design |
| Percent Complete | 70% |
| Est Completion Date | March 2020 |

| | |
|--------------------------|---------|
| Growth | |
| System Improvement | 100% |
| Environmental Regulation | |
| Population Served | 825 |
| Capacity | 0.7 MGD |

H. Map



PROJECTS PENDING CLOSE-OUT
Prince George's Sewer Projects
(costs in thousands)

| Project Number | Agency Number | Project Name | Estimated Total Cost | Expenditures Thru FY'17 | Estimated Expenditures FY'18 | Remarks |
|-----------------------|----------------------|---|-----------------------------|--------------------------------|-------------------------------------|---------------------------|
| | S-57.94 | Western Branch WWTP Incinerator Emissions Control | \$2,312 | \$2,312 | \$0 | Project no longer needed. |
| | S-123.26 | Marlboro Meadows Community System | \$2,533 | \$0 | \$2,533 | Project completed. |
| | | TOTALS | \$4,845 | \$2,312 | \$2,533 | |

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ADOPTED 2018 WATER AND SEWER PLAN

CHAPTER 5 RURAL SANITATION

This chapter describes the policies and regulations pertaining to installation and retrofitting of onsite wells and sewage disposal systems. The Prince George's County Department of Permitting, Inspections and Enforcement (DPIE) and the Prince George's County Health Department (Health Department) administer the permitting and inspections of wells, and individual and shared onsite sewage disposal systems.

5.1 ONSITE WATER AND SEWER SYSTEMS

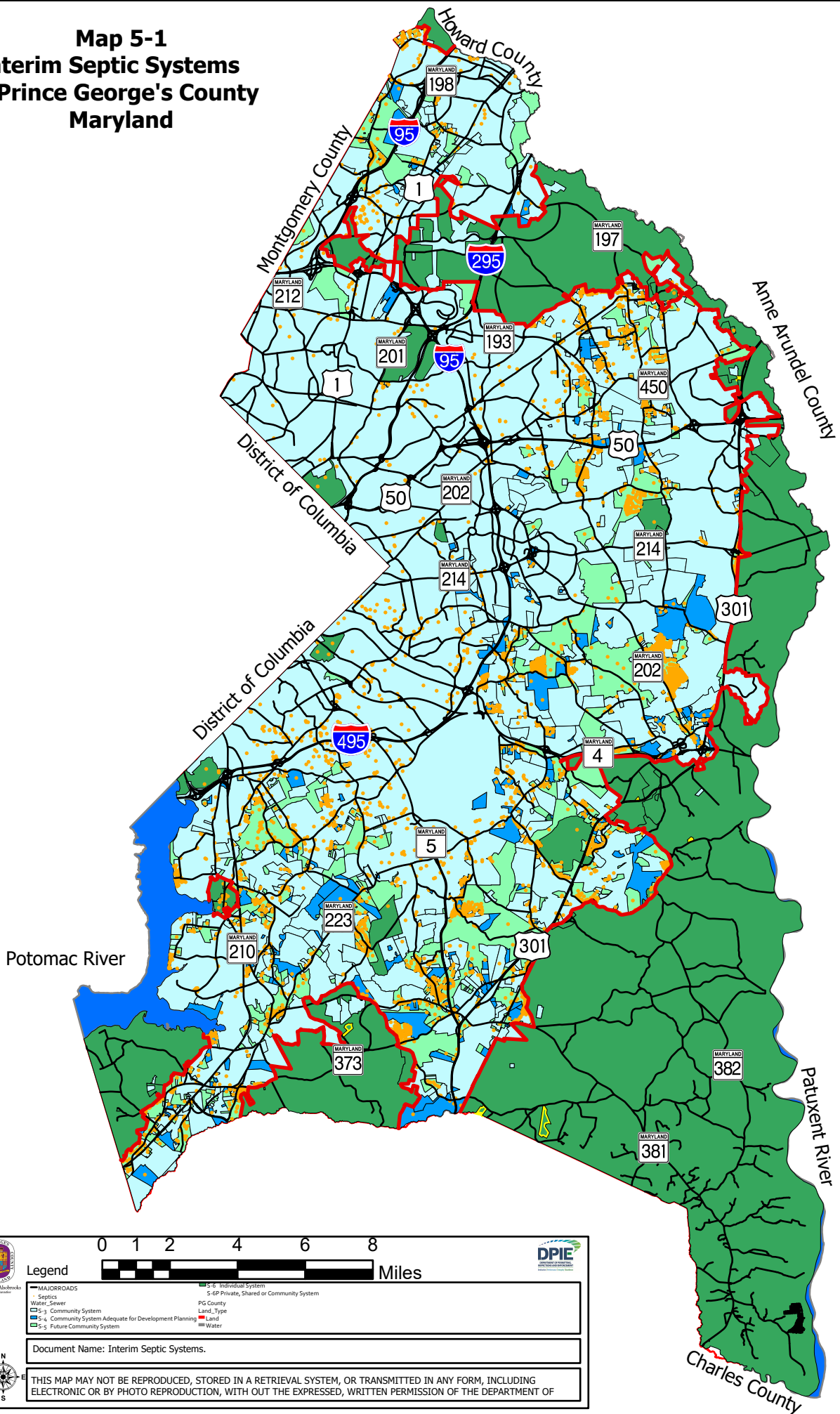
Onsite systems are defined as water supply wells and sewage disposal systems that are located on the property that they serve. There are thousands of properties served by onsite systems in the County. DPIE and the Health Department approve, permit, and maintain records of these systems.

Any onsite potable water supply or sewage disposal system with an average annual capacity of 5,000 gallons per day is considered a community system and must be included in the Water and Sewer Plan. Water withdrawal for nonpotable uses such as agriculture, dewatering, or remediation of contaminated groundwater do not require inclusion in the Plan provided the annual average flow does not exceed 10,000 gallons per day, and there is no anticipated impact to existing or potential potable water supplies.

As a general rule, an onsite water supply or sewage disposal system shall be installed in the County where public water and sewer facilities are not available. These areas are primarily located outside the Sewer Envelope and designated in Category 6. However, the installation and use of temporary or interim individual systems in areas other than Category 6 may be necessary where public water and sewer facilities are either not adequate or not available until economic or engineering constraints can be overcome. **Map 5-1**, Interim Septic Usage, depicts the current distribution of individual – interim septic systems usage inside the Sewer Envelope, in Sewer Category 5, 4 and 3. This map may be amended by DPIE as properties connect, or when found to have connected to the public sewer system (See Section 5.2.5 Interim Systems, et al). The use of new, innovative and alternative technologies may be encouraged in order to reduce demand on the sewage treatment system. The County has not maintained a map for individual wells.

The County Health Department will explore all options to solve existing health hazards with onsite sewage disposal systems; however, existing health hazards may require that a subdivision or individual property be connected to an existing community system regardless of the designated water and sewer category. Under conditions of an existing or anticipated health hazard, the County Health Department may require a subdivision or individual properties to connect to an existing community system regardless of the designated water and sewer category. If a community water and sewer system is not economically available to remediate a health hazard, then the County Health Department will require the repair, remodeling or replacement of the existing well or sewage disposal system that is posing a health hazard. If the health hazard cannot be abated through replacing or repairing the onsite system, the Health Department will invoke other measures to ensure that the health hazard has been abated.

Map 5-1 Interim Septic Systems Prince George's County Maryland



Legend

| | |
|--|--|
| MAJORROADS | S-S Individual System |
| Septics | S-GP Private, Shared or Community System |
| Water_Sewer | PG County |
| Community System | Land_Type |
| S-a Community System Adequate for Development Planning | Land |
| S-s Future Community System | Water |

Document Name: Interim Septic Systems.

THIS MAP MAY NOT BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM, OR TRANSMITTED IN ANY FORM, INCLUDING ELECTRONIC OR BY PHOTO REPRODUCTION, WITH OUT THE EXPRESSED, WRITTEN PERMISSION OF THE DEPARTMENT OF

ADOPTED 2018 WATER AND SEWER PLAN

5.2 ONSITE SYSTEMS FOR NEW CONSTRUCTION

5.2.1 Conventional Systems

Conventional onsite sewage disposal systems are to be used in the areas outside the Sewer Envelope where there is no planned community service. They are specifically required for lots created through the State's subdivision regulations found in the Code of Maryland Regulations (COMAR 26.04.03). In general, conventional onsite sewage disposal systems are permitted provided they are in compliance with the applicable code (COMAR 26.04.02), and the Prince George's County Code (Subtitle 22).

Conventional sewage disposal systems typically incorporate the use of septic tanks and an accompanying drain field, dry well or sand mound system. As of January 1, 2013, all new construction within the Chesapeake Bay Critical Area requires the installation of Best Available Technology (BAT) for the reduction of nitrogen treatment tanks. These systems can incorporate a combination of features such as aeration, agitation, recirculation, filtration, chemical treatment, etc. in order to improve the quality of the effluent discharged from the system and lessen the environmental impact on the waters of the State, including the Chesapeake Bay. Residents in other areas of the County may, if they choose, install BAT tanks, but are not required at this time.

The feasibility of these systems is determined through onsite percolation testing of the soils. Percolation test rates normally distinguish conventional disposal systems from alternative or experimental systems which may be constructed in less permeable soils. Subtitle 22 of the Prince George's County Code specifies the minimum satisfactory percolation test requirements necessary for delineating the sewage disposal recovery area for any individual lot.

Applications to perform percolation tests and to obtain permits for onsite sewage disposal systems shall be filed with the County Health Department through the License Office at the Department of Permitting, Inspections and Enforcement (DPIE). When applying for percolation testing, the applicant shall submit a site plan detailing the proposed development of the property. A percolation test application remains active until all tests are completed for the proposed property. For lots where site conditions dictate the use of an innovative and alternative disposal system (I&A), a separate I&A percolation test application must be filed.

Most percolation testing conducted in the County occurs during the "wet season" that normally begins February 1 and ends April 30 of each year. The County Health Department determines when properties can be tested depending on the various types of soils on the property. Several soils within the Prince George's County Soil Survey are classified as severely limited for the installation of sewage disposal systems due to high water tables, perched water tables, seasonally high water tables, excessive slopes, and flood hazards. The predominance of any one or a combination of types of soil with these limitations, on or in close proximity to the property, determine whether a property has to be tested during the wet season or may be tested at any time of the year.

ADOPTED 2018 WATER AND SEWER PLAN

Preliminary plan approval of subdivisions utilizing conventional septic systems must show for each lot a minimum 10,000 square foot sewage disposal area based on at least two satisfactory percolation tests. The preliminary plan must also show the location of any proposed wells and the topography at two-foot interval contours.

In addition to onsite water supply wells, the Health Department also issues permits for geothermal, remediation and monitoring wells under COMAR 26.04.04. Applicable regulations governing well and sewage disposal system permits and installation procedures are obtained through the Prince George's County Health Department, Division of Environmental Health/Disease Control, Environmental Engineering/Policy Program.

5.2.2 Abandonment Policies

The abandonment of a well or a sewage disposal system must comply with appropriate State laws and regulations in order to prevent them from acting as conduits of contamination to the waters of the State and to help eliminate health and safety hazards. Proper abandonment of the old wells and septic systems is required for any new development, and is often a condition of a preliminary subdivision approval. The State regulation, COMAR 26.04.04, requires that wells be backfilled and sealed by a licensed well driller or witnessed by a representative from the Division of Environmental Health of the County Health Department. The abandonment of a septic system must be done in a manner to ensure that it cannot be used again, and that it does not become either a health or safety hazard. To comply with the Code, the septic tank must be pumped out by a licensed scavenger and either backfilled in place or removed. Owners or developers are required to contact the Health Department if other portions of the septic system are to be disturbed.

5.2.3 Shared Onsite Water and Sewer Facilities

Prince George's County supports the use of shared water and sewer facilities in areas of the County that are outside the Sewer Envelope. Shared facilities often allow development of these areas consistent with the County's land use plans such as conservation subdivisions, while assuring the protection of sensitive areas and preventing contamination of ground and surface waters.

Shared facilities are community systems of limited size, utilizing onsite wells and or sewage disposal systems serving two or more lots. Shared facilities are governed by COMAR 26.04.05. According to COMAR, all shared facilities must be managed and operated by a governmental entity called a "controlling authority." This entity provides management, operation and continuous preventive and corrective maintenance of the shared facility. In Prince George's County, the controlling authority shall be a third party entity acceptable to the County Health Officer. As the approving authority, the Health Department cannot be a controlling authority.

The shared facility must be approved by the County Health Department and, should the shared system exceed 5,000 gallons per day, by the Maryland Department of the Environment (MDE). It must meet all applicable State and County regulations, including those of WSSC and M-NCPPC. Prior to submittal of a preliminary plan, a concept design plan for a shared sewage disposal system and/or shared water supply facility must be submitted to the Health Department.

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For a shared sewage disposal system, the plan shall include the shared sewage disposal easement area(s) delineated by satisfactory percolation tests and water table observation holes. The plan must also show the proposed location of gravity and force sewer mains, the projected locations of sewage and pump tanks, and the treatment facilities. The concept design for a shared water supply facility is to show the well location(s), water mains, and necessary storage and treatment facilities. In accordance with the Public Utilities Article of the WSSC District Laws, the design and construction of the components of the shared facilities shall meet all relevant WSSC design and construction standards for the benefit of public health and welfare. WSSC shall review and approve treatment systems, excluding septic treatment and disposal systems; and, regardless of the type of treatment system, shall review and approve all on-site piping.

Prior to record plat approval for shared sewage disposal systems, the Health Department must receive a detailed site plan depicting the exact location of the force and gravity mains, the proposed treatment facilities and the sewage disposal area. In addition, an approved MDE ground water discharge permit must be obtained for any shared sewage disposal system that exceeds 5,000 gallons per day. For shared water supply facilities, the site plan shall detail the location of the proposed wells that are to be used as the shared water source. The plan must also show all water supply lines and the location of water treatment facilities. A water appropriation permit will be required from MDE prior to record plat approval. Test wells are likely required before the issuance of the water appropriations permit. All shared facilities must be approved as an amendment to the Water and Sewer Plan prior to final plat approval. Agreements with the controlling authority must be reviewed and approved by the County and the MDE prior to final plat approval. Shared facility agreements shall clearly specify the rights, duties, and responsibilities of the system owners and the controlling authority, both financially and operationally, to assure perpetual operation of the system(s) and clarify the roles of the State and local health authorities to inspect the system(s) as WSSC has no intention of assuming ownership or operation and maintenance responsibilities. DPIE and the Health Department must cosign final plats of subdivision for properties using shared facilities.

5.2.4 Alternative Systems

Alternative systems allow development of lots recorded in the land records of Prince George's County that are determined to be compatible and consistent with County growth policies including the General Plan Rural and Agricultural Areas Strategies for conserving agricultural and forest resources. Alternative systems must also conform to percolation rates specified in the MDE guidance memorandum "Alternative Onsite Sewage Disposal Systems," dated September 28, 1994. Types of alternative systems include:

- At-grade mound
- Sand mound
- Enhanced pretreatment system
- Waterless toilet/graywater system
- Shallow low-pressure distribution system
- Shallow alternating trench system

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Alternative systems require more intensive site review, installation inspection, and operational maintenance than conventional types of disposal systems. Conditions for approval of alternative systems are as follows:

1. Approval for these systems rests with the County Health Department with assistance from the staff of the MDE.
2. Alternative systems must meet the same criteria as conventional systems for setback distances, recovery areas and unsaturated treatment zones.
3. The property owner, the County Health Department, and MDE must sign an Agreement and Easement document to be recorded in the County Land Records and returned to the Health Department. The Agreement and Easement document establishes the regulatory conditions associated with the alternative system, necessary operational and maintenance requirements, and allows access for monitoring by State and County personnel.

5.2.5 Interim Systems or Waivers for Wells and Septic Systems

Interim Systems are used in areas of Prince George's County where there is an expectation that public sewer and water will eventually serve the property, but is currently unavailable. This does not include the Rural and Agricultural Areas where permanent systems are expected to serve the property. DPIE manages the approval of interim systems through a waiver process based on recommendations from the Health Department and WSSC. Waiver application forms may be obtained from DPIE (see Chapter 6). Interim Systems will generally be approved only for individual single-family homes or minor subdivisions as defined in Section 24-117 of the County Code. Percolation tests may be conducted prior to a waiver application. Construction trailers can use temporary wells and sewage disposal systems without an interim system approval if they are on sites that will ultimately be served by public water and sewer.

A waiver to install an interim onsite water and sewer system may be granted by DPIE provided that:

- A. The applicant meets all the requirements specified above for conventional or alternative systems.
- B. The cost of service connection to the community system substantially exceeds the Health Department's estimate of the cost of constructing an individual system. WSSC shall determine the availability and adequacy of water and sewer service based on transmission and treatment capacities, or economic and engineering constraints. Where WSSC finds that service cannot be provided, it shall inform DPIE of the limitations and develop a projected cost estimate to provide service to the property in question.

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- C. Once public water and sewer is made available to a lot, the property owner may continue using the interim system, but must connect within one year of the line being placed into service and abutting the property.
- D. In the event of malfunction of the interim system, it will be the property owner's responsibility to abate the health hazard by replacing or repairing the existing system under Health Department oversight. However, if the community system is available and accessible, the property must connect to the community system.

5.3 SEWAGE DISPOSAL SYSTEMS FOR EXISTING STRUCTURES

The Prince George's County Government will generally require connection of an existing occupied residence to public sewer systems to address public health issues. If public sewer is not available, the County Health Department will pursue the installation of a conventional or alternative sewage disposal system. Failing systems in the Chesapeake Bay Critical Area must be remedied with a Best Available Technology (BAT) system for the reduction of nitrogen or connection to the public sewer leading to a wastewater treatment plant which has incorporated Enhanced Nutrient Reduction (ENR) technologies.

5.3.1 Experimental and Innovative Sewage Disposal Systems

Should the installation of conventional or alternative sewage disposal systems not be possible due to poor soil characteristics or high ground water tables, the County supports the use of innovative sewage disposal systems when such systems are considered to be economically and environmentally acceptable. The County government endorses continuing research that would provide data useful in determining the suitability of various innovative systems to the County's natural environments. One provision of the MDE guidelines specifies the need for a maintenance contract to ensure the continued operation of these more complex systems. Further information can be obtained from the Prince George's County Health Department, Environmental Engineering/Policy Program.

5.3.2 Holding Tanks

A holding tank is a watertight tank with sufficient capacity to receive and retain at least one week's volume of sewage flow. A holding tank must be emptied on a regular basis by a licensed scavenger. The County shall not authorize the use of a holding tank for new construction. Rather, it is an acceptable means of sewage disposal when a malfunctioning sewage disposal system cannot be repaired or renovated, until such time as public sewer or some other acceptable disposal method can replace the system.

5.3.3 Chemical Toilets

A chemical toilet is a self-contained unit that directs human waste into a watertight tank containing deodorizing and liquefying chemicals. A chemical toilet will be accepted for use at temporary events not exceeding 14 days in length and on construction sites during the actual

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construction phase. The Health Department may also accept the use of chemical toilets in parks owned by governmental agencies.

5.3.4 Upgrade of Existing Sewage Disposal Systems

Sewage disposal systems that are required to be upgraded to meet anticipated increases in sewage flow must comply with requirements for conventional or alternative sewage disposal system, before the Health Department can approve the increase in sewage flow. The Department's determination that the system can be upgraded will be based on the projected increase in the size of the disposal system and the capability of the property to support that increase. The projected sewage flow, percolation test information, capacity and design of the existing system, and the amount of available land to upgrade the system will be contributing factors in making that determination.

5.4 FUNDING FOR ON-SITE SYSTEMS

The County Health Department is delegated responsibility to administer funding from the State's Chesapeake Bay Restoration Fund (BRF). Successful applicants for such funding may have the cost of BAT tank purchase and installation (including the system's initial year(s) of periodic operations and maintenance inspections) paid by the BRF. Funding may also be applied to the connection of an existing domestic dwelling with a failing septic system to the public sewerage system. Interested parties should contact the Health Department's Division of Environmental Health/Disease Control, Environmental Engineering/Policy Program for further information and an application.

5.5 CONTRACTOR SERVICES

The Health Department, pursuant to Prince George's County Code, Subtitle 22, issues annual licenses to persons performing sewage system related services, i.e., percolation testing, sewage disposal system installation and scavenger companies. The Department also performs annual inspections to certify the suitability of scavenger vehicles to WSSC as a condition of their being allowed to collect and discharge septage to WSSC treatment facilities. Where transfer of septage from small capacity trucks to larger vehicles is carried out, such activity shall be listed in this Water and Sewer Plan.

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CHAPTER 6 PROCEDURES FOR ADOPTING AND AMENDING THE PLAN

The authority to adopt and amend the Water and Sewer Plan resides with the County Council, following recommendations by the County Executive. The Water and Sewer Plan Amendment cycles provide the County Executive and the County Council with an opportunity to manage the rate of growth in the County. It also provides an opportunity to ensure the adequacy of the infrastructure and the delivery of services in a staged manner. The County will schedule four legislative amendment cycles for category changes and minor text amendments as well as monthly administrative amendment cycles per annum, excluding August and December. The Plan adoption process is described further in Section 6.1.

Section 6.2 describes the amendment processes that includes both legislative and administrative amendments. The legislative amendment process, used to advance properties from Category 6 or 5 to Category 4, is further described in Section 6.3. The administrative amendment process of the Plan, used when property owners are ready to develop and move from Category 4 to 3 or for a public use allocation, is discussed in Section 6.4. The requirements and procedures to obtain a waiver to either connect to public water and sewer or to use individual wells and septic systems are discussed in Section 6.5.

6.1 PLAN ADOPTION PROCESS

State law requires a comprehensive update of the Water and Sewer Plan at least once every three years. The update must include any changes that have occurred in demographics, geographical features, environmental factors, Federal, State or local regulations, and public health requirements. It also incorporates all legislative and administrative amendments approved since the previous plan adoption (November 2008), including category change actions, map revisions and corrections, and necessary text amendments.

The County Executive submits the Plan and Plan Maps for consideration by the County Council. The County Council schedules a public hearing and provides State and local agencies with 30 days' notice of the hearing. Following the public hearing, a work session of the appropriate County Council Committee is held. After considering matters raised at the public hearing and at the work session, the County Council acts on the proposed Plan. The County Executive has 10 days following adoption of the resolution to comment on the County Council's action before the resolution is effective.

In addition, the Water and Sewer Plan is amended annually with the County Council adopting the CIP of WSSC in May of each year. The CIP contains capital projects to support water supply and sewerage system development. Descriptions of these projects are included in the Water and Sewer Plan as chapter **Appendices 3-7** and **4-2**.

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6.2 AMENDMENT PROCESSES

The adopted Water and Sewer Plan assigns a category to every piece of property in the County. These categories determine whether land can be developed using public, or community, water and sewer or individual well and septic systems. A category change is usually required for a development proposal that needs a subdivision, or that disturbs more than 5,000 square feet of land. The categories are discussed in Section 2.1.2. “Water and Sewer Categories.”

Requests for changes to these categories, also known as the Water and Sewer Plan Amendments, can be achieved through two processes: The Legislative Amendment process and the Administrative Amendment process. The Legislative Amendment process is used when changes are proposed from Category 6 or 5 to Category 4 and for variations to policies, procedures, and practices established by the adopted Water and Sewer Plan. The Administrative Amendment process is used when changes are proposed from Category 4 to Category 3 and for public projects that are to be allocated for “public convenience and necessity” use. Both processes require the filing of an application for water and sewer plan amendment. Applications are discussed further in Sections 6.3.3 and 6.4.2, and as **Appendix 6-1**.

6.3 LEGISLATIVE AMENDMENT PROCESS

Landowners, County agencies, the Maryland-National Capital Park and Planning Commission (M-NCPPC), and the Maryland Department of the Environment (MDE) can initiate applications for the Legislative Amendment process. Plan amendments can be requested for water and sewer category changes, and for water withdrawal points and points of discharge, in excess of 5,000 gallons per day as an annual daily average. Additionally, a contract purchaser, with the owner’s written consent, may initiate the application.

The County Executive has delegated the management of the Water and Sewer Plan, including the preparation of Legislative Amendments, to the Department of Permitting, Inspections and Enforcement (DPIE). DPIE leads in implementing the County’s goals, objectives and legal requirements for providing water and sewer service in Prince George’s County, in concert with land use and sustainable growth policies established by the adopted General Plan, and through the Department’s protection of the County’s natural and manmade resources. In its management of the Water and Sewer Plan and amendments, DPIE coordinates with County and Bi-County agencies and evaluates, prepares and submits proposed Legislative Amendments for the County Executive's review and recommendation. These recommendations are then sent with an accompanying proposed Council Resolution for consideration by the County Council.

The County Council provides a notice of the pending amendments to the public, County, and State agencies prior to a public hearing. Anyone interested in an amendment or an application in the proposed Water and Sewer Plan Amendment package may testify at the public hearing. After the public hearing, a work session of the appropriate County Council Committee is held. After considering matters raised at the public hearing and work session, the County Council acts

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on the proposed Legislative Amendments. The County Executive has 10 days following adoption of the resolution to comment on the County Council's action before the resolution is effective.

Prince George's County will schedule four Water and Sewer Plan Legislative Amendment cycles each year. This is one more cycle than previous adopted plans have allowed. Applications to amend the Plan must be submitted to DPIE by the respective closing dates: **March 1**, **June 1**, **September 1**, and **December 1**. DPIE provides application forms (see **Appendix 6-1** of this chapter). The applications, with all required attachments, must be completed before the closing date to be accepted for review (see Section 6.3.3). DPIE, the County Executive and the County Council reserve the right to request any additional information deemed appropriate. An application may be rejected from the process if requested information is not received within a designated time frame. Additionally, an application may be rejected if the policies and criteria listed in Section 2.1.4 are not met for the development review processes or for the development proposed. Incomplete applications received, via courier, mail or electronic transfer, will be returned to the applicant or the correspondent of record. Applications found to be incomplete after the closing date will be required to re-file, and may be subject to an additional filing or late fee.

6.3.1 Referral and Review Process

Applications are reviewed by the Washington Suburban Sanitary Commission (WSSC), the Maryland-National Capital Park and Planning Commission (M-NCPPC), the County Health Department (PGCHD), and the Department of Permitting, Inspections and Enforcement (DPIE). DPIE may also request reviews or comments from other appropriate agencies and municipalities. One copy of each application is sent to the County Council. Reviewing agencies are given 15 days from the date of referral to submit comments to DPIE on applications received.

DPIE, as the agency integrally involved in permitting services for the County and the administrator of this process, evaluates each application proposal based on criteria listed in Section 2.1.4, and consistency to other Federal, State, Regional, County, and Municipal land use plans and planning policies outlined or implied in the Water and Sewer Plan. DPIE comments on the existence of and requirements for permits prior to, during, and after the disturbance of land, and the proposed development's need for road improvements and other transportation facilities.

State and County agencies involved in the review process provide information and assistance pertinent to water and sewer planning and development specific to its area of proficiency. These comments are considered in recommendations presented to the County Executive and County Council. In addition to DPIE, the plan administrative agency, the following agencies provide written comments on all amendment applications: WSSC calculates an estimated sewage flow for each project and describes whether the project can be served by existing water and sewer lines, or estimates what size and type of improvements would be necessary to provide service; M-NCPPC compiles information on general plan policies, master plan recommendations, zoning, subdivision status, and adequacy of public facilities, residential capacities, community needs, infrastructure, and services; and PGCHD provides information about existing wells, septic systems and percolation tests conducted on the subject property, as well as soils and other environmental health and sanitation issues.

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Based on the information provided in the application and the comments received from reviewing agencies, DPIE prepares a report evaluating the merits of the request and its proposal. The County Executive then determines a recommendation for each request and transmits the proposed amendment resolution to the County Council. DPIE notifies each applicant of the County Executive's recommendation once the resolution has been introduced as pending legislation. The County Council holds a public hearing and a work session prior to adoption of the resolution. At the close of each public hearing, the Chair of the County Council shall specify that no additional evidence will be accepted by the Clerk of the Council for inclusion into the record. If any evidence is presented subsequent to the public hearing, it shall not be considered as a part of the record and shall not be used as a basis for denying or granting a category change request. The adopted Council Resolution serves as legal documentation of the approved amendments to the Water and Sewer Plan and Maps. A copy of the adopted County Council Resolution is available at the Office of the Clerk of the Council.

The Legislative Amendment process has been modified to accommodate four cycles, approximating 13 weeks per cycle. The exact duration and action dates are dependent on weekdays, holidays and other workload within County agencies, and may also be impacted by County elections. The introduction of a resolution for an Amendment, the public hearing and the County Council's final adoption must each occur at a full legislative session of the County Council. These are usually held on Tuesdays.

Table 6-1. Approximate Schedule for Legislative Amendments

| | |
|------------|--|
| Week 1 | Initial review by DPIE and referral to agencies |
| Weeks 2-5 | Agency commenting period |
| Weeks 6-7 | DPIE prepares staff report, drafts resolution for transmittal of the County Executive's recommendations and Office of Law review to the County Council |
| Week 8 | County Council introduces Resolution |
| Weeks 9-12 | Public hearing notice, public hearing and work session |
| Week 13 | Final adoption by the County Council |

6.3.2 Redesignation Criteria for Legislative Amendments

Legislative Amendments to the Plan include category changes. In order for the County to approve a particular category change, the project must meet the policies and criteria listed in Section 2.1.4 of this plan. Category specific criteria also include the following:

- Category 4
- The project complies with applicable zoning requirements.
 - Water and sewer service is found to be adequate and available through a WSSC-issued Letter of Findings.
 - Additional residential capacity is needed (residential development)
 - The development proposal includes an adequate description.
 - Property is located inside the Sewer Envelope

- Category 5
- The proposed development complies with applicable zoning.

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- Water and sewer service is ultimately planned for the area.
- Additional residential capacity is not needed (residential development)
- Property is located inside the Sewer Envelope

- Category 6
- The project complies with applicable zoning requirements.
 - Community service is not planned for the area.
 - Rural sanitation and rural water supply can support the development.
 - Property is located outside the Sewer Envelope.

Any project that has an active rezoning application may not be processed for water and sewer category amendments.

6.3.3 Application Requirements

The application form must be completed according to its accompanying instructions and is subject to a review process. An application must be made using forms provided by DPIE or by downloading the application from the DPIE website (see **Appendix 6-1** of this chapter). A completed application consists of the original application form (notarized as appropriate), required supporting materials and documents on 8 ½ x 11 papers, and the required nonrefundable filing fee. Documents must be legible and scanner-ready for acceptance into the designated cycle for processing. The deadline for accepting applications is the close of business on the 1st of **March, June, September** and **December**. If the deadline date is on a weekend or a holiday, the following business day will be considered the deadline date.

6.3.4 Refiling of Denied Applications

Denied applications may be refiled in consecutive cycles. The County reserves the right, however, to determine whether circumstances or policies related to the original denial have changed significantly to justify reconsideration in the next consecutive cycle. The refiled application is subject to the applicable non-refundable filing fee.

6.3.5 Fee Schedule

A fee schedule for Legislative Amendments is found in **Appendix 6-2** of this chapter.

6.4 ADMINISTRATIVE AMENDMENT PROCESS

Once a property has been changed to Category 4 and meets certain criteria, a Plan Amendment application to move to Category 3 may be submitted. Category 3 status allows the owner of the property to obtain appropriate water and sewer extension authorization, record the final plat and subsequently receive building permits. Plan amendments for changes from Category 4 to Category 3, and for public use allocations are generally approved administratively. Public use allocations are required for any development proposed by a public entity (Federal, State, County, Municipal, and Regional) and those deemed public by the Maryland Public Service Commission, possessing a Certificate of Public Convenience and Necessity (CPCN).

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DPIE will accept applications for Administrative Amendments on a continuous basis, and approvals will be issued approximately 45 days after receipt of a complete submittal. Applications should only be submitted to DPIE after the Planning Board has approved the preliminary subdivision. Applications for an Administrative Amendment are submitted on an Application for Water and Sewer Plan Amendment form furnished by DPIE (see **Appendix 6-1** of this chapter). Applications may be initiated by the landowner or his/her legal representative, or by a contract purchaser with the written consent of the property owner. Additionally, County agencies, the M-NCPPC and the Maryland Department of the Environment, may also initiate an administrative amendments. Only completed applications should be submitted for review (see Section 6.4.2). Incomplete applications received, via courier, mail, or electronic transmittal will be returned to the applicant or the correspondent of record. Applications found to be incomplete may be subject to an additional filing fee.

DPIE will evaluate applications received by the 1st of each designated month, and a report on each application will be transmitted to the County Executive and the County Council by the 15th of the month. In order to ensure an adequate analysis and receipt of current information, DPIE reserves the right to determine what is necessary before transmitting the evaluation to the County Executive and the County Council. Reasons for delayed transmittals may include, but are not limited to the following: approved Preliminary Plans that are more than four years old, outstanding conditions (State or County) relating to the preliminary plan approval, conditions set at the time of the legislative approval, expired or outdated DPIE Site Development Concept Plans, or failure to provide any portion of requested information necessary to complete the evaluation. The County Executive and the County Council will have 30 calendar days to comment on the application and its request, once transmitted by DPIE. If no comments are made, the Director of DPIE may approve each application included in the transmitted cycle.

During the 30-day review period, the County Executive or County Council may request that an application be processed as a Legislative Amendment. Should this occur, the application would be placed in the next available Legislative Amendment cycle (**March, June, September or December**). DPIE will notify the applicant, or the correspondent of record, of any pending procedures or deficiencies in the filing that would prevent the application's processing in a requested cycle.

6.4.1 Redesignation Criteria for an Administrative Amendment

DPIE shall use the policies and criteria listed in Section 2.1.4 of this Plan to review an administrative change from Category 4 to Category 3. At a minimum, the development proposal submitted with the application shall have:

- A. An approved, valid Preliminary Plan, including the signed corresponding Resolution of the specified plan.
- B. A valid DPIE Site Development Concept Approval Letter.
- C. Conceptual water and sewer alignments shown on the preliminary plan submitted in a Hydraulic Planning Analysis (HPA) for WSSC to review.
- D. Required Capital Projects included in the adopted WSSC CIP.

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- E. No additional capacity dependencies noted in WSSC’s Letter of Findings.
- F. Description of the project’s ability to meet the County’s criteria for quality development, to include:
 - 1. Architectural renderings (sales brochure quality);
 - 2. Description of amenities (itemized, if not included above);
 - 3. Confirmed builder(s);
 - 4. Description of community and public enhancements;
 - 5. Designation as a priority project in the County’s Economic Development Program.

6.4.2 Application Requirements

The application form must be completed according to accompanying instructions and is subject to a review process. An application must be submitted using forms provided by DPIE or by downloading the application from the DPIE website (see **Appendix 6-1** of this chapter). The original application form and all supporting materials are required for acceptance into the process. A completed application consists of the original application form (notarized as appropriate), required supporting materials and documents on 8 ½ x 11 papers (except for certified Preliminary Plans), and the required nonrefundable filing fee. Documents must be legible and scanner-ready, if not completed online.

6.4.3 Fee Schedule

A fee schedule for plan amendments is found in **Appendix 6-2** of this chapter.

6.5 WAIVER PROCESS

Prince George’s County has had a history of allowing interim well and septic systems, on a case by case basis, in areas designated for development planning and future public service (Category 4 and Category 5). It is the intent that interim well and septic systems be removed once public water and sewer becomes available and accessible. However, many developed residential lots are still being serviced by well and septic systems because public water and sewer lines have not been constructed to allow for connections, or property owners have not yet connected to the public system. Numerous interim systems are failing and posing concerns to health and the natural environment. Strategies are now under review that actively seek to remediate these circumstances. New regulations, such as The Sustainable Growth and Agricultural Preservation Act of 2012 (SB 236, also known as “the Septics Bill”) has placed stringent requirements on Maryland counties to identify areas where “major and minor residential subdivisions may be located and what type of sewerage system will serve them.” The General Plan has redelineated the County by tiers to guide where public facilities are to be constructed, and where interim systems may be utilized. The County will make every effort to strictly adhere to bills, acts and regulations that have been imposed to protect and sustain the natural and manmade environments. Waivers shall not be granted for the purpose of circumventing any of the established policies and guidelines.

The Waiver process is designed to eliminate unnecessary burden on an individual owner of an existing single-family residence or lot, or a residential minor subdivision. The property must

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be located inside the Sewer Envelope, within the Growth Boundary, and in a publicly designated category. There are two types of waivers: 1) Waiver to Connect to Public (Community) Water and Sewer; and 2) Waiver to Use an Interim Individual Well and Septic System.

The Director of DPIE may waive certain Water and Sewer Plan requirements for existing, individually-owned residences and residential minor subdivisions. An application and a review process initiated at DPIE – in conjunction with WSSC, the County Health Department, and M-NCPPC – will determine eligibility of the subject property, and a recommendation based upon findings. Applicants will receive a letter signed by the Director of DPIE regarding the approval or denial of such requests.

Waivers are not typically needed for homeowners who are using an existing well or septic system that has become a health hazard. In most of these cases, the Health Department makes a determination on how to expedite and resolve the problem (see Chapter 5).

6.5.1 Waiver Criteria—Connection to Public (Community) Water and Sewer

A Waiver for Connection to Public Water and Sewer may be requested when public water or gravity sewer lines abut the property and the property owner wishes to connect. Waivers are provided for existing, individually-owned residential lots and parcels, and residential minor subdivisions. This waiver process may be applied for up to seven existing single-family residential lots, or for a proposed subdivision determined by M-NCPPC to qualify as a residential minor subdivision defined in Section 24-117 of the County Code. Each lot must be located inside the Sewer Envelope, within the Growth Boundary, and have abutting water and abutting gravity sewer lines located in a dedicated street, right-of-way or traversing the property. Connections to public water and sewer may not exceed 200 feet of dedicated streets or rights-of-way. The waiver process typically does not change the water or sewer category designation of the property. Residential minor subdivisions requesting such waivers shall be evaluated under the criteria specified in Section 2.1.4 “Category Change Policies and Criteria.”

6.5.2 Waiver Criteria – Use of Interim Individual Well and Septic Systems

A Waiver for the use of interim individual well and septic systems may be requested when the public water and sewer system is not currently available or accessible, but is planned (for servicing and extending) under an approved project. Waivers are provided for existing, individually-owned residential lots and residential minor subdivisions. This waiver process may only be applied for up to seven existing, individually-owned residential lots, or for a proposed subdivision determined by M-NCPPC to qualify as a residential minor subdivision defined in Section 24-117 of the County Code. Each lot must be located inside the Sewer Envelope, within the Growth Boundary, located in an area that is planned for public service under an authorized and active project and, connection is currently greater than 200 feet from the property line. The property must meet the required acreage, testing, and secure the appropriate permits to install or maintain an interim individual system as determined by the PGCHD (see Chapter 5). Connection to the public system shall be made within one year or less after the public system becomes available (As described in COMAR 26.03.01.05). Residential minor subdivisions requesting waivers shall be evaluated under the criteria specified in Section 2.1.4 “Category Change Policies and Criteria.”

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6.5.3 Application Requirements

An application must be submitted using forms provided by DPIE or by downloading the application from the DPIE website (see **Appendix 6-1** of this chapter). Applications are to be completed with the fee and attachments as listed on the application form. Incomplete applications will not be reviewed, and the fee will not be refunded. Additional documents may be requested for further analysis after an initial review. Waiver applications do not have a filing deadline, and may be submitted at any time.

6.5.4 Fee Schedule

A fee schedule for the Waiver process is found in **Appendix 6-2** of this chapter.

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**THE PRINCE GEORGE'S COUNTY GOVERNMENT
DEPARTMENT OF PERMITTING, INSPECTIONS AND ENFORCEMENT**

Documents and Forms:

Instructions for Amending the Plan

Water and Sewer Plan Amendment (Form 2.01)

Final Plat Approval (Form 2.02)

Waiver for Connection to Water and Sewer (Form 2.03)

Waiver for Interim/Individual Well or Septic System (Form 2.04)

Application forms (including instructions) may be downloaded from our website at:
<http://www.princegeorgescountymd.gov/1024/Permitting-Inspections-and-Enforcement>

Application forms contained herein are the approved forms associated with the printing of this Plan. For the version currently in use, please contact:

***Department of Permitting, Inspections & Enforcement (DPIE)
9400 Peppercorn Place, Largo, Maryland 20774
301-636-2060***

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**THE PRINCE GEORGE'S COUNTY GOVERNMENT
DEPARTMENT OF PERMITTING, INSPECTIONS AND ENFORCEMENT**

APPLICATION FOR WATER AND SEWER PLAN AMENDMENT

INSTRUCTIONS

Please follow the instructions carefully to ensure the application is complete. An incomplete application may delay the processing of the request, including rejection from the requested cycle, and additional fees. The 2018 Water and Sewer Plan revises fees for the plan, plan amendments, and processes that must be included with your submission. A Fee Schedule accompanies this instruction sheet. For questions or assistance in completing the forms, contact the Department of Permitting, Inspections and Enforcement (DPIE), Site Road Plan Review Division, at (301) 636-2060. Interactive applications (PDF) and the 2018 Water and Sewer Plan (PDF) may be found at: <http://www.princegeorgescountymd.gov/1024/Permitting-Inspections-and-Enforcement>

Send completed applications and other required information to:

Prince George's County Government
Department of Permitting, Inspections and Enforcement (DPIE)
9400 Peppercorn Place
Largo, MD 20774

For questions regarding the approved General Plan, master plans, zoning or subdivisions, contact the Maryland-National Capital Park and Planning Commission (M-NCPPC) at:
(301) 952-3680 or (301) 952-3530

For information on the public water and sewer system, connections and line extensions, and water and sewer billing, contact the Washington Suburban Sanitary Commission (WSSC) at:
(301) 206-WSSC (9772)

For information on well and septic systems, contact the Prince George's County Health Department (PGCHD) at:
(301) 883-7681

| Type of Amendment | Administrative | Legislative |
|-----------------------------|--|---|
| Requested Amendment | Category 3 or Public Use | All other category change requests |
| Application Deadlines | Continuous; approvals monthly except August and December | March 1, June 1 September 1, December 1 |
| Approximate Processing Time | 45 days (some reviews may require additional 30 days) | 13 weeks |
| Submittal Requirements | Original application and required attachments | Original application and required attachments |

In addition to the application form, the following attachments are required based on the requested amendment and its criteria:

| Requested Amendment | Required Attachments |
|----------------------------|--|
| Category 4 | <p>Copy of the current County tax map referencing the grid number(s) and parcel number(s) with the property clearly delineated</p> <p>Development Proposals – description of how the proposal will enhance the surrounding community including initiatives to improve roads, public facilities, community services and environmental concerns</p> <p>Completed owner and contract purchaser Disclosure Statement(s)</p> <p>Notarized owner’s signature</p> <p>Recommended Attachments/Actions:</p> <ul style="list-style-type: none"> • A conceptual description of the development proposal • Response to the Land Development Review questions should be as complete as possible |

| Requested Amendment | Required Attachments |
|--|---|
| <p>Category 3 or Public Use Allocation</p> | <p>An approved Preliminary Plan of subdivision and its signed Planning Board Resolution;</p> <p>A valid DPIE Site Development Concept approval letter</p> <p>A valid WSSC Hydraulic Planning Analysis (HPA) Letter of Findings</p> <p>Architectural renderings (a graphic representation of the finished dwellings or structure and the layout; sales brochures are preferred; submittals larger than 8 ½” x 11” will not be accepted) with written descriptions of amenities offered</p> <p>Confirmed Builder(s)</p> <p>Photocopy of the current County tax map referencing the grid number(s) and parcel number(s) with the property clearly delineated</p> <p>Land Development Review questions answered completely and separate sheets provided as requested</p> <p>Completed owner and contract purchaser Disclosure Statement(s)</p> <p>Notarized owner’s signature</p> |

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IV. PROPOSED DEVELOPMENT

| <u>Residential</u> | <u>Total Acreage</u> | <u># of Units</u> | <u>Minimum Livable Space*</u> | <u>Minimum Sales/Rent \$ per Unit</u> |
|--------------------|--------------------------|-------------------|-----------------------------------|---|
|--------------------|--------------------------|-------------------|-----------------------------------|---|

*Livable space – The enclosed (finished) living area of the primary, residential structure *above ground or grade level* that is utilized for living, sleeping, eating, cooking, bathing, washing and sanitation purposes. This does not include basements, even if finished.

| | | | | |
|--------------------------|-------|-------|-------|-------|
| Single Family Detached | _____ | _____ | _____ | _____ |
| Townhouse | _____ | _____ | _____ | _____ |
| Multifamily _____ Floors | _____ | _____ | _____ | _____ |
| Other: _____ | _____ | _____ | _____ | _____ |

| <u>Non- Residential</u> | <u>Total Acreage</u> | <u># of Bldgs.</u> | <u># of Floors</u> | <u>Total Floor Area</u> | <u>Minimum Sales/Rent \$ per sq. ft.</u> |
|-----------------------------|--------------------------|--------------------|--------------------|-----------------------------|--|
|-----------------------------|--------------------------|--------------------|--------------------|-----------------------------|--|

| | | | | | |
|--------------|-------|-------|-------|-------|-------|
| Retail Space | _____ | _____ | _____ | _____ | _____ |
| Office | _____ | _____ | _____ | _____ | _____ |
| Warehouse | _____ | _____ | _____ | _____ | _____ |
| Church | _____ | _____ | _____ | _____ | _____ |
| Other: _____ | _____ | _____ | _____ | _____ | _____ |

Contract Purchaser: _____

Architect/Engineer: _____

Confirmed Builder(s): _____

(Required for all Administrative Amendments – Category 4 to 3)

1. Is the commercial/industrial space designed for a certain business? If yes, please explain.

2. What type of business will occupy the space?

Estimated number of employees/contractors _____

3. If relocating from within Prince George’s County, please provide the current location/address of the business:

4. Describe how the proposal will enhance the surrounding community, including what initiatives are offered to improve roads, public facilities, community services, and efficiently use environmental resources. Please provide any information that would facilitate the review of this proposal on a separate 8½” x 11” page.

V. LAND DEVELOPMENT REVIEW

Some responses may not be applicable to small, residential developments or projects in the early stages of development

1. Subdivision Name: _____
Preliminary Plan of Subdivision #: _____ Submittal Date: _____
Date of Preliminary Plan Approval: _____ Certification Date: _____

2. Comprehensive Design Plan, Phase II, Name: _____
CDP #: _____ Submittal Date: _____ Approval Date: _____

3. Rezoning or Special Exception Plan Name: _____
Rezoning or Special Exception #: _____ Submittal Date: _____ Approval Date: _____

Note: Projects undergoing rezoning or special exception cannot be processed for water or sewer category Amendment. Rezoning and SE cases must receive final approval before amendments can be processed.

4. Site Development Concept Plan #: _____ Approval Date: _____

5. WSSC Letter of Findings #: _____ Approval Date: _____

6. Is this project a Designated Priority Project? Yes: _____ No: _____

7. Are sustainable practices and techniques proposed? Yes: _____ No: _____
If "yes," please attach description on a separate page.

8. Please identify the appropriate Policy Area in which the proposal is located from Plan Prince George's 2035: _____ Growth _____ Rural & Agricultural

9. Please check the applicable Sustainable Growth Act (SGA) tier designation from Plan Prince George's 2035:
_____ Tier 1 _____ Tier 2 _____ Tier 3 _____ Tier 4

10. Explain how this development meets or will meet the tier-specific policies established in Plan Prince George's 2035 (Please attach a separate page.)

11. Does water and sewer service to the property necessitate a project in the WSSC Capital Improvement Program (CIP)? Yes: _____ No: _____ Not Certain: _____

PLEASE NOTE: The latest edition of DPIE Form 2.01 (Rev. 12/17) may be downloaded at:

The website is currently under construction and pending revision of the 10-Year Water and Sewer Plan. Please contact the program manager at 301-636-2060 or sabranch@co.pg.md.us for more information.

*The original application form and requested attachments are **required** upon submittal to the Legislative or the Administrative Amendment cycle, and must be delivered to DPIE within 48 hours of its electronic transmittal (if approved for electronic transmittal).*

The application may be rejected by DPIE if any part of the submittal criteria is not satisfied by the application deadline for the designated amendment cycle or if documentation is not legible.

Signature of Correspondent: _____

Name, Title, Company: _____

Telephone: _____ E-mail Address: _____

VI. OWNER/CONTRACT PURCHASER DISCLOSURE STATEMENT

PLEASE NOTE: A separate ownership Disclosure Statement is required for the Property Owner and Contract Purchaser. Legal addresses must be disclosed. Post Office boxes are not acceptable. Attach a separate sheet, if necessary, in the format presented below:

All individuals having at least 5% interest in the subject property or in the Corporation owning the property (not needed for a corporation listed on the national stock exchange)

| | | |
|-------------|---------------------|-------------------------|
| <u>Name</u> | <u>Home Address</u> | <u>Business Address</u> |
|-------------|---------------------|-------------------------|

Officers of the Corporation

| | | |
|--------------|--------------------------|------------------------------------|
| <u>Names</u> | <u>Corporate Address</u> | <u>Office and Date Assumed</u> |
|--------------|--------------------------|------------------------------------|

Members of the Board of Directors

| | | | |
|-------------|----------------|-------------------------|-------------------------|
| <u>Name</u> | <u>Address</u> | <u>Date Assumed</u> | <u>Term Expires</u> |
|-------------|----------------|-------------------------|-------------------------|

Statement Prepared by: Owner Applicant Correspondent
(Please check as appropriate)

Date: _____ Signature: _____

Telephone: _____ E-mail Address: _____



**THE PRINCE GEORGE'S COUNTY GOVERNMENT
DEPARTMENT OF PERMITTING,
INSPECTIONS AND ENFORCEMENT**

VII.

**NOTARY PAGE FOR OWNER SIGNATURE (S) TO ACCOMPANY
APPLICATION FOR WATER AND SEWER PLAN AMENDMENT
(If more than three owners attach a separate sheet in the format presented)**

Owner: _____ (1)

Tax Map #: _____ Grid: _____ Parcel/Lot #: _____

Signature of Owner

Notary Seal, Signature, Commission Expiration

Owner: _____ (2)

Tax Map #: _____ Grid: _____ Parcel/Lot #: _____

Signature of Owner

Notary Seal, Signature, Commission Expiration

Owner: _____ (3)

Tax Map #: _____ Grid: _____ Parcel/Lot #: _____

Signature of Owner

Notary Seal, Signature, Commission Expiration

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Prince George's County
 Department of Permitting, Inspections
 and Enforcement
SITE/ROAD PLAN REVIEW DIVISION
 9400 Peppercorn Place
 Largo, Maryland 20774
 301.636.2060 ♦ FAX: 301.925.8510



FINAL PLAT APPROVAL APPLICATION

Each record plat proposing the use of public water and/or sewer facilities must be submitted with a completed application form to: **Department of Permitting, Inspections and Enforcement, 9400 Peppercorn Place, Largo, Maryland 20774.**

For more information, please call (301) 636-2060.

Submittal Date: _____ *(If applicable)* **Previous Submittal Date:** _____

Record Plat Name: _____

Applicant: _____ Engineer/Company _____

Contact Person: _____ Telephone(s): _____

E-mail Address: _____

| DEVELOPMENT PROPOSAL | | | |
|--|------------------------------|---|------------------------------|
| Residential (Provide number of units) | | Non-residential (Provide best numerical estimates) | |
| Existing | Planned | Existing | Planned |
| _____ units | _____ units | _____ sq.ft. | _____ sq.ft. |
| _____ units | _____ units | _____ sq.ft. | _____ sq.ft. |
| _____ units | _____ units | _____ sq.ft. | _____ sq.ft. |
| _____ units | _____ units | _____ seats | _____ seats |
| _____ units | _____ units | _____ seats | _____ seats |
| _____ units | _____ units | _____ seats | _____ seats |
| _____ units | _____ units | _____ beds | _____ beds |
| _____ units | _____ units | _____ sq.ft. | _____ sq.ft. |
| | single-family | | office |
| | townhouses | | retail store |
| | garden apts. | | warehouse |
| | high-rise apts. | | restaurant |
| | elderly housing | | church |
| | nursing home | | school _____ (specify type) |
| | <i>other</i> _____ (specify) | | hospital |
| | | | <i>other</i> _____ (specify) |

Prior to submitting the plat for review, please ensure the following have been completed and provided:

- _____ The property is in **Water and Sewer Category 3**
- _____ The above boxed-in sections of this form are completed
- _____ Appropriate note is printed on the plat (see page 2)
- _____ Surveyor's and owner's signatures are on the plat
- _____ Preliminary Plan number is on the plat
- _____ WSSC grid number is on the plat
- _____ Provide one paper copy of the plat
- _____ Provide current WSSC Letter of Findings & Sketch
- _____ Floodplain review required, approved or not applicable (specify)
- _____ DPIE's signature block is printed on the plat as shown herein (1 ½ x 5 ½)
- _____ A Mylar copy of the plat is included (a total of 2 plans)
- _____ Applicable fee (see Fee Schedule) payable to "Prince George's County"

DEPARTMENT OF PERMITTING, INSPECTIONS AND ENFORCEMENT
 PRINCE GEORGE'S COUNTY, MARYLAND

APPROVED: _____
 DATE _____ DIRECTOR OR DESIGNEE _____

Use the appropriate water and sewer notes on the Final Plat, and above the Signature Block, please print:

For Public Water and Sewer Systems Only

Note # 1 ***When water and sewer lines already about each proposed lot:***

Approval of this plat is predicated upon public water and sewer being available prior to construction.

Note # 2 ***When water and sewer line extensions are required for service:***

Approval of this plat is based upon a reasonable expectation that public water and sewer service will be available when needed and is conditioned on fulfilling all of the commitments contained in the Washington Suburban Sanitary Commission project/ authorization # _____. Furthermore, waiver # _____ for connection to public water or sewer has been obtained from DPIE. If an On-Site system will be utilized on the property, please provide the approved on-site number from the Washington Suburban Sanitary Commission.

Note # 3 ***When public water and sewer lines are already being utilized by existing structures and only lot lines are being modified:***

Approval of this plat will have no impact on the existing public water and sewer systems. The approval of future building permits will be based upon public water and sewer capacities being available prior to construction.

Note # 4 ***When shared water and sewer facilities are proposed
(Note that shared facility plats must be co-signed with the Health Department):***

Approval of this plat is predicated upon the use of a shared sewage disposal system (or water supply system) approved in CR-____-20____(Please provide the number of the Council Resolution approving the shared facility).

This Page does not need to be submitted with the plat.



Prince George's County
 Department of Permitting, Inspections
 and Enforcement
SITE/ROAD PLAN REVIEW DIVISION



9400 Peppercorn Place
 Largo, Maryland 20774
 301.636.2060 ♦ FAX: 301.925.8510

**WAIVER APPLICATION FOR
 CONNECTION(S) TO PUBLIC WATER AND SEWER**

Waiver is applied for (*check appropriate number*): 1 2 3 4 residential connection(s)
 for public water _____ public sewer _____ service for the following property:

Legal address of property: _____

Tax Map #: _____ Grid: _____ Parcel(s): _____ Lot: _____ Acreage: _____

Tax Account #: _____ Subdivision Name: _____

Preliminary Subdivision #: _____ Development Proposal: _____

Total sq. ft. of structure (The enclosed [finished] living area of the primary residential structure *above ground or at grade level* that is utilized for living, sleeping, eating, cooking, bathing, washing and sanitation purposes. This does not include basements, even if finished.): _____

Total Price (including land): _____

Property Owner: _____

Address: _____

Owner's Signature: _____ (Date)

(Signature requires a Notary)

Work Telephone #: _____ Home Telephone #: _____

Mobile Telephone #: _____ E-mail Address: _____

A Waiver may be approved if the following criteria are met and provided:

- The property is located **inside the Sewer Envelope** boundary, and within **Sustainable Growth Act Tiers I or II**
- The property is designated in **Water or Sewer Category 4 or 5**
- Existing water and sewer lines are near the property (within 200 feet) in dedicated streets or rights-of-way; and
- The water and sewer lines are to serve a maximum of seven single family residential lots that are either existing or proposed for the minor subdivision as defined in Section 24-117 of Subtitle 24 of the Prince George's County Code; and service can be provided to each lot without a main line extension.

Required attachments:

- A copy of the tax map with the property lines clearly delineated
- A copy of the preliminary plan (if applicable)
- A copy of the architectural rendering of the proposed unit(s); and, if applicable
- A copy of the WSSC authorization showing that water and/or sewer lines are being built abutting the property
- If property ownership has changed in the last sixty days, submit documentation verifying current ownership
- Applicable fee – **payable to "Prince George's County"** – is received (See Fee Schedule; Note: Fee is non-refundable.)

A Waiver is subject to Health Department moratoria, WSSC transmission and treatment capacity restrictions and engineering constraints. This approval does not guarantee a connection. For further information, please call 301-636-2060. Submit the completed application, documents and fee to:

Prince George's County Government,
 Department of Permitting, Inspections and Enforcement
 9400 Peppercorn Place, Suite 230
 Largo, Maryland 20774

For more information, please call the Water and Sewer Plan Coordinator at: 301-636-2060

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Prince George's County
 Department of Permitting, Inspections
 and Enforcement
SITE/ROAD PLAN REVIEW DIVISION
 9400 Peppercorn Place
 Largo, Maryland 20774
 301.636.2060 FAX: 301.925.8510



**WAIVER APPLICATION FOR AN
 INTERIM INDIVIDUAL WELL OR SEPTIC SYSTEM**

A Waiver for an Interim System is applied for the installation of a (*check the appropriate service*):
Well: _____ **Septic System:** _____ on the following property:

Legal Address: _____

Tax Map #: _____ Grid: _____ Parcel/Lot: _____ Tax Account: _____

Subdivision Name (*if applicable*): _____

Total sq. ft. of Structure (The enclosed [finished] living area of the primary residential structure *above ground or at grade level* that is utilized for living, sleeping, eating, cooking, bathing, washing and sanitation purposes. This does not include basements, even if finished.) _____

Justification for the installation of an interim individual system(s): _____

Development Proposal: _____ Total Price (including land): _____

Property Owner: _____ Address: _____

Work Telephone #: _____ Home Telephone #: _____

Mobile Telephone #: _____ E-mail: _____

Owner's Signature: _____

(Signature requires a Notary)

(Date)

=====

A Waiver may be approved if the following criteria are met and provided:

- The property is in **Water and/or Sewer Category 3, 4 or 5** and public service is currently unavailable or inaccessible to the platted parcel or lot
- The property is located within Sustainable Growth Act Tiers I or II
- The interim individual system is to serve a single-family residential unit on a platted parcel or lot
- A copy of the tax map with the property lines clearly delineated is attached
- A copy of the architectural rendering or photo of the residential unit(s) is attached
- Current ownership documents are provided if ownership of the platted parcel or lot has changed in the last ninety days
- Applicable fee – **payable to "Prince George's County"** – is received (*See Fee Schedule; Note: Fee is non-refundable.*)

For more information, please call the Water and Sewer Plan Coordinator at: 301-636-2060.

Submit the completed application to:

Prince George's County
 Department of Permitting, Inspections and Enforcement
 9400 Peppercorn Place, Suite 230
 Largo, Maryland 20774

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PRINCE GEORGE'S COUNTY
FEE SCHEDULE ASSOCIATED WITH
THE 2018 WATER AND SEWER PLAN
AMENDMENTS AND PROCESSES

All services and activities under the auspices of the adopted Water and Sewer Plan are subject to the fee schedule that accompanies the plan. All fees are waived for public agencies, i.e., Federal, State, County and Municipal entities.

Water and Sewer Plan Amendments and Activities Related to Water and Sewer Planning

Fees are non-refundable and applicable for category change applications, whether legislative or administrative, waiver applications, and final plat review applications. Deferred and resubmitted applications must also pay these fees. Applications are due by the designated filing deadlines for administrative and legislative amendments. A late submittal to the administrative or legislative amendment cycles are subject to the discretion of the Department of Permitting, Inspections and Enforcement (DPIE) and may be charged at a rate of 10% of the assessed application fee. Applications for other processes do not have a filing deadline, however, the application will expire one year from the date of receipt if no activity, or for incomplete packages.

The Fee Schedule associated with the adoption of the 2018 Water and Sewer Plan is as follows:

I. Water/Sewer Category Amendment

Residential - Dwelling Units (DUs)

- 1 Dwelling Unit
- 2 - 10 Dwelling Units
- 11 - 25 Dwelling Units

26 - 100 Dwelling Units **\$3,850** **x** **\$3,850**

101+ Dwelling Units

Commercial Development

Minor: 2 acres or less

Major: more than 2 acres **\$7,150** **x** **\$7,150**

Mixed Use

Mixed Use example: 26 DUs, 2 Bldgs, 14 acres: \$3,850 (residential fee) + \$7,150 (commercial fee) = \$11,000

Shared System - considered commercial in nature; requires legislation to amend the W/S Plan

Commercial + Residential Fees

Commercial Fees

II. Water/Sewer Waiver Fees

Residential (Minor)

Interim System - Well

Interim System - Septic

Connection - Public Water

Connection - Public Sewer

Non Residential

Interim System - Well

Interim System - Septic

Non Residential use is to accommodate existing development until authorized public water/sewer available

\$550

\$550

\$385

\$385

\$935

\$935

III. Water/Sewer Review - Final Plat

Review/Signature (per Mylar)

Expedited Review/Signature (per Mylar)

\$385

\$110

Payee: Prince George's County

\$11,000

*Late submittals are subject to the discretion of DPIE and a late fee may be charged at a rate of 10% of the assessed application fee
Fees are waived for public entities i.e., Federal, State, County, Municipal*

2018 Plan Fees PGEO

Sample Fees

IV. Documents and Maps

Water and Sewer Plan - Printshop copy

Water and Sewer Category Maps

36" x 60"

11" x 17"

Map Excerpt (prepared to order)

8.5" x 11"

\$220 ea

\$308 ea

\$110 ea

\$55 ea

Section IV amended by CR-11-2020 for inclusion

Fees increased effective 02/14/22 CR-082-2021