



# PROPOSED CIP

Capital Improvements Program  
FY 2024 - 2029



# Washington Suburban Sanitary Commission

## Proposed Six-Year Capital Improvements Program Fiscal Years 2024 - 2029

October 1, 2022

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### ***Delivering the Essential***

On our cover: WSSC Water operates and maintains a water transmission and distribution network that contains 6,000 miles of water mains, with pipe sizes ranging from 4 inches in diameter to 96 inches in diameter. The Water Reconstruction Program manages the rehabilitation and replacement of the more than 4,500 miles of distribution mains (pipes less than 16 inches in diameter). Over the last 10 years, this program has rehabilitated more than 50 miles of water mains per year on average. WSSC Water crews, like the one shown on the cover, are on the front lines working 24 hours a day, 7 days a week to ensure safe, clean, and reliable water is delivered to the 1.9 million residents we serve in Montgomery and Prince George's Counties. Investing in water infrastructure helps protect public health, while creating jobs and fostering economic growth.

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**WSSC WATER  
PROPOSED CAPITAL IMPROVEMENTS PROGRAM  
FISCAL YEARS 2024-2029**

**LEGAL AUTHORITY AND RESPONSIBILITY**

**Statutory Basis**

Under Section 23-304 of the Public Utilities Article of the Annotated Code of Maryland, the Washington Suburban Sanitary Commission (WSSC Water) is responsible for annually preparing a Six-Year Capital Improvements Program (CIP) for major water and sanitary sewerage facilities and transmitting it to the County Council and the County Executive of Montgomery County and the County Executive of Prince George's County by October 1 each year. WSSC Water, where required by the two County Councils' final action on the program, must revise the same and then, prior to the commencement of the first fiscal year of the six-year program, adopt the CIP.

Section 23-301 defines major projects for inclusion in the CIP as water mains at least 16 inches in diameter, sewer mains at least 15 inches in diameter, water or sewage pumping stations, force mains, storage facilities, and other major facilities. Project information presented in this document complies with all legal requirements of the 10-year water and sewerage plans and is in direct support of the two Counties' approved land use plans and policies for orderly growth and development. By Resolution No. 2022-2317 dated June 15, 2022, the Commissioners adopted the FYs 2023-2028 CIP.

**WSSC Water's Role**

Established as a bi-county agency more than 100 years ago, in 1918, by an act of the Maryland General Assembly, WSSC Water is responsible for planning, designing, constructing, operating, and maintaining water and sewerage systems, and acquiring facility sites and rights-of-way in order to provide potable water and sanitary sewer services to residents, businesses, and federal, state, and local municipalities within the Washington Suburban Sanitary District (WSSD). The WSSD encompasses nearly all of Montgomery and Prince George's Counties and provides water and sewer service to approximately 1.9 million customers in an area of nearly 1,000 square miles. A board of six Commissioners directs WSSC Water, three appointed by the County Executive of Prince George's County and confirmed by the Prince George's County Council, and three appointed by the County Executive of Montgomery County and confirmed by the Montgomery County Council. Commissioners serve four-year staggered terms.

## **WSSC Water's Mission**

We are entrusted by our community to provide safe and reliable water, life's most precious resource, and return clean water to our environment, all in an ethical, sustainable, and financially responsible manner.

## **WSSC Water's Responsibilities**

Primary responsibilities include:

- protecting the health and safety of the residents of both Counties by providing an adequate supply of safe drinking water;
- meeting fire-fighting requirements;
- collecting and treating wastewater before it is returned to the waters of the State of Maryland;
- managing and safeguarding the watershed and the water supply by implementing sound forestation and land use practices;
- monitoring the collection and treatment of wastewater;
- discharging an effluent cleansed of nutrients, pollutants, and hazardous materials;
- managing treated wastewater biosolids responsibly and cost effectively;
- maintaining the existing water and wastewater infrastructures;
- planning for the orderly growth of the sanitary district and WSSC Water services to meet the needs of the communities we serve;
- monitoring adherence to all plumbing and gas-fitting standards and ensuring proper coordination with other public utilities; and
- managing operations to provide efficient service to its customers while keeping costs as low as possible.

The projects contained in this CIP represent WSSC Water's plan to successfully meet its responsibilities. WSSC Water strives to maintain a balance between the use of valuable resources and the public's demand for clean water. Meeting these responsibilities helps ensure that we fulfill our core mission and strengthen our local economies while assuring that we maintain fair, ethical, and equitable contracting practices. This will allow us to secure high quality and competitively priced goods and services from our diverse and talented local businesses in Prince George's and Montgomery Counties.



## **PROGRAM OVERVIEW**

### **Objective**

The principal objective of the CIP is the six-year programming of planning, design, land acquisition, and construction activities for major water and sewerage infrastructure projects and programs. These projects and programs may be necessary for system improvements for service to existing customers, to comply with federal and/or state environmental mandates, or to support new development in accordance with the Counties' approved plans and policies for orderly growth and development.

The water supply and sewage disposal bonds are repaid to bond holders over a 30-year period by annual principal and interest payments (debt service). In this manner, the initial high cost of capital improvements is spread over time and paid for by future customers who will benefit from the facilities, as well as by current customers. The annual debt service on outstanding bonds is paid from operating funds. The primary funding source for the repayment of debt is the revenue generated by water consumption and sewer use charges. Water and sewer charges are set on an annual basis to cover both operational and debt service costs (associated with the water supply and sewage disposal bonds). It is through this capital project financing process that the size of the CIP impacts the size of water and sewer bond issues, the associated debt service costs, and, ultimately, our customers' water and sewer bills.

Several capital spending and funding practices are noteworthy. WSSC Water:

- continues an aggressive program to rehabilitate or replace the older portions of our 6,000 miles of water main and 5,700 miles of sewer main infrastructure;
- funds capital facilities needed to accommodate growth with the System Development Charge (SDC). This charge is reviewed annually by the County Councils. (Refer to Appendices A and B for details. A comparison of SDC revenues and estimated growth spending for the six-year program period is displayed on the table titled "Growth Funding" in the Funding Growth section of this document.);
- uses PAYGO (Pay-As-You-Go): the practice of using current revenues, when budgeted, to the extent practical to help fund the capital program, thereby reducing the need for debt financing;
- maximizes and manages the collection of funding from alternative sources including state and federal grants, and payments from other jurisdictions for projects which specifically benefit them. The amount of these collections varies from year to year. WSSC Water's reliance on rate-supported debt to build the capital program is reduced to the extent that these sources are available to help fund capital projects; and

- does not allow the use of rate-supported debt to fund CIP-sized water and sewer projects requested by Applicants in support of new development. These projects, identified as System Extension Process (SEP) projects, may only proceed if built at the Applicant's expense. (An explanation of the SEP process is included in the System Extension Process section of this document.) However, since these projects are eligible for SDC credits (to the extent that SDC funds are available), the Applicants should eventually recoup their costs. (Refer to Appendix B for definitions and details.)

In May 1993, the Montgomery and Prince George's County Councils created the Bi-County Working Group on WSSC Spending Controls (Working Group) to review WSSC Water finances and recommend spending control limits. The Working Group's January 1994 report recommended "the creation of a spending affordability process that requires the Counties to set annual ceilings on WSSC Water's rates and debt (debt in this context means both bonded indebtedness and debt service), and then place corresponding limits on the size of the capital and operating budgets of the Commission." The objective of this process is to create a framework for controlling costs and achieving low or moderate water/sewer bill increases, as well as slowing the rate at which WSSC Water is incurring debt, thus reducing the portion of WSSC Water water/sewer bills dedicated to paying off debt. This valuable, annual process focuses debate on the need to balance affordability considerations against providing the resources necessary to serve existing customers, meet environmental mandates, and provide the facilities needed for growth.

WSSC Water has submitted a CIP and budget, which generally conforms to the Spending Affordability Guidelines (SAG) established by both County governments every year since 1994. Through FY 2023, projects were reduced or deferred by nearly \$383 million. For FY 2024, CIP and Information Only combined spending was within guidelines as submitted.

The FY 2024 combined expenditures (CIP & Information Only projects) are estimated at \$704.7 million, which represents an increase of approximately \$79.2 million above the approved funding level for FY 2023. The increase is primarily due to the deferrals and reductions totaling \$110.5 million that were made to the FY 2023 funding level as part of the budget process last year.



## **Funding Sources**

The projects included in this Combined Program are funded primarily by issuance of water and sewer rate-supported debt (WSSC Bonds). To a lesser degree, projects may also be funded by the following:

- State Grants – a share of the support provided on a local level. The State of Maryland provides funding under a separate grants program for enhanced nutrient removal at existing wastewater treatment plants (water resource recovery facilities) and for the rehabilitation of sewer mains as part of the Chesapeake Bay Program;
- Federal Grants – Department of Energy grants related to the Energy Performance Program and Piscataway Bioenergy projects to promote and develop green energy sources;
- Local Government Contributions – payments to WSSC Water for co-use of regional facilities, or funding provided by County governments for projects they are sponsoring;
- PAYGO – when budgeted, the practice of using current revenues to the extent practical to help fund the capital program, thereby reducing the need for debt financing;
- SDC – anticipated revenue from the System Development Charge; and
- Contribution/Other – projects funded by Applicants for growth projects where the County Councils have directed that no WSSC Water rate-supported debt be used to pay for the project.

(Please refer to Figure 3 near the end of this section, which displays the funding allocations for the major funding sources.)

## **Funding Growth**

The portion of the Combined Program needed to accommodate growth is approximately \$233.4 million, which equals 5% of the six-year total expenditures, and \$54.1 million or 8% of the FY 2024 budget. The funding sources for this part of the program are SDC revenues and payments by Applicants. In the event that growth costs are greater than the income generated by growth funding sources, either SDC supported or rate-supported water/sewer bonds may be used to close any gap.

The Maryland General Assembly, in 1993, first approved legislation authorizing the Montgomery and Prince George's County Councils to establish, and WSSC Water to impose, a System Development Charge. This is a charge on new development to pay for that part of the CIP needed to accommodate growth in WSSC Water's customer base. In accordance with the enabling legislation,

the Councils approved, and WSSC Water began to phase in, this charge beginning in FY 1994. The SDC was approved at the maximum rate of \$160 per fixture unit by Commission Resolution No. 95-1457, adopted May 24, 1995, and became effective July 1, 1995. In the 1998 legislative session, the General Assembly modified the charge by passage of House Bill 832 setting the fee at \$200 per fixture unit with a provision for annual inflation adjustments. Subsequent resolutions have established a process for approving partial and full exemptions for elderly housing and biotechnology properties, as well as exemptions for properties in designated economic revitalization areas and properties used primarily for recreational and educational programs and services to youth. For FY 2023, the Montgomery and Prince George's County Councils increased the maximum allowable charge by the 6.4% increase in the CPI-U but maintained the current rate of \$203 per fixture unit. The Commissioners adopted the Councils' actions by Resolution Number 2022-2314 dated June 15, 2022. Policies and other information associated with the SDC are included in this document in Appendices A through D.

It is estimated that there will be an overall growth funding shortfall of \$75.0 million over the six-year program period. The surplus or shortfall between growth funding sources (SDC, developer contributions, and Applicant payments under System Extension Permits) and the estimated growth-related expenditures vary over the six-year period. If growth-related expenditures were to exceed the available SDC account balance in any given fiscal year, it is anticipated that new SDC-supported debt would be issued to cover this temporary gap. The debt will be repaid through future SDC collections, as allowed by state law. Further, it is currently anticipated that no significant additional growth projects will evolve in the later years of the six-year period. (A listing of SDC-eligible projects is included in Appendix D.)

An estimate of the surplus or shortfall for each fiscal year is presented in the table on the following page. To estimate the surplus or shortfall for an individual fiscal year, it is assumed that approximately 63% of the eligible expenditures will actually be incurred in a given year due to scheduling and other delays. The projected surplus or shortfall is the difference between the eligible expenditures adjusted for completion and the sum of the various funding sources.

## GROWTH FUNDING

(In Millions)

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total 6 Years
<b>CIP GROWTH EXPENDITURES</b>	\$ 53.9	\$ 55.9	\$ 38.4	\$ 36.6	\$ 28.7	\$ 19.4	\$ 232.9
Expenditures Adjusted for Completion	33.9	55.0	45.2	37.5	31.5	22.6	225.7
<b>FUNDING SOURCES</b>							
Privately Funded Projects	10.4	15.6	10.3	3.9	1.1	0.8	42.1
Estimated SDC Revenue	22.6	22.6	22.6	22.6	22.6	22.6	135.6
Less SDC Developer Credits	(4.5)	(4.5)	(3.5)	(3.5)	(2.5)	(2.5)	(21.0)
Less SDC Exemptions <sup>1</sup>	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(1.0)	(6.0)
<b>Total Funding Sources</b>	\$ 27.5	\$ 32.7	\$ 28.4	\$ 22.0	\$ 20.2	\$ 19.9	\$ 150.7
<b>FUNDING SURPLUS/(SHORTFALL) ADJUSTED FOR COMPLETION</b>	\$ (6.4)	\$ (22.3)	\$ (16.8)	\$ (15.5)	\$ (11.3)	\$ (2.7)	\$ (75.0)

<sup>1</sup> Each County may grant SDC exemptions, as identified in Appendix A, totaling up to \$500,000 per fiscal year as provided for in Maryland state law (Public Utilities Article, Section 25-403(b)). Unused exemption amounts are available for use in future fiscal years. Cumulative unused SDC exemptions totaled approximately \$8.3 million for Montgomery County and \$2.3 million for Prince George's County through June 30, 2022.

### Expenditures

The Proposed FYs 2024-2029 Combined Program includes 61 CIP and 11 Information Only projects for a grand total of \$5.9 billion. The grand total is \$10.9 million greater than the Adopted FYs 2023-2028 Combined Program primarily due to recent inflationary trends. Expenditures for the six-year program period are estimated at \$4.5 billion. FY 2024 expenditures are estimated at \$704.7 million, of which \$185.0 million is for the Water Program, \$256.7 million is for the Sewerage Program, and \$263.0 million is for the Information Only projects. System Extension Process (SEP) growth projects are estimated at \$42.4 million in the six-year program with approximately \$16.9 million programmed in FY 2024. There are 3 new projects this cycle. New projects are shown on the New Projects Listing near the end of this section.

A table comparing the Adopted FYs 2023-2028 CIP to the Proposed FYs 2024-2029 CIP follows:

## CIP COMPARISON

(In Thousands)

CIP	Combined Program	Total 6 Years	Budget Years
Adopted FYs 2023-2028	\$ 5,887,860	\$ 4,171,605	\$ 625,495
Proposed FYs 2024-2029	5,898,789	4,505,783	704,655
Change	\$ 10,929	\$ 334,178	\$ 79,160

The six-year expenditures for the Combined Program are estimated at \$4.5 billion, with approximately \$1.4 billion for the Water Program, \$1.3 billion for the Sewerage Program, and \$1.9 billion for the Information Only projects. This is a \$334.2 million increase from the six-year total for the Combined Program in the Adopted FYs 2023-2028 CIP. The overall increase is primarily due to recent inflationary trends and the deferrals and reductions totaling \$110.5 million that were made to the FY 2023 funding level as part of the budget process last year.

### Expenditure Categories

Expenditures are divided into three main categories: projects needed for growth, projects needed to implement environmental regulations, and projects needed for system improvements. The categories are defined as follows:

- Growth – any project, or part of a project, that increases the demand for treatment and delivery of potable water and/or increases system requirements to collect and treat more sewage in response to new, first time, service hookups to the existing customer base.
- Environmental Regulations – any project which is required to meet changes in federal regulations, such as the Clean Water Act, or in response to more stringent state operating permit requirements, but does not increase system capacity. Any part of this type of a project that provides for additional capacity is for growth.
- System Improvements – any project which improves or replaces components of existing water and sewerage systems or provides for mainline relocations required in response to County or state transportation department road or transit projects where the intended purpose is not to increase the capacity of any system components. This category also includes program-sized water main extensions for which the primary function is to provide water supply redundancy to pressure zones or smaller areas in the WSSD or for system loops to improve maintainability and reliability. Any part of this type of a project not dictated by maintenance or rehabilitation needs and that provides for additional capacity is for growth. (Please refer to Figure 4 near the end of this section, which displays funding allocations for all three categories.)



## **CIP Development Schedule**

The CIP production cycle spans 13 months, beginning in May of each year. The organizational units responsible for project initiation submit project description forms (commonly referred to as PDFs) to the Finance Department (Budget Division). The expenditures and schedules displayed on each PDF represent the best estimate of the cost and the time it will take to plan, design, and construct a project. These submittals are comprehensively reviewed with the General Manager/CEO and senior staff each June to assess the addition of new projects, changes in cost or scope, criticality, priority, environmental sensitivity, adherence to County growth and public outreach policies, construction schedule changes, and spending affordability considerations.

Following this comprehensive review, worksessions are conducted by the Budget Division with the Prince George's and Montgomery County governments, Maryland-National Capital Park and Planning Commission (M-NCPPC), and local municipality representatives to solicit their input, and a draft document is presented to the Commissioners for their consideration. Draft CIP Public Hearing documents are published and distributed each August and the Commissioners' host public hearings in each County in September. The hearings are advertised in a major newspaper circulated in Prince George's and Montgomery Counties, through our webpage and social media, and special notices are sent to the Prince George's and Montgomery Counties' State Senators and Delegates, County Executives, County Council members, and County government staff. In addition, a notice is included with each water bill mailed to customers throughout the months of June, July, and August inviting them to participate in the public hearings. After considering all relevant comments, the Commissioners approve the Proposed CIP document and authorize transmittal to both County governments before October 1, in accordance with state law.

After January of the following year, the Prince George's and Montgomery County Executives transmit their recommendations to their respective County Councils. Each County Council conducts separate public hearings and worksessions to consider additional modifications to the Proposed CIP. On or before May 15th, the County Councils meet jointly to agree on required changes, and on or before June 1st each year, enact formal resolutions identifying project modifications and approving the addition of new projects. WSSC Water then adopts these changes and additions before the beginning of the new fiscal year on July 1st. If the Councils do not jointly agree on changes by June 1st, under law, the CIP is approved as proposed.

## **Program Description**

Individual project information is displayed on the PDFs. The content of these PDFs, as prescribed under Section 23-303 of the Public Utilities Article of the Annotated Code of Maryland, includes as applicable: estimated diameter, length, and location of pipelines; design capacity; population and area to be served; project justification; project expenditure schedule showing the estimated cost and funding sources; and, where applicable, a map. PDFs are organized within the following major sections: Montgomery County Water,

Montgomery County Sewer, Bi-County Water, Bi-County Sewer, Prince George's County Water, Prince George's County Sewer, and Information Only. A financial summary of expenditures by major section is included at the end of this narrative. Project number prefixes indicate a water (W-), sewerage (S-), or administrative (A-) project. Administrative projects are included in the Information Only section and refer to projects that may be attributable to both water and sewerage. Each major section includes a financial summary for the projects in that section, a list of new projects, a PDF for each project, and a list of projects that are being closed out in the section.







Projected acquisition costs for land, rights-of-way, and any watershed buffer property are consolidated onto composite PDFs (W-202.00 and S-203.00). This format provides flexibility in expending funds in a specific fiscal year and permits WSSC Water to respond to the uncertainty of implementation schedules, unpredictable delays, unanticipated rights-of-way requirements, and the need to assure an equitable negotiation position by avoiding project-specific cost displays prior to contacting property owners. When a land purchase has been concluded, this cost is transferred back to the individual project.

A projects pending close-out list is included at the end of each major section when required. Each list contains projects which were approved and included in the prior adopted CIP, but which do not appear in this program for reasons such as expected construction completion or project cancellation.

This document also contains an Information Only projects section. Projects in this section are not required to be in the program under Section 23-303 of the Public Utilities Article of the Annotated Code of Maryland but may be included for any number of reasons such as: fiscal planning purposes; the reader's improved understanding of the full scope of a specific set of projects; or responding to requests from County governments. Expenditures for Information Only projects, shown separately on the financial summary, are not included as part of the CIP six-year program costs. The Combined Program is the sum of the CIP and Information Only projects and represents the entire capital budget request.

Expenditure projections for the first year of the six-year program, as shown on each PDF in Block B, column Year I, are included in the capital budget and the operating budget includes the requisite debt service. In addition to adopting a six-year CIP, the Montgomery and Prince George's County governments also annually review and approve WSSC Water's capital and operating budget.

The following symbols are used on the individual project maps to represent different types of water and sewerage system components:

- Water Main/Gravity Sewer 
- Water/Wastewater Pumping Station 
- Sewage Force Main 
- Water/Sewage Storage Facility 
- Water Filtration Plant 
- Water Resource Recovery Facility 

## **CIP PLANNING PROCESS**

### **Water Treatment/Distribution Systems**

The provision of potable water involves three major areas: supply, treatment, and distribution. The Potomac and Patuxent Rivers are the two sources of water supply for the WSSD, with the majority of water coming from the Potomac. Raw water is taken directly from the natural flow of the Potomac River into the Potomac Water Filtration Plant in Montgomery County. Water from the Patuxent River is impounded in two reservoirs by the Brighton and T. Howard Duckett Dams, which are the sources of supply to the Patuxent Water Filtration Plant in northern Prince George's County. The Triadelphia and T. Howard Duckett reservoirs have a combined storage capacity of approximately 10.2 billion gallons of water. The two filtration plants have produced an average of 162.5 million gallons of potable water per day over the last five fiscal years.

The natural flow in the Potomac River can be augmented during low flow conditions by two other reservoirs. The Jennings Randolph Reservoir, impounding 13.0 billion gallons of emergency raw water supply, is located on the North Fork of the Potomac River in West Virginia, and is owned and operated by the U.S. Army Corps of Engineers. Little Seneca Lake in Montgomery County provides an additional 3.8 billion gallons of useable raw water storage, and is owned and operated by WSSC Water. Both reservoirs are shared by users in the Washington Metropolitan area, including the U.S. Army Corps of Engineers and the Fairfax County Water Authority. Withdrawal during low flow conditions is governed by the terms of the Potomac Low Flow Allocation Agreement of 1981, as amended, and is administered by the Interstate Commission on the Potomac River Basin.

As raw water enters a plant, it goes through several stages of filtration and purification. Much of the finished water produced at the plants has to be pumped into the distribution system. Water pumping stations are strategically located throughout the WSSD to move water to higher topographic elevations to maintain adequate system pressure. The WSSD is divided into 17 major pressure zones that represent hydraulically separated segments of the water system. The pipelines within each of the zones must be designed to serve not only customers within the confines of that zone, but also customers in adjacent interconnected zones. Water to zones at higher elevations must be pumped; water to lower elevations must be closely controlled with pressure regulating valves. A system under pressure enables the pipes to be laid uphill or downhill, with the flow direction independent of the slope of the ground. The design and operation of a water system is a complex task which requires detailed knowledge of the interrelationships between the source of supply, the location of pumping stations, pump characteristics, pressure reducing valves, storage facilities, pipe diameters and capacity characteristics, consumption patterns throughout the day, operating techniques and costs, and location of our 1.9 million customers spread out over our 1,000 square mile service area.



The 60 elevated tanks, standpipes, and ground-level storage structures in the distribution system are filled with finished, filtered water to meet daily peak customer demand and to provide reserves for fire protection and emergencies. A network of 6,000 miles of underground water pipeline delivers water to homes, apartments, schools, hospitals, businesses, and all other types of buildings where water meters measure the amount of water used. All customer accounts are metered and billed based upon individual usage. For over 100 years, these facilities have been operated and maintained by WSSC Water 24 hours a day, 7 days a week, including holidays, in order to provide safe and reliable service to our customers.

### **Water Resource Recovery Facilities/Wastewater Collection Systems**

WSSC Water's water resource recovery facilities have been nationally recognized as a Utility of the Future Today by the National Association of Clean Water Agencies (NACWA), the Water Environment Federation (WEF), the Water Research Foundation (WRF), and the WaterReuse Association, with input from the U.S. Environmental Protection Agency (EPA), for transformational work in community engagement, watershed stewardship, and recovery of resources such as water, energy, and nutrients. The Utility of the Future Today designation recognizes water utilities that have transformed from the traditional wastewater treatment system to a resource recovery center and leader in the overall sustainability and resilience of the communities they serve, recovering resources from wastewater, engaging in their community, forming unique partnerships, and building an internal culture of innovation. As one of the country's most effective pollution control networks, WSSC Water facilities go beyond conventional, second-stage treatment to provide "tertiary treatment," which is an advanced treatment process. All of WSSC Water's facilities employ state of the art, integrated, enhanced nutrient removal processes that significantly reduce the amount of nitrogen and phosphorous reaching the Chesapeake Bay. These features ensure that the quality of the effluent (treated wastewater discharged from the facilities) is better than the natural waters into which it is returned.

Wastewater operations are divided into two functions: treatment and conveyance of sewage. Sewage treatment is accomplished through a network of facilities, the base of which is the regional water resource recovery facility. WSSC Water owns and operates six water resource recovery facilities, which receive and process waste from residences, businesses (where waste is a by-product of the manufacturing process), restaurants, hospitals, and other commercial and industrial users. During the water resource recovery process, solid material is removed, harmful organisms are destroyed, and excess disinfection products are neutralized before the remaining liquid, the effluent, is returned to the waters of Maryland.

WSSC Water's six facilities have a combined capacity of 95 million gallons per day (MGD). The six facilities are Piscataway, Western Branch, Parkway, Seneca, Damascus, and Hyattstown. Unlike the water system, operation of the sewerage system is highly dependent upon other area jurisdictions and, for this reason, WSSC Water has purchased 169.6 MGD of treatment capacity at the Blue Plains Advanced Wastewater Treatment Plant located in the District of Columbia, 3.0 MGD of capacity at the Mattawoman

Wastewater Treatment plant located in northern Charles County, and 20,000 gallons per day of capacity in the Town of Poolesville's wastewater treatment plant. The capital costs of the Blue Plains and Mattawoman plants are shared among the users based upon treatment capacity allocations. WSSC Water also pays to the District of Columbia and Charles County a share of the operating, maintenance, and overhead costs at each plant, in proportion to actual flows. These cost-sharing arrangements were agreed to in the Intermunicipal Agreement of 2012 and the Mattawoman Agreement of 1980, respectively. Sewer capacity purchased in the Poolesville plant is in accordance with the May 1984 agreement between the Town of Poolesville and the Montgomery County government.

The other function of the sewerage system is to convey waste flows from the point of origin (for example, from a customer's home) to a point of treatment. The sewerage network contains 5,700 miles of pipeline, with pipe sizes ranging from 6 to 102 inches in diameter and is predominantly a gravity system. This means the flow travels in a downhill direction without any other help and, therefore, sewers generally flow along streambeds towards the lowest elevation in a basin. The sewers in one drainage basin are independent of those in other basins. There are 13 major drainage basins in the WSSD.

The largest diameter pipelines (interceptor sewers) extend out from the treatment plant to the major lines (trunk lines) within individual drainage basins. Smaller diameter pipelines (outfalls) run up sub-basins from the major lines. Even smaller lines (laterals), usually built in or along subdivision streets to provide service to abutting properties, lead up to hundreds of thousands of individual service connections (hookups from the pipe in the street to a private home or building) to be served by the remainder of the conveyance system. Ideally, the entire system would provide for the gravitational flow of waste from the individual houses, businesses, and other sources through the laterals in the various subdivisions to the outfalls and through the larger diameter interceptors to the water resource recovery facility. Because gravity cannot always be used to accomplish this ideal pattern of flow, WSSC Water has more than 50 wastewater pumping stations in operation, and others in standby status, throughout the WSSD. These pumping stations range from 0.06 to 306 MGD in capacity. Pumping stations lift wastewater through a pressure line called a force main, over ridges or from stream valleys that have no continuous trunk sewer, into the gravity-flow system of an adjacent drainage basin that contains existing pipeline and water resource recovery facilities. All WSSC Water wastewater flows through enclosed trunk line systems and is completely separate and independent from the storm drain system. For over 100 years, these facilities have been operated and maintained by WSSC Water 24 hours a day, 7 days a week, including holidays, in order to provide safe and reliable service to all of our customers.

In addition, small pressure systems exist throughout the WSSD. A typical system is comprised of a grinder pump (one for each dwelling unit grouped in a small residential development) contained in a sump pumping through a plastic force main, and then connecting to a gravity sewer line located nearby. This type of system is limited in size and is necessary to overcome minor changes in topography to avoid the construction of a conventional gravity line in another direction where the distance to an existing sewer would be considerably greater and less cost effective.

Approximately 63% of all wastewater originating in Montgomery County and central Prince George's County follows the Anacostia, Rock Creek, and Potomac River Valleys, to the Blue Plains Advanced Wastewater Treatment Plant. WSSC Water's proportionate share of capital costs at Blue Plains, to meet suburban Maryland's treatment requirements, have represented some of the most significant planned expenditures in this document. The purpose of the projects contained in this document and their associated cost is to expand, replace, or rehabilitate the existing water and sewerage systems; to continue a very high level of continuous service and reliability; and to protect the health of current and new customers, while mitigating impacts on the environment.

### **Environmental Concerns**

WSSC Water is committed to protecting the natural environment of Prince George's and Montgomery Counties as it carries out its mandate to provide sanitary sewer and drinking water services. This commitment focuses on those unique natural and manmade features (waterways, woodlands, and wetlands, as well as parklands, historical sites, and residential areas) that have been indicated by federal, state, and local environmental protection laws and regulations. Specific impact information is included in the evaluation of alternatives by the Asset Management Program (AMP), if the environment features will be affected by the proposed construction of a project. Six primary areas are addressed as appropriate:

- Stream Valleys – identify the classification of the stream and, in general terms, the published water quality. From published maps, show the topography including the 100-year floodplain;
- Wetlands (Tidal and Non-tidal) – using published maps, show the locations of these and give their classification;
- Woodlands or Forested Areas – using aerial photographs or published maps, show the location of these and identify their type;
- Parklands – using published maps, show the location of all land holdings of the M-NCPPC, the Department of Natural Resources, and the National Park Service;
- Steep Slopes – using published maps, show all slopes greater than 15%; and,
- Historical/Archaeological Sites – the Maryland Geological Survey (State Archaeologist) and Maryland Historical Trust will provide information on sites near the project alternatives. The M-NCPPC or County government may provide additional information of local interest.

A further extension of these protections has been funded by the approximately \$238.0 million included in the six-year Combined Program which is attributable to meeting environmental regulations. These projects, currently estimated at 5% of the six-

year Combined Program costs, are mandated by the EPA under the Clean Water Act through the State of Maryland Department of the Environment in response to pollution controls in the form of more stringent state discharge permit requirements. The environmental component is allocated among the projects listed in the following table, and project details can be found on the individual PDFs included elsewhere in this document.

### **Environmental Spending**

<b>Project</b>	<b>Total 6 Years (In Millions)</b>
W-73.33 Potomac WFP Consent Decree Program	\$ 129.1
W-202.00 Land & Rights-of-Way Acquisition - Bi-County Water	6.0
S-22.11 Blue Plains: Pipelines & Appurtenances	102.9
<b>Combined Program Expenditures Allocated to Environmental Regulations</b>	<b>\$ 238.0</b>

### **Green Bond Project Funding**

The International Capital Market Association (ICMA) describes the Green Bond market as an opportunity to enable and develop the key role that debt markets can play in funding projects that contribute to environmental sustainability. WSSC Water is committed to protecting the natural environment of Prince George's and Montgomery Counties as it carries out its mandate to provide sanitary sewer services and safe, clean drinking water. This commitment is reflected in the organization's core values of accountability, innovation, and environmental stewardship, which serve to guide and incorporate behavior and decision-making into the organization's investments into green buildings, pollution prevention and control, renewable energy, water quality, and climate change adaptation.

To be eligible for Green Bond proceeds, candidate green projects must meet criteria in one or more of the following areas:

#### **Green buildings**

- Installation of high-efficiency heating, ventilating, and air conditioning units;
- Installation of high-efficiency LED lighting fixtures;
- Use of cool roof materials; and
- Installation of high-efficiency water and wastewater processing equipment, pumps, motors, and valves.



#### Pollution prevention and control

- Lead clean-up and removal;
- Protection of environmentally sensitive areas from sewer overflow;
- Construction of new sewer, storm drain, and recycled water supply systems;
- Sewer system repair and rehabilitation to prevent overflow into waterways;
- Sewer line blockage assessments and remediation; and
- Enhance nutrient removal (nitrogen and phosphorus) and discharge processes to protect waterways.

#### Renewable energy

- Installation of new equipment and systems to produce biogas and electricity.

#### Water quality

- Sewer and water line reconstruction;
- Leak detection technologies;
- Advanced mixing systems;
- Installation of technologies to reduce chemical use; and
- Construction of new source water intake to reduce drinking water contamination and treatment cost.

#### Climate change adaptation

- Address safety standards including the Probable Maximum Flood criteria and maximum credible earthquake loadings;
- Installation of enhanced power reliability at wastewater facilities to prevent sanitary sewer overflows; and
- Reduce biosolids production to enhance the health of the Chesapeake Bay and reduce greenhouse gas emissions and other air pollutants.

Projects focused on the activities above are eligible to be funded in whole or in part by an allocation of the Green Bond proceeds. Based upon WSSC Water's review of its capital project portfolio, the following projects will be financed with the proceeds from Green Bonds: Potomac Water Filtration Plant (WFP) Consent Decree Program (page 3-6) and Large Diameter Water Pipe & Large Valve Rehabilitation Program (page 3-7).

Green Bond proceeds will be specifically directed to pay the costs of design, construction, property acquisition, and other related costs necessary for selected projects. Further, WSSC Water will produce an annual report detailing how the Green Bond proceeds were used to finance the selected projects, a description of the selected projects, and details of the environmental benefits resulting from the projects. More information on WSSC Water's Green Bond program and reporting can be found on our website at [wsscwater.com/greenbond](http://wsscwater.com/greenbond).

### **Public Outreach**

WSSC Water's proactive Project Outreach program is an integral part of our process to include early public involvement in projects. The objective is to inform affected communities about WSSC Water's plans, actively seek their input, and respond to their concerns. WSSC Water's planning approach is an open process, receptive to public comment and involvement. Residents of Prince George's and Montgomery Counties are given the opportunity to review clear, accessible documents that describe the rationale behind program planning and project decisions. The overall outreach goals are to:

- identify community and public policy issues early in the planning stage;
- address the known community concerns and environmental issues that are within the reasonable context of the planning effort;
- promote community understanding of system needs and demands, and the planning process used by WSSC Water to maintain public health standards and water quality protection;
- provide constructive forums for community involvement and information throughout the planning process;
- provide a clear understanding of the decision-making process;
- address potential health and environmental risks; and
- establish and maintain open lines of communication.

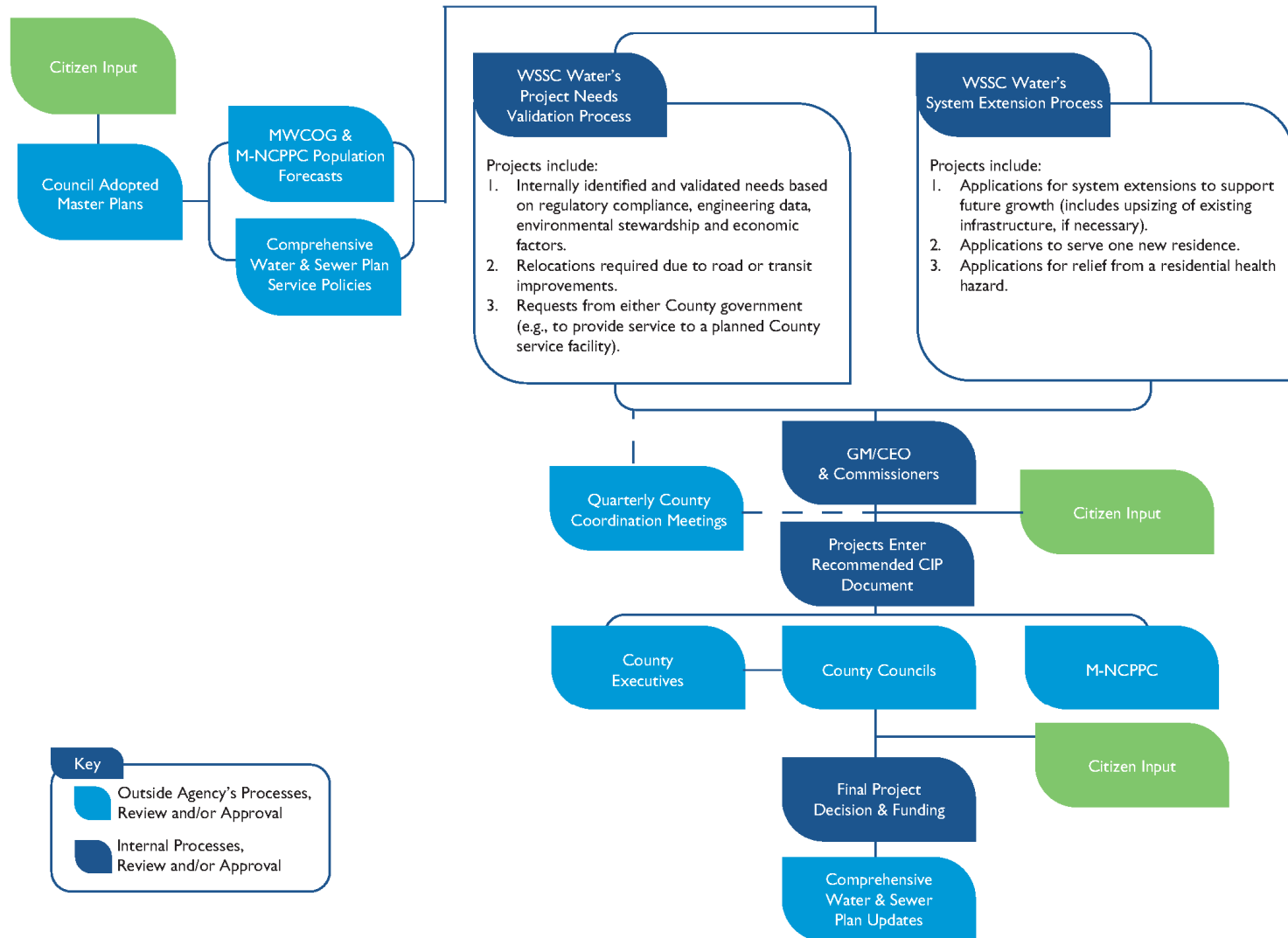
The Project Outreach program advocates achieving planning goals through a collaborative effort among staff, technical experts, citizens and/or organizations, and public officials. Fostering community involvement allows WSSC Water to be responsive and sensitive to community concerns, to define the best approach to address customers' concerns, and to garner community support while meeting public health objectives.

### **The Planning Process**

The planning process incorporates engineering data, environmental requirements, economic factors, and public interaction to establish a sound basis for making decisions, for efficiently conducting and documenting specific work tasks, and for successfully implementing needed solutions. The planning process utilizes business case studies to identify needs, develop and evaluate options, and identify a preferred solution. An important goal in the process is to produce a result that is acceptable to citizens, elected officials, regulatory agencies, and WSSC Water at a reasonable cost.

A number of outside influences affect the project planning process. Water and sewer projects are essentially an infrastructure response to land use decisions made by the two County governments and demographic information (population forecasts) provided by the Metropolitan Washington Council of Governments (MWWOG) and the M-NCPPC. These elements are used to calculate projected water and sewerage demands. WSSC Water must also consider environmental consequences and compliance with federal and state regulations such as the Clean Water Act and Safe Drinking Water Act. The needs analysis process also incorporates both County governments' guidance on service policies as contained in the Comprehensive 10-Year Water and Sewerage Plans. Generally stated, the goals, purposes, and concepts provided by the Prince George's and Montgomery County governments require that the water and sewerage systems be consistent with officially-approved local and general plans, and provide adequate capacity to accommodate the foreseeable development of the area served based upon population and employment projections. This requirement corresponds with what has always been WSSC Water's policy: to provide utility service to the type and location of development that each County governing body has approved, if economically and otherwise feasible. Figure 1, on the following page, displays the overall CIP project development and approval process.

**Figure I**  
**CIP PROJECT DEVELOPMENT AND APPROVAL PROCESS**



## **WSSC Water's Asset Management Program**

To address WSSC Water's Strategic Priorities, in particular those to Optimize Infrastructure and Spend Customer Dollars Wisely, the objective of the AMP is to identify infrastructure needs and investment strategies for the next 30 years, or more, and develop and implement an asset management framework for optimal investment decision-making. A key task is to identify the existing and future capacity, regulatory, and rehabilitation/repair/replacement requirements for the next 30 years. The AMP provides input to WSSC Water's multi-year financial forecasting and develops and refines a 30-year capital investment projection based on the following requirements: regulatory, capacity, maintenance, rehabilitation/replacement, process control, energy conservation, efficiency, and reliability.

## **How Projects Enter the CIP**

The AMP systematically identifies and validates water and wastewater needs through its Project Needs Validation Process and is the primary source of new projects. Figure 2 depicts some of the key elements of WSSC Water's Project Needs Validation Process.

**Figure 2**  
**OVERVIEW OF WSSC WATER'S PROJECT NEEDS VALIDATION PROCESS**

Genesis and Validation	Business Case Development	Review and Approval
Asset Management Plans	Technical Analysis and Documentation	WSSC Water CIP
• Establishment of Need	• Coordination	• Project Prioritization
• Need Validation	• Community Outreach	• Public Comment
• Funding	• Project Validation	• County Governments
	• Solution Recommendation	
Implementation		

WSSC Water's needs assessments may identify other potential projects. A project may be added in response to relocation requirements due to road or transit improvements or the need to construct a segment of pipe in advance of paving. Projects may also be included at the request of either County government, usually to provide service to a planned County service facility, or in response to a request for service from an Applicant for new development through the System Extension Process. Projects may also enter the CIP when they are split from previously approved projects. Projects may be split either at the request of the Applicant or for administrative reasons such as to afford better project management or to provide greater clarity to the reader.



## **System Extension Process (SEP)**

SEP projects are undertaken by developers to support future growth. Service to properties approved under the SEP almost always require the extension of small diameter subdivision lines and may involve program-sized pipes that must be included in the CIP. This document includes only the portion of an Applicant's total pipe extension or pumping facility requirements and associated costs that conform to the definition provided in the Statutory Basis section at the beginning of this narrative.

To initiate a project, the Applicant will submit preliminary subdivision plans to the Planning Department of the M-NCPPC for their County. WSSC Water will review these submittals for water and/or sewer service, including a determination if the property to be served is located within the appropriate "service category." (Service category designations are a staging tool employed by and strictly administered in the Comprehensive 10-Year Water and Sewerage Plans by both County governments. If the property is not in the correct service category, the Applicant must contact the appropriate County office to begin a County 10-Year Plan amendment process for reconsideration of the service area designation currently assigned to the property. If a designation change is approved later by the County Council, the Applicant may proceed with the construction of the project.) Once it has been determined that the property to be served is located within the appropriate service category, and a request for Hydraulic Planning Analysis (HPA) is made and completed, WSSC Water issues a Letter of Findings (LOF) which specifies the project conditions that must be met prior to the start of construction. The need for a CIP-sized project is identified during the HPA review. WSSC Water will perform a review of the design plans for compliance with requirements. Construction can begin when design plans have been approved, all necessary permits and rights-of-way have been obtained, and the Applicant has satisfied all other project conditions. More than a third of the projects in this document are SEP-related.

For those projects serving one new residence or providing relief from a residential health hazard, the Applicant may hire an engineer to follow the SEP or can opt to follow the WSSC Water Built Process. Each step in the WSSC Water Built Process is done at the Applicant's expense. In this case, the Applicant will prepare a feasibility study for review and for WSSC Water to issue a feasibility LOF. The LOF will again specify any project conditions and advise the Applicant of their cost responsibilities. If the Applicant elects to proceed with the WSSC Water Built Process, WSSC Water will prepare the design plans. Once the Applicant has met all the project conditions from the LOF, the design plans are approved, and all permits and rights-of-way are acquired, WSSC Water will proceed with the construction of the project at the Applicant's expense. However, such projects rarely include CIP-sized mains.

## **Project Development Criteria**

It has been WSSC Water's policy to have facilities in service when, or before, they are needed so that new development demands on the system do not result in a reduction of the level of service provided to existing customers. This policy provides for

unrestricted water supply and no sewage overflows and avoids a water or sewer connection moratorium. This general service policy guides the planning and sizing of the systems and requires that both the water and wastewater systems are sized to handle the peak or maximum demands, adjusted for weather-related usage. The task is to balance cost and spending affordability limits with environmental consequences, risk, and system reliability.

Water and wastewater systems are composed of functionally different sub-systems: treatment, transmission, distribution, collection, and storage. Ideally, the capacity of each component should match the capacity of the other parts of the system. An example of a real situation from the past is the comparison of the Blue Plains Advanced Wastewater Treatment Plant to the Muddy Branch and Seneca Creek wastewater transmission systems. The plant had enough capacity but, in contrast, probable peak flows in the sewers exceeded pipeline capacity. These were part of the same network, yet one of the sub-systems had excess capacity, while other parts, although connected, were deficient. Transmission projects to correct this imbalance were completed in these basins, ensuring capacity to handle future flows in the conveyance systems.

For most facilities, WSSC Water plans enough capacity to last 20 years or more. When it seems clear that adding capacity incrementally will not be economical, feasible, or is significantly disruptive, longer range planning is done. A pipeline is sized for full development, or “build out” of its service area, to avoid repeated environmental and community disruption caused by construction. In most cases, this results in a service life that extends beyond 20 years. Since the weather-related usage and future population projections are broad-based estimates of future conditions used in the calculation of future flow demands, the rate at which predicted flows increase or decrease in a pipeline system is somewhat variable, but still useful in providing a long-range target for timing the project construction. WSSC Water conservatively estimates the lead time required to plan, design, and construct a facility, and projects enter the CIP on that basis. It is not unusual for 10 or more years to elapse before a major facility project, such as a treatment plant, is finished following its initial appearance in this document.

Twenty-year estimates of increases in customer demand are based on the most recent M-NCPPC demographic forecasts of population, dwelling units, and employment. Estimates of full development demands are based on the most current land use and zoning information available from the M-NCPPC. This data is organized by Traffic Analysis Zones in Montgomery County and by Policy Analysis Zones in Prince George’s County. The information is then disaggregated by sub-basins for use in the planning and sizing of projects.

### **Project Estimates**

Pipeline cost estimates are developed through the use of a detailed checklist of cost elements. The comprehensiveness and uniformity of planning-level cost estimates is significantly improved through the inclusion of more site-specific details, previously not

considered until advanced stages of design. Through this process the number of projects with cost increases that typically occur when a project transitions from the preliminary planning phase to the design phase is greatly reduced.

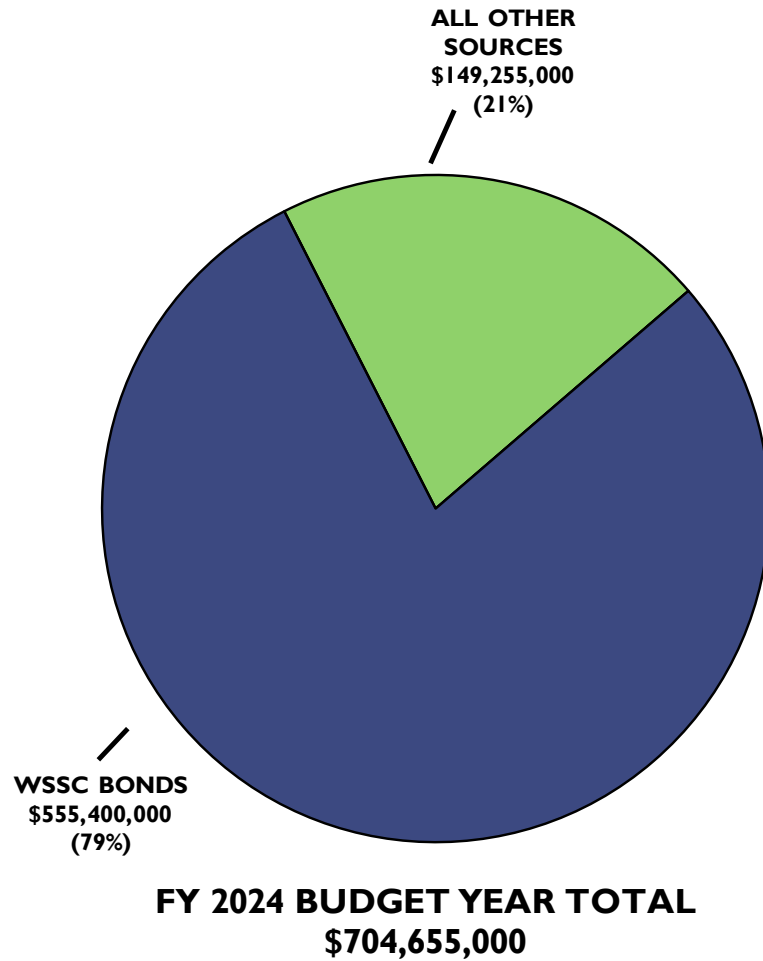
Actual design plans and profiles, if available, are analyzed together with United States Geological Survey soil maps. Additional factors such as site access, excessive traffic, known jurisdictional constraints, presence of rock or running sand, work through existing neighborhoods or open fields, and proximity to other existing utility lines are taken into consideration. The base prices upon which the estimates are predicated are derived from both historical cost data and the most recent bid information. The specific final unit prices are increased or decreased, dependent upon factors such as those listed above. In addition, all environmental mitigation costs for efforts such as reforestation are already included in the individual project costs. Regardless of the extensive checklist, some additional costs may be required by permitting agencies to reflect unpredictable requirements for things such as changes in alignment, more complex traffic management plans, or for changes in permit requirements for more stringent erosion protection measures at construction sites. The need for these kinds of features is project specific and is identified on individual PDFs when appropriate.

Order of magnitude cost estimates for major facility projects (e.g., treatment plants and pumping stations) are first derived from business case studies in the planning stage and further refined in the design phase based on estimates developed by consulting engineers. WSSC Water requires that projects be re-evaluated by consulting engineers at the 30% and 70% stages of design. Estimated construction costs, reflecting any modifications, are identified on the individual PDFs, if applicable. Because the costs displayed in the CIP are estimates and not actual costs, construction contingencies may be added.

The “Other” cost element, displayed in Block B, in the Expenditure Schedule on each PDF, is a broad estimate of the direct and indirect expenses associated with the implementation of each project and is not covered by the other major cost categories. These costs include direct support costs for a project such as salaries, wages, and related personnel costs (Social Security, retirement, etc.), and services, rentals, supplies, mileage, and other expenses. This element is estimated for the majority of the projects in this document by multiplying the sum of the project’s Planning, Design and Supervision and Construction cost elements in each column on the PDF by a constant 15.0%. There are exceptions: a value, based upon 1.0%, is applied to Blue Plains project costs; a constant of 10.0% is used to more realistically estimate these expenses for projects with a total estimated cost of \$10.0 to \$49.9 million; and, a constant of 5.0% is used for projects with a total estimated cost of \$50.0 million or more.

A project’s previous expenditures, which include all direct, indirect, and overhead costs, are shown on the PDF in the Block B Expenditure Schedule in the “Thru” column. These expenditures are accessed from the financial information system through the period ending March 31st of each year. End of the fiscal year expenditures were not available in time for the development of project expenditure schedules and are estimated.

**Figure 3**  
**WSSC WATER PROPOSED FYs 2024-2029 CIP**  
**COMBINED PROGRAM FUNDING BY SOURCE**

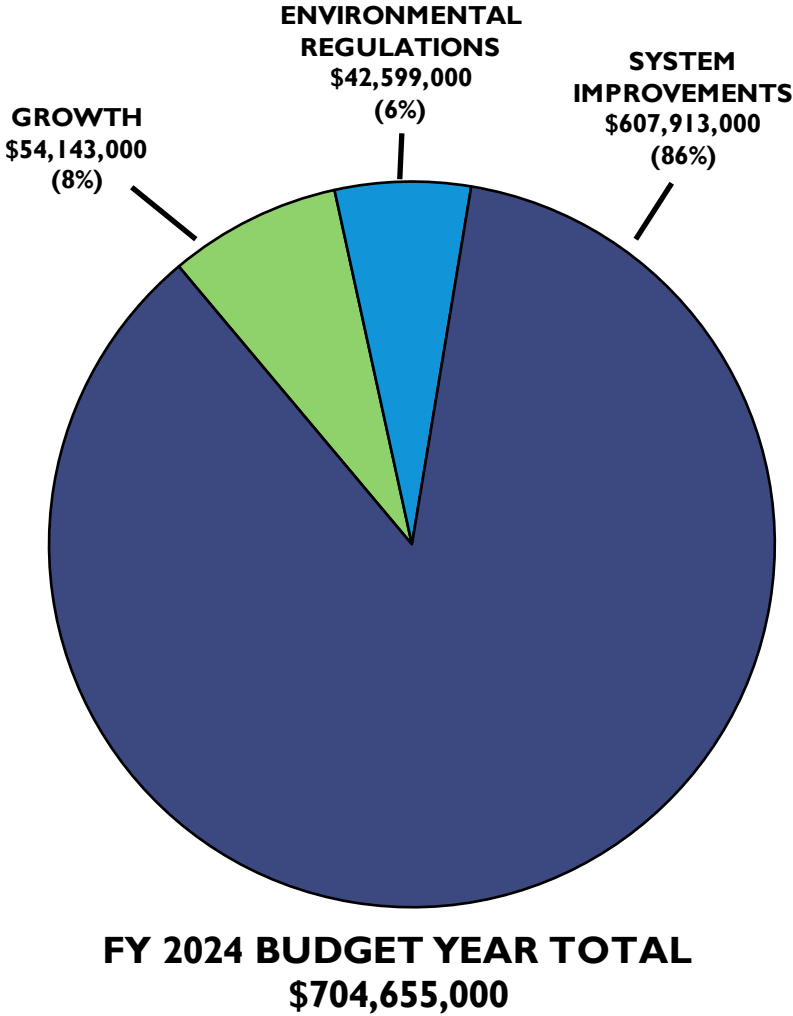


**79%**

of the FY 2024 Combined  
 Program is funded through  
 long-term debt.

Funding Source	FY 2024 Amount
WSSC Bonds	555,400,000
PAYGO	44,000,000
SDC & Others	73,785,000
Federal & State Grants	25,142,000
Local Government Contributions	6,328,000
<b>Total</b>	<b>704,655,000</b>

**Figure 4**  
**WSSC WATER PROPOSED FYs 2024-2029 CIP**  
**COMBINED PROGRAM BY MAJOR CATEGORY**



**86%**

of the FY 2024 Combined Program is for reinvestment in our system infrastructure.

Major Category	FY 2024 Amount
Growth	54,143,000
System Improvements	607,913,000
Environmental Regulations	42,599,000
<b>Total</b>	<b>704,655,000</b>

**FINANCIAL SUMMARY**

(ALL FIGURES IN THOUSANDS)

**EXPENDITURE PROJECTIONS**

SECTION	EST. TOTAL COST	EXPEND THRU 22	EST. EXPEND 23	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BEYOND SIX YEARS	PAGE NUM
					YR 1 24	YR 2 25	YR 3 26	YR 4 27	YR 5 28	YR 6 29		
Montgomery County Water Projects	9,734	67	23	9,644	3,133	3,142	2,977	196	99	97	-	1-1
Prince George's County Water Projects	231,618	37,734	15,799	168,430	39,443	56,975	36,189	30,869	3,110	1,844	9,655	5-1
Bi-County Water Projects	1,446,875	61,870	99,023	1,190,193	142,441	195,428	214,382	239,646	217,366	180,930	95,789	3-1
<b>TOTAL WATER PROJECTS</b>	<b>1,688,227</b>	<b>99,671</b>	<b>114,845</b>	<b>1,368,267</b>	<b>185,017</b>	<b>255,545</b>	<b>253,548</b>	<b>270,711</b>	<b>220,575</b>	<b>182,871</b>	<b>105,444</b>	
Montgomery County Sewer Projects	88,689	9,802	4,569	61,146	10,106	14,154	7,644	2,544	7,254	19,444	13,172	2-1
Prince George's County Sewer Projects	442,037	144,306	63,222	230,498	66,393	72,989	44,032	25,849	14,984	6,251	4,011	6-1
Bi-County Sewer Projects	1,571,417	242,178	207,099	969,357	180,166	152,157	156,002	182,970	158,552	139,510	152,783	4-1
<b>TOTAL SEWER PROJECTS</b>	<b>2,102,143</b>	<b>396,286</b>	<b>274,890</b>	<b>1,261,001</b>	<b>256,665</b>	<b>239,300</b>	<b>207,678</b>	<b>211,363</b>	<b>180,790</b>	<b>165,205</b>	<b>169,966</b>	
<b>TOTAL CIP PROGRAM</b>	<b>3,790,370</b>	<b>495,957</b>	<b>389,735</b>	<b>2,629,268</b>	<b>441,682</b>	<b>494,845</b>	<b>461,226</b>	<b>482,074</b>	<b>401,365</b>	<b>348,076</b>	<b>275,410</b>	
Total Information Only Projects	2,108,419	3,765	226,448	1,876,515	262,973	296,175	311,547	308,138	335,711	361,971	1,691	7-1
<b>COMBINED PROGRAM</b>	<b>5,898,789</b>	<b>499,722</b>	<b>616,183</b>	<b>4,505,783</b>	<b>704,655</b>	<b>791,020</b>	<b>772,773</b>	<b>790,212</b>	<b>737,076</b>	<b>710,047</b>	<b>277,101</b>	

**FUNDING PROJECTIONS**

SOURCE	EST. TOTAL COST	EXPEND THRU 22	EST. EXPEND 23	TOTAL SIX YEARS	FUNDING SCHEDULE						BEYOND SIX YEARS
					YR 1 24	YR 2 25	YR 3 26	YR 4 27	YR 5 28	YR 6 29	
WSSC Bonds	4,555,754	449,419	533,347	3,425,388	555,400	577,701	568,138	605,733	562,587	555,829	147,600
PAYGO	620,016	-	31,016	479,000	44,000	65,000	80,000	80,000	100,000	110,000	110,000
State Grants	144,351	-	20,400	123,951	20,600	23,351	20,000	20,000	20,000	20,000	-
System Development Charges	245,732	30,224	14,438	190,402	36,945	40,920	31,120	34,855	27,988	18,574	10,668
Contributions/Other	263,069	19,318	7,638	236,111	36,840	73,118	65,095	40,239	20,025	794	2
Government Contributions	52,440	191	4,977	38,441	6,328	6,388	6,717	7,682	6,476	4,850	8,831
Federal Grants	17,427	570	4,367	12,490	4,542	4,542	1,703	1,703	-	-	-
<b>COMBINED PROGRAM</b>	<b>5,898,789</b>	<b>499,722</b>	<b>616,183</b>	<b>4,505,783</b>	<b>704,655</b>	<b>791,020</b>	<b>772,773</b>	<b>790,212</b>	<b>737,076</b>	<b>710,047</b>	<b>277,101</b>

**WSSC WATER FYs 2024 - 2029 COMBINED PROGRAM**  
**NEW PROJECT LISTING**  
 (ALL FIGURES IN THOUSANDS)

AGENCY NUMBER	PROJECT NAME	TOTAL PROJECT COST	SIX YEAR PROGRAM COST	BUDGET YEAR COST	% GROWTH
<b><u>Montgomery County Sewer Projects</u></b>					
S - 000085.23	Johns Hopkins Medical Research Park Sewer Main	6,545	3,987	828	100%
S - 000103.17	Rose Village Sewer Main	1,864	1,731	897	100%
<b><u>Prince George's County Sewer Projects</u></b>					
S - 000086.20	National Capital Business Park Sewer	1,795	1,731	897	100%
<b>TOTAL</b>		<b>10,204</b>	<b>7,449</b>	<b>2,622</b>	

3 New Projects



**WSSC WATER FYs 2024 - 2029 COMBINED PROGRAM**  
**PENDING CLOSE-OUT PROJECT LISTING**  
 (ALL FIGURES IN THOUSANDS)

AGENCY NUMBER	PROJECT NAME	ESTIMATED TOTAL COST	EXPENDITURES THRU FY 22	ESTIMATED EXPENDITURES FY 23	REMARKS
<b><u>Montgomery County Sewer Projects</u></b>					
S - 000084.67	Milestone Center Sewer Main	-	-	-	No longer requires CIP-sized pipes.
S - 000085.21	Shady Grove Station Sewer Augmentation	7,652	7,627	25	Project completion expected in FY 23.
<b><u>Prince George's County Sewer Projects</u></b>					
S - 000086.19	Southlake Subdivision Sewer	775	682	93	Project completion expected in FY 22.
<b><u>Bi-County Sewer Projects</u></b>					
S - 000170.08	Septage Discharge Facility Planning & Implementation	5,332	5,332	-	Staff recommended that the project be closed.
<b>TOTAL</b>		<b>13,759</b>	<b>13,641</b>	<b>118</b>	

4 Projects Pending Close-Out

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## **Section 1 - Montgomery County Water Projects**

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**FINANCIAL SUMMARY**

(ALL FIGURES IN THOUSANDS)

**MONTGOMERY COUNTY WATER PROJECTS**

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 22	EST. EXPEND 23	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BEYOND SIX YEARS	PAGE NUM
						YR 1 24	YR 2 25	YR 3 26	YR 4 27	YR 5 28	YR 6 29		
W - 000046.26	Pleasant's Property Water Main Extension	2,207	42	-	2,165	1,949	216	-	-	-	-	-	1-2
W - 000113.20	White Oak Water Mains Augmentation	5,567	25	23	5,519	400	2,436	2,683	-	-	-	-	1-3
W - 000113.21	Viva White Oak Water Main	1,960	-	-	1,960	784	490	294	196	99	97	-	1-4
<b>TOTALS</b>		9,734	67	23	9,644	3,133	3,142	2,977	196	99	97	-	

Pleasant's Property Water Main Extension

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Brink HG760A
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000046.26	382201	Change			Planning Areas	Clarksburg & Vicinity PA 13

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	607	42		565	509	56					
Land											
Construction	1,318			1,318	1,186	132					
Other	282			282	254	28					
Total	2,207	42		2,165	1,949	216					

C. Funding Schedule (000's)

Contributions/Other	2,207	42		2,165	1,949	216					
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D. Description & Justification

<b>DESCRIPTION</b> This project provides for the planning, design, and construction of 2,320 feet of 16-inch diameter water main to serve Pleasant's Property.
<b>BENEFIT</b> Economic Development: This growth project supports the economic development goals of the Counties
<b>JUSTIFICATION</b> Pleasant's Property Hydraulic Planning Analysis (June 2020).
<b>COST CHANGE</b> Not applicable.
<b>OTHER</b> The project scope has remained the same. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.
<b>COORDINATION</b> Coordinating Agencies: Maryland-National Capital Park & Planning Commission; Montgomery County Department of Environmental Protection; Montgomery County Government Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$69	
Debt Service		
Total Cost	\$69	
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'22
Date First Approved	FY'22
Initial Cost Estimate	1,984
Cost Estimate Last FY	2,082
Present Cost Estimate	2,207
Approved Request Last FY	1,857
Total Expense & Encumbrances	42
Approval Request Year 1	1,949

G. Status Information	
Land Status	Not Applicable
Project Phase	Planning
Percent Complete	0 %
Estimated Completion Date	Developer Dependent

Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	



White Oak Water Mains Augmentation

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Montgomery Main 495A
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000113.20	382001	Change			Planning Areas	Fairland-Beltsville (PG) PA 61; Langley Park & Vicinity PA 65

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	944	25	20	899	348	318	233				
Land											
Construction	3,900			3,900		1,800	2,100				
Other	723		3	720	52	318	350				
Total	5,567	25	23	5,519	400	2,436	2,683				

C. Funding Schedule (000's)

SDC	5,567	25	23	5,519	400	2,436	2,683				
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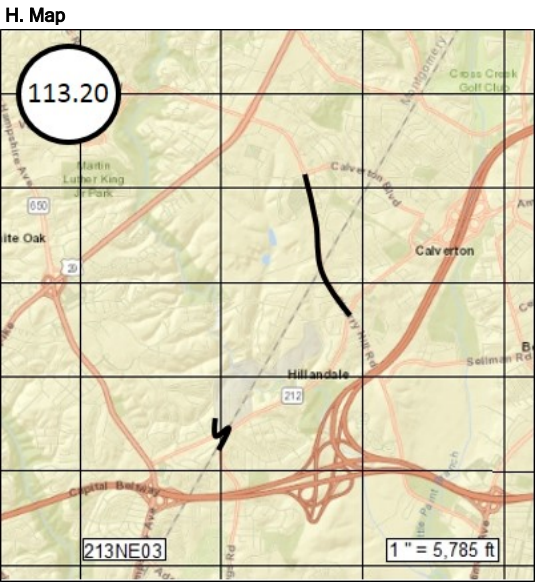
D. Description & Justification

<b>DESCRIPTION</b> This project provides for the planning, design, and construction required for the replacement of 7,650 feet of 4-inch to 20-inch diameter water main along Cherry Hill Road, Gracefield Road, and Powder Mill Road/Perimeter Road to serve three planned projects in the White Oak area: Washington Adventist Hospital, VIVA Global LifeSci Village, and Food & Drug Administration White Oak Master Plan.
<b>BENEFIT</b> Economic Development: This growth project supports the economic development goals of the Counties; System Capacity: This project will enhance existing infrastructure by building additional capacity in order to meet existing and/or future demand; System Reliability: This project will improve service reliability through fewer and shorter service interruptions
<b>JUSTIFICATION</b> The existing mains in these areas will be upsized to provide adequate capacity to serve domestic and fire flow needs for the three new developments. The mains will also provide additional looping and redundancy to the 495A Pressure Zone.  MWCOG Round 8.0 growth forecasts; WSSC Memorandum dated November 21, 2017; Capital Needs Process Validation #122 submitted December 4, 2017.
<b>COST CHANGE</b> Not applicable.
<b>OTHER</b> The project scope has remained the same. The schedule and expenditure projections shown in Block B above are planning level estimates and are expected to change based upon site conditions and design constraints. Due to a paving moratorium, design activities have been suspended until FY'24.
<b>COORDINATION</b> Coordinating Agencies: Maryland Department of the Environment; Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission; Montgomery County Government; Prince George's County Government Coordinating Projects: W - 000113.21 - Viva White Oak Water Main

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service		
Total Cost		
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'20
Date First Approved	FY'20
Initial Cost Estimate	4,830
Cost Estimate Last FY	5,306
Present Cost Estimate	5,567
Approved Request Last FY	23
Total Expense & Encumbrances	25
Approval Request Year 1	400

G. Status Information	
Land Status	Not Applicable
Project Phase	Design
Percent Complete	0 %
Estimated Completion Date	June 2026
Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	



Viva White Oak Water Main

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Montgomery Main 495A					
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins						
W - 000113.21	382202	Change			Planning Areas	Colesville-White Oak & Vicinity PA 33; Fairland (MC) PA 34					

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	392			392	157	98	59	39	20	19	
Land											
Construction	1,312			1,312	525	328	197	131	66	65	
Other	256			256	102	64	38	26	13	13	
Total	1,960			1,960	784	490	294	196	99	97	

C. Funding Schedule (000's)

Contributions/Other	1,960			1,960	784	490	294	196	99	97	
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D. Description & Justification

<b>DESCRIPTION</b> This project provides for the planning, design, and construction of 8,900 feet of 16-inch diameter water main to serve Viva White Oak and vicinity.
<b>BENEFIT</b> Economic Development: This growth project supports the economic development goals of the Counties
<b>JUSTIFICATION</b> Viva White Oak Hydraulic Planning Analysis (July 2019).
<b>COST CHANGE</b> Not applicable.
<b>OTHER</b> The project scope has remained the same. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.
<b>COORDINATION</b> Coordinating Agencies: Maryland Department of the Environment; Maryland-National Capital Park & Planning Commission; Montgomery County Department of Public Works and Transportation; Montgomery County Government Coordinating Projects: S - 000118.09 - Viva White Oak Sewer Main; S - 000118.10 - Viva White Oak Sewer Augmentation; W - 000113.20 - White Oak Water Mains Augmentation

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$266	
Debt Service		
Total Cost	\$266	
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'22
Date First Approved	FY'22
Initial Cost Estimate	1,780
Cost Estimate Last FY	1,849
Present Cost Estimate	1,960
Approved Request Last FY	741
Total Expense & Encumbrances	
Approval Request Year 1	784

G. Status Information	
Land Status	Not Applicable
Project Phase	Planning
Percent Complete	20 %
Estimated Completion Date	Developer Dependent

Growth	100%
System Improvement	
Environmental Regulation	
Population Served	53,300
Capacity	



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## **Section 2 - Montgomery County Sewer Projects**

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**FINANCIAL SUMMARY**

(ALL FIGURES IN THOUSANDS)

**MONTGOMERY COUNTY SEWER PROJECTS**

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 22	EST. EXPEND 23	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BEYOND SIX YEARS	PAGE NUM
						YR 1 24	YR 2 25	YR 3 26	YR 4 27	YR 5 28	YR 6 29		
S - 000036.01	Arcola WWPS & FM	6,498	188	-	6,310	806	2,490	3,014	-	-	-	-	2-3
S - 000061.02	Reddy Branch WWPS & FM	26,187	112	-	14,123	292	292	117	735	735	11,952	11,952	2-4
S - 000063.08	Sam Rice Manor WWPS & FM	7,276	155	-	5,901	305	122	230	610	1,830	2,804	1,220	2-5
S - 000083.07	Ashford Woods WWPS & FM	3,740	120	299	3,321	1,287	1,197	689	148	-	-	-	2-6
S - 000085.22	Shady Grove Neighborhood Center	2,131	257	478	1,396	698	698	-	-	-	-	-	2-7
S - 000085.23	Johns Hopkins Medical Research Park Sewer Main	6,545	75	2,483	3,987	828	1,337	1,822	-	-	-	-	2-8
S - 000094.13	Damascus Town Center WWPS Replacement	10,475	422	743	9,310	3,002	5,980	328	-	-	-	-	2-9
S - 000094.14	Spring Gardens WWPS Replacement	11,765	597	-	11,168	385	55	758	758	4,606	4,606	-	2-10
S - 000103.17	Rose Village Sewer Main	1,864	73	60	1,731	897	536	171	127	-	-	-	2-11
S - 000118.09	Viva White Oak Sewer Main	1,654	-	-	1,654	661	414	248	166	83	82	-	2-12
S - 000151.02	Erickson Bethesda Sewer Main	2,902	176	481	2,245	945	1,033	267	-	-	-	-	2-13
	Projects Pending Close-Out	7,652	7,627	25	-	-	-	-	-	-	-	-	2-14
<b>TOTALS</b>		88,689	9,802	4,569	61,146	10,106	14,154	7,644	2,544	7,254	19,444	13,172	



**NEW PROJECT LISTING**  
**MONTGOMERY COUNTY SEWER PROJECTS**  
 (ALL FIGURES IN THOUSANDS)

AGENCY NUMBER	PROJECT NAME	TOTAL PROJECT COST	BUDGET YEAR COST	PAGE NUMBER
S - 000085.23	Johns Hopkins Medical Research Park Sewer Main	6,545	828	2-8
S - 000103.17	Rose Village Sewer Main	1,864	897	2-11
<b>TOTAL</b>		<b>8,409</b>	<b>1,725</b>	

# Arcola WWPS & FM

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Sligo Creek 06
S - 000036.01	382301	Change			Planning Areas	Kensington-Wheaton PA 31

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	1,538	188		1,350	700	340	310				
Land											
Construction	4,135			4,135		1,825	2,310				
Other	825			825	106	325	394				
<b>Total</b>	<b>6,498</b>	<b>188</b>		<b>6,310</b>	<b>806</b>	<b>2,490</b>	<b>3,014</b>				

## C. Funding Schedule (000's)

WSSC Bonds	6,498	188		6,310	806	2,490	3,014				
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## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of the modifications to the Arcola Wastewater Pumping Station and replacement of the Arcola Force Main. The rehabilitation will replace both pumps, maintaining the pumping station's 0.17 MGD capacity. The existing 1,300 linear feet of 4-inch force main will be replaced. In addition, replacement of all electrical and mechanical components, piping assets, and the HVAC system are included.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life

### JUSTIFICATION

The existing pumping station and force main were constructed in 1961 and have reached the end of their useful lives. Replacement of the existing force main is in accordance with an initiative to prioritize replacing force mains that have reached their anticipated life expectancy. This upgrade work was recommended as part of WSSC Water's Asset Management Program (CNPV #183).

### COST CHANGE

Not applicable.

### OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are preliminary planning level estimates and are expected to change based upon site conditions and design constraints. Planning work for the replacement and upgrade began in FY'21 under ESP S-616.01, Arcola Force Main Replacement and WWPS Upgrade.

### COORDINATION

Coordinating Agencies: Maryland Department of Natural Resources; Maryland Department of the Environment; Maryland-National Capital Park & Planning Commission; Montgomery County Government  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$423	27
Total Cost	\$423	27
Impact on Water and Sewer Rate		

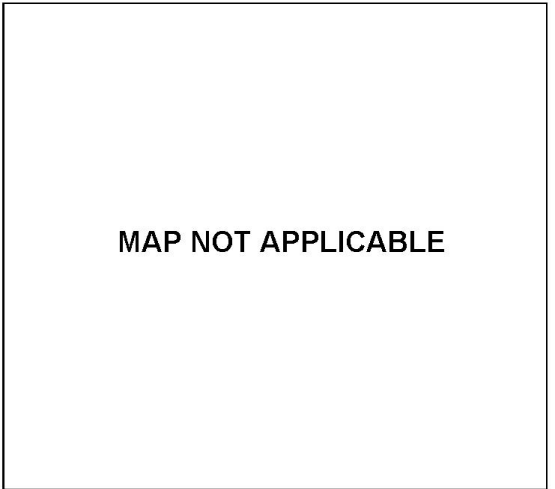
## F. Approval and Expenditure Data (000's)

Date First in Program	FY'23
Date First Approved	FY'23
Initial Cost Estimate	6,140
Cost Estimate Last FY	6,140
Present Cost Estimate	6,498
Approved Request Last FY	
Total Expense & Encumbrances	188
Approval Request Year 1	806

## G. Status Information

Land Status	Public/Agency owned land
Project Phase	Planning
Percent Complete	100 %
Estimated Completion Date	April 2026
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	0.17 MGD

## H. Map



# Reddy Branch WWPS & FM

A. Identification and Coding Information		
Agency Number	Project Number	Update Code
S - 000061.02	382302	Change

PDF Date	October 1, 2022
Date Revised	

Pressure Zones	
Drainage Basins	Rock Creek 05
Planning Areas	Olney & Vicinity PA 23

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	2,616	112		2,238	265	265	106	668	668	266	266
Land											
Construction	21,200			10,600						10,600	10,600
Other	2,371			1,285	27	27	11	67	67	1,086	1,086
Total	26,187	112		14,123	292	292	117	735	735	11,952	11,952

## C. Funding Schedule (000's)

WSSC Bonds	26,187	112		14,123	292	292	117	735	735	11,952	11,952
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## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of the modifications to the existing 3.04 MGD wastewater pumping station and replacement of approximately 12,774 feet of existing force main.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life

### JUSTIFICATION

The existing pumping station and 16-inch diameter PCCP force main were built in 1971 and have reached the end of their useful lives. The station is subject to flooding and there are safety concerns with equipment operation. Replacement of the existing force main is in accordance with an initiative to prioritize replacing force mains that have reached their anticipated life expectancy. This upgrade work was recommended as part of WSSC Water's Asset Management Program (CNPV #200).

### COST CHANGE

Not applicable.

### OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are preliminary planning level estimates and are expected to change based upon site conditions and design constraints. Planning work began in FY'21 under ESP S-611.04, Reddy Branch WWPS Upgrade. Future land costs are included in project S-203.00.

### COORDINATION

Coordinating Agencies: Maryland-National Capital Park & Planning Commission; Montgomery County Government; Town of Brookeville  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$1,704	31
Total Cost	\$1,704	31
Impact on Water and Sewer Rate		

## F. Approval and Expenditure Data (000's)

Date First in Program	FY'23
Date First Approved	FY'23
Initial Cost Estimate	24,614
Cost Estimate Last FY	24,614
Present Cost Estimate	26,187
Approved Request Last FY	
Total Expense & Encumbrances	112
Approval Request Year 1	292

## G. Status Information

Land Status	Land and R/W to be acquired
Project Phase	Planning
Percent Complete	5 %
Estimated Completion Date	June 2030
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	3.04 MGD

## H. Map



# Sam Rice Manor WWPS & FM

<b>A. Identification and Coding Information</b>			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Lower Anacostia 9
S - 000063.08	382303	Change			Planning Areas	Patuxent PA 15

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	1,895	155		1,527	265	106	200	530	213	213	213
Land											
Construction	4,452			3,604					1,378	2,226	848
Other	929			770	40	16	30	80	239	365	159
<b>Total</b>	<b>7,276</b>	<b>155</b>		<b>5,901</b>	<b>305</b>	<b>122</b>	<b>230</b>	<b>610</b>	<b>1,830</b>	<b>2,804</b>	<b>1,220</b>

## C. Funding Schedule (000's)

WSSC Bonds	1,237	26		1,004	52	21	39	104	311	477	207
SDC	6,039	129		4,897	253	101	191	506	1,519	2,327	1,013

## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of a 0.12 MGD wastewater pumping station and 3,521 linear feet of force main. The relocated wastewater pumping station and force main will provide service to the existing and future Ashton Service Area.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; System Capacity: This project will enhance existing infrastructure by building additional capacity in order to meet existing and/or future demand

### JUSTIFICATION

The existing pumping station was originally installed in 1977 and has reached the end of its useful life. The station does not meet current standards and is in jeopardy from encroaching streambank erosion. Replacement of the existing force main is in accordance with an initiative to prioritize replacing force mains that have reached their anticipated life expectancy. This upgrade work was recommended as part of WSSC Water's Asset Management Program (CNPV #191).

### COST CHANGE

The schedule and expenditure projections were revised based upon a preliminary assessment of site conditions and design constraints.

### OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are preliminary planning level estimates and are expected to change based upon site conditions and design constraints. Planning work began in FY'21 under ESP S-625.02, Sam Rice Manor WWPS Rehabilitation. Future land costs are included in project S-203.00.

### COORDINATION

Coordinating Agencies: Maryland Department of Natural Resources; Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission; Montgomery County Government  
Coordinating Projects: Not Applicable

<b>E. Annual Operating Budget Impact (000's)</b>		FY of Impact
Staff & Other		
Maintenance	\$46	31
Debt Service	\$80	31
Total Cost	\$126	31
Impact on Water and Sewer Rate		

## F. Approval and Expenditure Data (000's)

Date First in Program	FY'23
Date First Approved	FY'23
Initial Cost Estimate	5,501
Cost Estimate Last FY	5,501
Present Cost Estimate	7,276
Approved Request Last FY	
Total Expense & Encumbrances	155
Approval Request Year 1	305

## G. Status Information

Land Status	Land and R/W to be acquired
Project Phase	Planning
Percent Complete	10 %
Estimated Completion Date	June 2030
Growth	83%
System Improvement	17%
Environmental Regulation	
Population Served	
Capacity	0.12 MGD

## H. Map

MAP NOT APPLICABLE

# Ashford Woods WWPS & FM

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Seneca Creek 15
S - 000083.07	382304	Change			Planning Areas	Clarksburg & Vicinity PA 13

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	878	120	260	498	289	105	78	26			
Land											
Construction	2,390			2,390	830	936	521	103			
Other	472		39	433	168	156	90	19			
<b>Total</b>	<b>3,740</b>	<b>120</b>	<b>299</b>	<b>3,321</b>	<b>1,287</b>	<b>1,197</b>	<b>689</b>	<b>148</b>			

## C. Funding Schedule (000's)

Contributions/Other	3,740	120	299	3,321	1,287	1,197	689	148			
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## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of a 0.62 MGD wastewater pumping station and 2,160 feet of force main to serve the Egan property.

### BENEFIT

Economic Development: This growth project supports the economic development goals of the Counties

### JUSTIFICATION

Ashford Woods Hydraulic Planning Analysis (January 2021).

### COST CHANGE

Not applicable.

### OTHER

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

### COORDINATION

Coordinating Agencies: Maryland Department of Natural Resources; Maryland Department of the Environment; Maryland-National Capital Park & Planning Commission; Montgomery County Government  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$46	
Debt Service		
Total Cost	\$46	
Impact on Water and Sewer Rate		

## F. Approval and Expenditure Data (000's)

Date First in Program	FY'23
Date First Approved	FY'23
Initial Cost Estimate	3,591
Cost Estimate Last FY	3,591
Present Cost Estimate	3,740
Approved Request Last FY	1,237
Total Expense & Encumbrances	120
Approval Request Year 1	1,287

## G. Status Information

Land Status	Not Applicable
Project Phase	Planning
Percent Complete	0 %
Estimated Completion Date	Developer Dependent

Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	0.62 MGD

## H. Map



# Shady Grove Neighborhood Center

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Watts Branch 16
S - 000085.22	382102	Change			Planning Areas	Gaithersburg & Vicinity PA 20

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	563	257	196	110	55	55					
Land											
Construction	1,324		220	1,104	552	552					
Other	244		62	182	91	91					
<b>Total</b>	<b>2,131</b>	<b>257</b>	<b>478</b>	<b>1,396</b>	<b>698</b>	<b>698</b>					

## C. Funding Schedule (000's)

Contributions/Other	2,131	257	478	1,396	698	698					
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## D. Description & Justification

<p><b>DESCRIPTION</b></p> <p>This project provides for the planning, design, and construction of 1,800 feet of 15-inch sewer main to serve the Shady Grove Neighborhood Center Subdivision.</p> <p><b>BENEFIT</b></p> <p>Economic Development: This growth project supports the economic development goals of the Counties</p> <p><b>JUSTIFICATION</b></p> <p>The existing sewer system cannot handle the projected flows that will be generated by the Shady Grove Neighborhood Center. Shady Grove Neighborhood Center Planning Analysis (March 2019).</p> <p><b>COST CHANGE</b></p> <p>Not applicable.</p> <p><b>OTHER</b></p> <p>The project scope has remained the same. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.</p> <p><b>COORDINATION</b></p> <p>Coordinating Agencies: City of Rockville; Maryland Department of the Environment; Maryland-National Capital Park &amp; Planning Commission; Montgomery County Government</p> <p>Coordinating Projects: Not Applicable</p>
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E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$38	
Debt Service		
Total Cost	\$38	
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'21
Date First Approved	FY'21
Initial Cost Estimate	3,391
Cost Estimate Last FY	2,010
Present Cost Estimate	2,131
Approved Request Last FY	658
Total Expense & Encumbrances	257
Approval Request Year 1	698

G. Status Information	
Land Status	Not Applicable
Project Phase	Planning
Percent Complete	40 %
Estimated Completion Date	Developer Dependent
Growth	100%
System Improvement	
Environmental Regulation	
Population Served	7,000
Capacity	1.40 to 2.45 MGD



# Johns Hopkins Medical Research Park Sewer Main

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Muddy Branch 13
S - 000085.23		Add			Planning Areas	Gaithersburg & Vicinity PA 20

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	1,013	75	360	578	120	194	264				
Land											
Construction	4,688		1,799	2,889	600	969	1,320				
Other	844		324	520	108	174	238				
<b>Total</b>	<b>6,545</b>	<b>75</b>	<b>2,483</b>	<b>3,987</b>	<b>828</b>	<b>1,337</b>	<b>1,822</b>				

## C. Funding Schedule (000's)

Contributions/Other	6,545	75	2,483	3,987	828	1,337	1,822				
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## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of approximately 12,390 feet of 15-inch diameter or larger sewer mains to serve the Johns Hopkins Medical Research Park and vicinity. This work will extend service to the new development and replace existing sewer mains downstream of the development.

### BENEFIT

Economic Development: This growth project supports the economic development goals of the Counties

### JUSTIFICATION

Johns Hopkins Medical Research Park Hydraulic Planning Analysis (February 2022).

### COST CHANGE

Not applicable.

### OTHER

The present project scope was developed for the FY'24 CIP and has an estimated total cost of \$6,545,000. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.

### COORDINATION

Coordinating Agencies: City of Gaithersburg; Maryland-National Capital Park & Planning Commission; Montgomery County Government  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$264	
Debt Service		
Total Cost	\$264	
Impact on Water and Sewer Rate		

## F. Approval and Expenditure Data (000's)

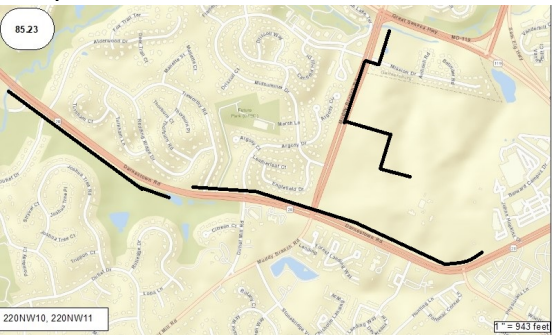
Date First in Program	FY'24
Date First Approved	FY'24
Initial Cost Estimate	6,545
Cost Estimate Last FY	
Present Cost Estimate	6,545
Approved Request Last FY	
Total Expense & Encumbrances	75
Approval Request Year 1	828

## G. Status Information

Land Status	Not Applicable
Project Phase	Planning
Percent Complete	0 %
Estimated Completion Date	Developer Dependent

Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	

## H. Map





# Damascus Town Center WWPS Replacement

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Patuxent North 26; Seneca Creek 15
S - 000094.13	382002	Change			Planning Areas	Damascus & Vicinity PA 11

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	1,928	362	646	920	510	300	110				
Land	60	60									
Construction	7,175			7,175	2,100	4,900	175				
Other	1,312		97	1,215	392	780	43				
<b>Total</b>	<b>10,475</b>	<b>422</b>	<b>743</b>	<b>9,310</b>	<b>3,002</b>	<b>5,980</b>	<b>328</b>				

## C. Funding Schedule (000's)

WSSC Bonds	7,332	295	520	6,517	2,101	4,186	230				
SDC	3,143	127	223	2,793	901	1,794	98				

## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of a 0.416 MGD wastewater pumping station (WWPS), approximately 2,100 linear feet of gravity sewer, and 2,100 linear feet of force main (FM). The new WWPS and associated FM and gravity sewer will provide service to the existing and future Damascus Town Center service area.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; System Capacity: This project will enhance existing infrastructure by building additional capacity in order to meet existing and/or future demand; Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties

### JUSTIFICATION

The existing pumping station, which is over 45 years old, was originally built as a privately owned facility and did not conform to WSSC Water standards. The pumping station was taken over by WSSC Water in the late 1970s. It has reached the end of its useful life and replacement parts are obsolete. Additionally, the capacity of the pumping station must be increased to accommodate the future service area in accordance with the Maryland-National Capital Park & Planning Commission Damascus Master Plan. The pumping station replacement was recommended by the Damascus Town Center WWPS Business Case Evaluation, Black & Veatch (September 2017) undertaken as part of WSSC Water's Asset Management Program.

### COST CHANGE

Not applicable.

### OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are preliminary planning level estimates and are expected to change based upon site conditions and design constraints. Planning work began in FY'18 under ESP S-602.01, Damascus Town Center WWPS Replacement.

### COORDINATION

Coordinating Agencies: Maryland Department of the Environment; Maryland-National Capital Park & Planning Commission; Montgomery County Department of Environmental Protection; Montgomery County Department of Public Works and Transportation; Montgomery County Government  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$75	27
Debt Service	\$477	27
Total Cost	\$552	27
Impact on Water and Sewer Rate		

## F. Approval and Expenditure Data (000's)

Date First in Program	FY'20
Date First Approved	FY'20
Initial Cost Estimate	9,460
Cost Estimate Last FY	10,057
Present Cost Estimate	10,475
Approved Request Last FY	660
Total Expense & Encumbrances	422
Approval Request Year 1	3,002

## G. Status Information

Land Status	Land and R/W Acquired
Project Phase	Design
Percent Complete	0 %
Estimated Completion Date	June 2026
Growth	30%
System Improvement	70%
Environmental Regulation	
Population Served	854
Capacity	0.416 MGD

## H. Map





# Spring Gardens WWPS Replacement

A. Identification and Coding Information		
Agency Number	Project Number	Update Code
S - 000094.14	382003	Change

PDF Date	October 1, 2022
Date Revised	

Pressure Zones	
Drainage Basins	Monocacy 25
Planning Areas	Damascus & Vicinity PA 11

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	3,117	597		2,520	350	50	689	689	371	371	
Land											
Construction	7,632			7,632					3,816	3,816	
Other	1,016			1,016	35	5	69	69	419	419	
Total	11,765	597		11,168	385	55	758	758	4,606	4,606	

## C. Funding Schedule (000's)

WSSC Bonds	3,882	197		3,685	127	18	250	250	1,520	1,520	
SDC	7,883	400		7,483	258	37	508	508	3,086	3,086	

## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of a 1.3 MGD wastewater pumping station, 7,500 linear feet of force main, and 900 linear feet of gravity sewer. The relocated wastewater pumping station and force main will provide service to the existing and future Spring Gardens service area.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; System Capacity: This project will enhance existing infrastructure by building additional capacity in order to meet existing and/or future demand; Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties

### JUSTIFICATION

The existing pumping station and force main are over 41 years old and have reached the end of their useful lives. Additionally, the existing capacity of the pumping station must be increased to accommodate build-out of the service area and therefore it must be replaced with a new facility rated at 1.3 MGD. This replacement work was recommended by various business case evaluations undertaken as part of WSSC Water's Asset Management Program.

### COST CHANGE

Not applicable.

### OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are preliminary planning level estimates and are expected to change based upon site conditions and design constraints. Planning work began in FY'18 under ESP S-602.26, Spring Gardens WWPS Replacement. Future land costs are included in project S-203.00.

### COORDINATION

Coordinating Agencies: Maryland Department of the Environment; Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission; Montgomery County Department of Public Works and Transportation; Montgomery County Government  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$76	30
Debt Service	\$253	30
Total Cost	\$329	30
Impact on Water and Sewer Rate		

## F. Approval and Expenditure Data (000's)

Date First in Program	FY'20
Date First Approved	FY'20
Initial Cost Estimate	10,180
Cost Estimate Last FY	10,993
Present Cost Estimate	11,765
Approved Request Last FY	
Total Expense & Encumbrances	597
Approval Request Year 1	385

## G. Status Information

Land Status	Land and R/W to be acquired
Project Phase	Planning
Percent Complete	5 %
Estimated Completion Date	May 2029
Growth	67%
System Improvement	33%
Environmental Regulation	
Population Served	
Capacity	1.3 MGD

## H. Map

MAP NOT APPLICABLE

# Rose Village Sewer Main

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Cabin John 07
S - 000103.17		Add			Planning Areas	Potomac-Cabin John & Vicinity PA 29

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	695	73	52	570	313	206	40	11			
Land											
Construction	935			935	467	260	109	99			
Other	234		8	226	117	70	22	17			
<b>Total</b>	<b>1,864</b>	<b>73</b>	<b>60</b>	<b>1,731</b>	<b>897</b>	<b>536</b>	<b>171</b>	<b>127</b>			

## C. Funding Schedule (000's)

Contributions/Other	1,864	73	60	1,731	897	536	171	127			
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## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of approximately 1,728 feet of 30-inch to 33-inch diameter sewer main to serve the Rose Village development. These sewers will replace existing sewer mains.

### BENEFIT

Economic Development: This growth project supports the economic development goals of the Counties

### JUSTIFICATION

Rose Village Hydraulic Planning Analysis (January 2022).

### COST CHANGE

Not applicable.

### OTHER

The present project scope was developed for the FY'24 CIP and has an estimated total cost of \$1,864,000. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.

### COORDINATION

Coordinating Agencies: Maryland Department of the Environment; Maryland-National Capital Park & Planning Commission; Montgomery County Government  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service		
Total Cost		
Impact on Water and Sewer Rate		

## F. Approval and Expenditure Data (000's)

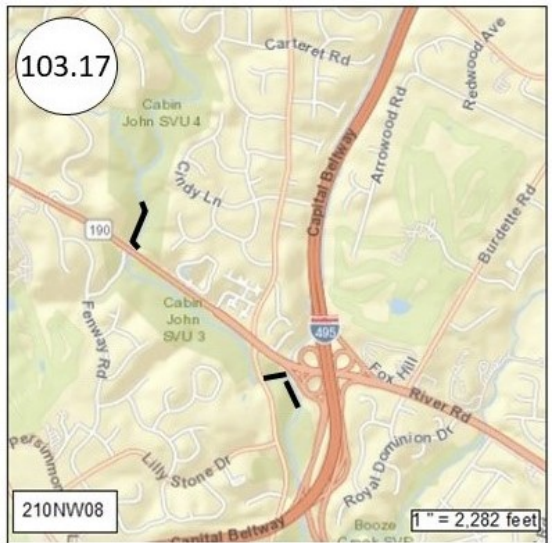
Date First in Program	FY'24
Date First Approved	FY'24
Initial Cost Estimate	1,864
Cost Estimate Last FY	
Present Cost Estimate	1,864
Approved Request Last FY	
Total Expense & Encumbrances	73
Approval Request Year 1	897

## G. Status Information

Land Status	Not Applicable
Project Phase	Planning
Percent Complete	0 %
Estimated Completion Date	Developer Dependent

Growth	100%
System Improvement	
Environmental Regulation	
Population Served	50,915
Capacity	

## H. Map



# Viva White Oak Sewer Main

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Paint Branch 2
S - 000118.09	382203	Change			Planning Areas	Colesville-White Oak & Vicinity PA 33; Fairland (MC) PA 34

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	330			330	132	83	50	33	16	16	
Land											
Construction	1,108			1,108	443	277	166	111	56	55	
Other	216			216	86	54	32	22	11	11	
Total	1,654			1,654	661	414	248	166	83	82	

## C. Funding Schedule (000's)

Contributions/Other	1,654			1,654	661	414	248	166	83	82	
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## D. Description & Justification

<b>DESCRIPTION</b> This project provides for the planning, design, and construction of 4,175 feet of 15-inch to 24-inch diameter sewer main to serve Viva White Oak and vicinity.
<b>BENEFIT</b> Economic Development: This growth project supports the economic development goals of the Counties
<b>JUSTIFICATION</b> Viva White Oak Hydraulic Planning Analysis (July 2019).
<b>COST CHANGE</b> Not applicable.
<b>OTHER</b> The project scope has remained the same. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.
<b>COORDINATION</b> Coordinating Agencies: Maryland Department of the Environment; Maryland-National Capital Park & Planning Commission; Montgomery County Department of Environmental Protection; Montgomery County Government Coordinating Projects: S - 000118.10 - Viva White Oak Sewer Augmentation; W - 000113.21 - Viva White Oak Water Main

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$89	
Debt Service		
Total Cost	\$89	
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'22
Date First Approved	FY'22
Initial Cost Estimate	1,500
Cost Estimate Last FY	1,560
Present Cost Estimate	1,654
Approved Request Last FY	623
Total Expense & Encumbrances	
Approval Request Year 1	661

G. Status Information	
Land Status	Not Applicable
Project Phase	Planning
Percent Complete	10 %
Estimated Completion Date	Developer Dependent

Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	1.097 MGD



# Erickson Bethesda Sewer Main

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Cabin John 07
S - 000151.02	382305	Change			Planning Areas	North Bethesda PA 30

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	426	176	100	150	80	50	20				
Land											
Construction	2,120		318	1,802	742	848	212				
Other	356		63	293	123	135	35				
Total	2,902	176	481	2,245	945	1,033	267				

## C. Funding Schedule (000's)

Contributions/Other	2,902	176	481	2,245	945	1,033	267				
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## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of 3,600 feet of 15-inch to 18-inch diameter sanitary sewer adjacent to the new development and 330 feet of 36-inch diameter sanitary sewer south of River Road to serve the Erickson Bethesda development.

### BENEFIT

Economic Development: This growth project supports the economic development goals of the Counties

### JUSTIFICATION

Erickson Bethesda Hydraulic Planning Analysis (March 2021).

### COST CHANGE

Not applicable.

### OTHER

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

### COORDINATION

Coordinating Agencies: Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission; Montgomery County Government  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$84	
Debt Service		
Total Cost	\$84	
Impact on Water and Sewer Rate		

## F. Approval and Expenditure Data (000's)

Date First in Program	FY'23
Date First Approved	FY'23
Initial Cost Estimate	2,740
Cost Estimate Last FY	2,740
Present Cost Estimate	2,902
Approved Request Last FY	518
Total Expense & Encumbrances	176
Approval Request Year 1	945

## G. Status Information

Land Status	Not Applicable
Project Phase	Planning
Percent Complete	30 %
Estimated Completion Date	Developer Dependent

Growth	100%
System Improvement	
Environmental Regulation	
Population Served	24,000
Capacity	

## H. Map



**PENDING CLOSE-OUT PROJECT LISTING**  
**MONTGOMERY COUNTY SEWER PROJECTS**  
 (ALL FIGURES IN THOUSANDS)

PROJECT NUMBER	AGENCY NUMBER	PROJECT NAME	ESTIMATED TOTAL COST	EXPENDITURES THRU FY 22	ESTIMATED EXPENDITURES FY 23	REMARKS
173804	S - 000084.67	Milestone Center Sewer Main	-	-	-	No longer requires CIP-sized pipes.
063806	S - 000085.21	Shady Grove Station Sewer Augmentation	7,652	7,627	25	Project completion expected in FY 23.
<b>TOTAL</b>			<b>7,652</b>	<b>7,627</b>	<b>25</b>	

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## **Section 3 - Bi-County Water Projects**

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**FINANCIAL SUMMARY**  
(ALL FIGURES IN THOUSANDS)

**BI-COUNTY WATER PROJECTS**

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 22	EST. EXPEND 23	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BEYOND SIX YEARS	PAGE NUM
						YR 1 24	YR 2 25	YR 3 26	YR 4 27	YR 5 28	YR 6 29		
W - 000073.30	Potomac WFP Submerged Channel Intake	97,456	2,267	-	-	-	-	-	-	-	-	95,189	3-3
W - 000073.32	Potomac WFP Main Zone Pipeline	115,702	1,987	315	113,400	4,725	4,725	18,900	34,125	34,125	16,800	-	3-4
W - 000073.33	Potomac WFP Consent Decree Program	194,642	35,042	30,450	129,150	32,550	32,550	32,550	31,500	-	-	-	3-6
W - 000161.01	Large Diameter Water Pipe & Large Valve Rehabilitation Program	786,477	-	51,563	734,914	79,326	94,582	102,325	132,727	162,919	163,035	-	3-7
W - 000161.02	I-495/I-270 Traffic Relief Plan Pipeline Relocations	193,557	381	68	193,108	19,642	57,934	57,809	38,496	19,227	-	-	3-9
W - 000172.07	Patuxent Raw Water Pipeline	33,369	22,193	10,615	561	561	-	-	-	-	-	-	3-10
W - 000175.05	Regional Water Supply Resiliency	16,857	-	4,367	12,490	4,542	4,542	1,703	1,703	-	-	-	3-11
W - 000202.00	Land & Rights-of-Way Acquisition - Bi-County Water	8,815	-	1,645	6,570	1,095	1,095	1,095	1,095	1,095	1,095	600	3-12
<b>TOTALS</b>		1,446,875	61,870	99,023	1,190,193	142,441	195,428	214,382	239,646	217,366	180,930	95,789	

## **POTOMAC WATER FILTRATION PLANT PROJECTS**

(COSTS IN THOUSANDS)

AGENCY NUMBER	PROJECT NAME	ADOPTED FY'23 TOTAL COST	PROPOSED FY'24 TOTAL COST	CHANGE \$	CHANGE %	SIX-YEAR COST	COMPLETION DATE (est)
W-73.30	Potomac WFP Submerged Channel Intake	94,144	97,456	3,312	3.5%	0	TBD
W-73.32	Potomac WFP Main Zone Pipeline	111,184	115,702	4,518	4.1%	113,400	December 2028
W-73.33	Potomac WFP Consent Decree Program	182,298	194,642	12,344	6.8%	129,150	January 2027
<b>TOTALS</b>		<b>\$387,626</b>	<b>\$407,800</b>	<b>\$20,174</b>	<b>5.2%</b>	<b>\$242,550</b>	

**Summary:** This group of projects represents operational improvements to the Potomac Water Filtration Plant (WFP) in Montgomery County. The Potomac WFP Submerged Channel Intake project (W-73.30) will provide an additional barrier against drinking water contamination, enhance reliability, and reduce treatment costs by drawing water from a location with a cleaner, more stable water quality. The Potomac WFP Main Zone Pipeline project (W-73.32) provides an 84-inch diameter redundancy main from the Main Zone pumping station to the 96-inch diameter and 66-inch diameter main wye connections on River Road, upgrades to the High Zone pumping station, and replacement of the existing 78-inch and 48-inch PCCP discharge mains. The Potomac WFP Consent Decree Program project (W-73.33) provides for the planning, design, and construction required for the implementation of Short-Term Operational and Long-Term Capital Improvements at the Potomac Water Filtration Plant (WFP) to allow WSSC Water to meet the new discharge limitations identified in the Consent Decree.

**Cost Impact:** Due to budgetary constraints, the Potomac WFP Submerged Channel Intake project (W-73.30) has been deferred to beyond six years. Expenditure projections for the Potomac WFP Main Zone Pipeline (W-73.32) were increased to reflect inflation. Estimates for the Potomac WFP Consent Decree Program (W-73.33) were updated to reflect actual bids for the sedimentation basin upgrades.



Potomac WFP Submerged Channel Intake

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Potomac WFP HGPOWF
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000073.30	033812	Change			Planning Areas	Bi-County

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	10,064	2,164									7,900
Land											
Construction	82,859	103									82,756
Other	4,533										4,533
Total	97,456	2,267									95,189

C. Funding Schedule (000's)

WSSC Bonds	97,456	2,267									95,189
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D. Description & Justification

<p><b>DESCRIPTION</b></p> <p>This project includes planning, which involves community outreach and coordination with elected officials, design, and construction of a submerged channel intake to provide an additional barrier against drinking water contamination (particularly Giardia cysts and Cryptosporidium oocysts), as well as to enhance reliability and reduce treatment costs by drawing water from a location with cleaner, more stable water quality.</p> <p><b>BENEFIT</b></p> <p>Water Quality: This project supports WSSC Water's mission to provide safe, clean water by improving the quality and/or safety of drinking water; System Reliability: This project will improve service reliability through fewer and shorter service interruptions; Financial Efficiency: This project is expected to increase revenues, decrease expenses, or both</p> <p><b>JUSTIFICATION</b></p> <p>The project is expected to pay for itself over time based upon the reduced chemical and solids handling costs resulting from the cleaner raw water source. It also provides for a more reliable supply by eliminating the current problems associated with ice and vegetation blocking the existing bank withdrawal. This project is consistent with the industry's recommended multiple barrier approach.</p> <p>Technical Memorandum No. 2 Water Quality Needs Assessment, O'Brien &amp; Gere Engineers, Inc. (November 2001); Draft Source Water Assessment Study, Maryland Department of the Environment (April 2003); Potomac WFP Facility Plan, O'Brien &amp; Gere Engineers, Inc. (September 2002); Draft Feasibility Study Report, Black &amp; Veatch (November 2013).</p> <p><b>COST CHANGE</b></p> <p>Due to budgetary constraints the project was deferred to beyond six years.</p> <p><b>OTHER</b></p> <p>The project scope has remained the same. Significant outreach activities occurred as part of the planning phase of this project. The National Environmental Policy Act (NEPA) process was concluded in January 2018 when the National Park Service (NPS) approved the Environmental Assessment and transmitted its record of decision and the Finding of No Significant Impact. A series of briefings with State legislators, County Council members, County Executive staff, and County Council staff will be undertaken prior to commencement of further engineering work. Both Councils will review the results of the detailed study and must approve continuing with the project before design and construction may proceed. Future land costs are included in project W-202.00.</p> <p><b>COORDINATION</b></p> <p>Coordinating Agencies: Maryland Department of Natural Resources; Maryland Department of the Environment; Maryland-National Capital Park &amp; Planning Commission; Montgomery County Department of Environmental Protection; Montgomery County Government; National Park Service; Prince George's County Department of Environmental Resources; Prince George's County Government; U.S. Army Corps of Engineers</p> <p>Coordinating Projects: W - 000073.33 - Potomac WFP Consent Decree Program</p>
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E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$6,340	
Total Cost	\$6,340	
Impact on Water and Sewer Rate	\$0.01	

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'04
Date First Approved	FY'03
Initial Cost Estimate	936
Cost Estimate Last FY	94,144
Present Cost Estimate	97,456
Approved Request Last FY	
Total Expense & Encumbrances	2,267
Approval Request Year 1	

G. Status Information	
Land Status	Land and R/W to be acquired
Project Phase	Planning
Percent Complete	100 %
Estimated Completion Date	TBD
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

<p><b>H. Map</b></p> <p>MAP NOT AVAILABLE</p>
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Potomac WFP Main Zone Pipeline

A. Identification and Coding Information		
Agency Number	Project Number	Update Code
W - 000073.32	133800	Change

PDF Date	October 1, 2022
Date Revised	

Pressure Zones	Montgomery Main 495A; Prince George's High HG450A;
Drainage Basins	
Planning Areas	Potomac-Cabin John & Vicinity PA 29

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	23,287	1,987	300	21,000	4,500	4,500	4,000	3,000	3,000	2,000	
Land											
Construction	87,000			87,000			14,000	29,500	29,500	14,000	
Other	5,415		15	5,400	225	225	900	1,625	1,625	800	
Total	115,702	1,987	315	113,400	4,725	4,725	18,900	34,125	34,125	16,800	

C. Funding Schedule (000's)

WSSC Bonds	47,437	815	129	46,493	1,937	1,937	7,749	13,991	13,991	6,888	
SDC	68,265	1,172	186	66,907	2,788	2,788	11,151	20,134	20,134	9,912	

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of redundant finished water discharge mains, water pumping station upgrades, and other process improvements at the Potomac Water Filtration Plant (WFP) to ensure a safe and reliable water supply. This work includes the following: two new 54-inch discharge pipes from the Main Zone and High Zone pumping stations that will feed into a new 84-inch discharge main that runs to the 96-inch and 66-inch main wye connections on River Road; the addition of two new pumps in the High Zone pumping station to serve the Main Zone; a new 66-inch suction pipe to serve the new pumps in the High Zone pumping station; other modifications to the High Zone pumping station, including surge protection modifications and electrical upgrades; and replacement of the existing 78-inch and 48-inch PCCP discharge mains, which are nearing the end of their useful lives, after the new 84-inch redundant discharge main is in place.

BENEFIT

System Reliability: This project will improve service reliability through fewer and shorter service interruptions; Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life

JUSTIFICATION

The primary purpose of this project is to provide redundancy to facilitate extended shutdowns for periodic maintenance, inspections, and repairs and to mitigate the risk to plant operations due to failure of any one of the finished water mains. The existing 78-inch PCCP main, which was installed in 1967, is the primary feed to the 96-inch Montgomery County Main Zone pipeline and the 66-inch River Road pipeline. The existing 48-inch PCCP main, which was installed in 1962, serves as only a partial backup to the 78-inch line, since it is not adequately sized to meet the current summer season demands. Furthermore, the existing mains are nearing the end of their useful lives and the 78-inch main alone cannot meet the projected 2040 maximum day demands of 210 MGD. The 78-inch main and the 48-inch main together could convey 210 MGD; however, relying on both pipes to meet future demands would decrease the redundancy and reliability of WSSC Water's system. The redundancy, process improvement, and rehabilitation/replacement work recommended by the Potomac WFP Main Zone Redundancy Business Case Evaluation (CDM Smith, May 2021), undertaken as part of WSSC Water's Asset Management Program, provides value to the customer by minimizing the risk of failure and ensuring a safe and reliable supply of up to 210 MGD of water in order to meet the current and future needs of the WSSD.

COST CHANGE

Not applicable.

OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are order of magnitude estimates and are expected to change based upon site conditions and design constraints. The schedule may change with the construction of the 78-inch and 48-inch replacement pipes after FY'28, once the 84-inch discharge main is in place.

COORDINATION

Coordinating Agencies: Maryland Department of Natural Resources; Maryland Department of the Environment; Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission; Montgomery County Department of Public Works and Transportation; Montgomery County

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$45	30
Debt Service	\$3,086	30
Total Cost	\$3,131	30
Impact on Water and Sewer Rate	\$0.01	30

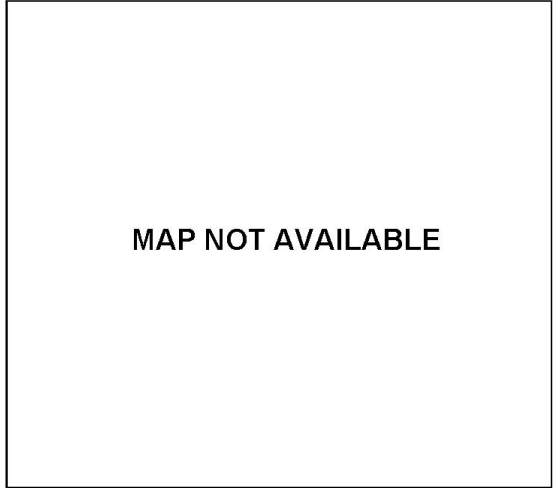
F. Approval and Expenditure Data (000's)

Date First in Program	FY'13
Date First Approved	FY'13
Initial Cost Estimate	330
Cost Estimate Last FY	111,184
Present Cost Estimate	115,702
Approved Request Last FY	1,155
Total Expense & Encumbrances	1,987
Approval Request Year 1	4,725

G. Status Information

Land Status	Public/Agency owned land
Project Phase	Planning
Percent Complete	100 %
Estimated Completion Date	December 2028
Growth	59%
System Improvement	41%
Environmental Regulation	
Population Served	
Capacity	210 MGD

H. Map





Potomac WFP Consent Decree Program

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Potomac WFP HGPOWF
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000073.33	173801	Change			Planning Areas	Bi-County

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	36,373	17,373	4,000	15,000	4,000	4,000	4,000	3,000			
Land	1,000	1,000									
Construction	149,669	16,669	25,000	108,000	27,000	27,000	27,000	27,000			
Other	7,600		1,450	6,150	1,550	1,550	1,550	1,500			
Total	194,642	35,042	30,450	129,150	32,550	32,550	32,550	31,500			

C. Funding Schedule (000's)

WSSC Bonds	194,642	35,042	30,450	129,150	32,550	32,550	32,550	31,500			
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D. Description & Justification

<p><b>DESCRIPTION</b></p> <p>The Potomac WFP Consent Decree Program provides for the planning, design, and construction required for the implementation of Short-Term Operational and Long-Term Capital Improvements at the Potomac Water Filtration Plant (WFP) to allow WSSC Water to meet the new discharge limitations identified in the Consent Decree.</p> <p><b>BENEFIT</b></p> <p>Regulatory &amp; Other Agreements: This project is required to meet regulatory requirements, multi-jurisdictional agreements, and/or consent decrees; Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties</p> <p><b>JUSTIFICATION</b></p> <p>The Consent Decree (CD) was Entered by the U.S. District Court of Maryland on April 15, 2016. Under the terms of the CD WSSC Water is required to "undertake short-term operational changes and capital improvements at the Potomac WFP that will enable WSSC Water to reduce significantly the pounds per day of solids discharged to the River" (CD Section II. Paragraph 6.i); and to plan, design, and implement long-term "upgrades to the existing Plant or to design and construct a new plant to achieve the effluent limits, conditions, and waste load allocations established by the Maryland Department of the Environment (the Department) and/or in this Consent Decree, and incorporated in a new discharge permit to be issued by the Department" (CD Section II. Paragraph 6.ii). The CD required WSSC Water to submit a Draft Audit Report and Draft Long-Term Upgrade Plan to the Citizens and the Department by November 15, 2016, and final reports to the Citizens and the Department by January 1, 2017. The Final Audit and Long-Term Upgrade Plan Reports were submitted to the Citizens and the Department on December 29, 2016. The Department reviews the Audit Report and selects recommended improvements in operations, monitoring, and waste tracking, along with select capital projects that can be completed no later than April 1, 2020 and that are necessary to achieve the goals identified in CD Section IV. Paragraph 24. Additionally, the work required to implement the Long-Term Capital Improvements Project(s) shall be fully implemented in accordance with the schedule set forth in the Long-Term Upgrade Plan. WSSC Water shall be subject to a lump-sum stipulated penalty in accordance with the CD for failure to implement the Long-Term Capital Improvement Project(s) by January 1, 2026.</p> <p><b>COST CHANGE</b></p> <p>The expenditure projections were updated to reflect actual bids for the sedimentation basin upgrades.</p> <p><b>OTHER</b></p> <p>The project scope has remained the same. The schedule and expenditure projections shown in Block B above are a mix of actual bids and design level estimates and include \$1,000,000 for Supplemental Environmental Projects included under CD Section IX. Paragraph 50. WSSC Water Green Bonds will be utilized to fund a portion of this project. The reduction in suspended solids discharged into the Potomac River will address the following International Capital Market Association (ICMA) Green Bond Principles 2016 categories: Pollution prevention/control; and Terrestrial and aquatic biodiversity conservation.</p> <p><b>COORDINATION</b></p> <p>Coordinating Agencies: Maryland Department of the Environment; Montgomery County Government; National Park Service; Prince George's County Government; U.S. Environmental Protection Agency, Region III</p> <p>Coordinating Projects: W - 000073.30 - Potomac WFP Submerged Channel Intake; W - 000073.32 - Potomac WFP Main Zone Pipeline</p>
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E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$12,662	28
Total Cost	\$12,662	28
Impact on Water and Sewer Rate	\$0.03	28
F. Approval and Expenditure Data (000's)		
Date First in Program		FY'17
Date First Approved		FY'16
Initial Cost Estimate		27,250
Cost Estimate Last FY		182,298
Present Cost Estimate		194,642
Approved Request Last FY		25,200
Total Expense & Encumbrances		35,042
Approval Request Year 1		32,550

G. Status Information	
Land Status	Land Acquired
Project Phase	Construction
Percent Complete	0 %
Estimated Completion Date	January 2027
Growth	
System Improvement	
Environmental Regulation	100%
Population Served	
Capacity	

H. Map
MAP NOT AVAILABLE

# Large Diameter Water Pipe & Large Valve Rehabilitation Program

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000161.01	113803	Change			Planning Areas	Bi-County

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	63,403		6,921	56,482	7,673	8,291	8,812	9,549	10,310	11,847	
Land											
Construction	651,577		39,953	611,624	64,441	77,693	84,211	111,115	137,798	136,366	
Other	71,497		4,689	66,808	7,212	8,598	9,302	12,063	14,811	14,822	
Total	786,477		51,563	734,914	79,326	94,582	102,325	132,727	162,919	163,035	

## C. Funding Schedule (000's)

WSSC Bonds	786,477		51,563	734,914	79,326	94,582	102,325	132,727	162,919	163,035	
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## D. Description & Justification

### DESCRIPTION

The purpose of this program is to plan, inspect, design, and rehabilitate or replace large diameter water transmission mains and large system valves that have reached the end of their useful life. Condition assessment and/or corrosion monitoring is performed on metallic pipelines, including ductile iron, cast iron, and steel, to identify lengths of pipe requiring replacement or rehabilitation and cathodic protection. The PCCP Inspection and Condition Assessment and Monitoring Program identifies individual pipe segments that require repair or replacement to assure the continued safe and reliable operation of the pipeline. The program also identifies extended lengths of pipe that require the replacement of an increased number of pipe segments in varying stages of deterioration that are most cost effectively accomplished by the replacement or rehabilitation of long segments of the pipeline or the entire pipeline. Rehabilitation or replacement of these mains provides value to the customer by minimizing the risk of failure and ensuring a safe and reliable water supply. The program includes installation of Acoustic Fiber Optic Monitoring equipment in order to accomplish these goals in PCCP mains.

\*EXPENDITURES FOR LARGE DIAMETER WATER PIPE REHABILITATION ARE EXPECTED TO CONTINUE INDEFINITELY.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; System Reliability: This project will improve service reliability through fewer and shorter service interruptions; Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties

### JUSTIFICATION

WSSC Water has approximately 1,031 miles of large diameter water main ranging from 16-inches to 96-inches in diameter. This includes 335 miles of cast iron, 326 miles of ductile iron, 35 miles of steel, and 335 miles of PCCP. Internal inspection and condition assessment is performed on PCCP pipelines 36-inches and larger in diameter. Of the 335 miles of PCCP, 140 miles are 36-inch diameter and larger. The inspection program includes internal visual and sounding, sonic/ultrasonic testing, and electromagnetic testing to establish the condition of each pipe section and determine if maintenance repairs, rehabilitation, or replacement are needed.

The planning and design phase evaluates the alignment, hydraulic capacity, and project coordination, among other factors, in an effort to re-engineer these pipelines to meet today's design standards. The design effort includes the preparation of bid ready contract documents including all needed rights-of-way acquisitions and regulatory permits. The constructed system is inspected and an as-built plan is produced to serve as the renewed asset record.

In July 2013, WSSC Water's Acoustic Fiber Optic monitoring system identified breaking wires in a 54-inch diameter PCCP water transmission main in the Forestville area of Prince George's County. Upon attempting to close nearby valves to isolate the failing pipe for repair, WSSC Water crews encountered an inoperable valve with a broken gear, requiring the crew to drop back to the next available valve. This dropping-back to another valve would block one of the major water mains serving Prince George's County, significantly enlarging the shutdown area and reduce our capacity to supply water to over 100,000 residents. In order to minimize the risk associated with inoperable large valves and possible water outages, the large valve inspection and repair program was initiated to systematically inspect, exercise, repair, or replace any of the nearly 1,500 large diameter valves and vaults located throughout the system.

Utility Wide Master Plan (December 2007); 30 Year Infrastructure Plan (2007); FY'24 Water Network Asset Management Plan (May 2022).

### COST CHANGE

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$51,161	
Total Cost	\$51,161	
Impact on Water and Sewer Rate	\$0.11	

## 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	576,383
Present Cost Estimate	786,477
Approved Request Last FY	45,675
Total Expense & Encumbrances	
Approval Request Year 1	79,326

## G. Status Information

Land Status	Not Applicable
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	On-Going

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

## H. Map

MAP NOT AVAILABLE

Program costs reflect the latest schedule and expenditure estimates based upon the recommendations from the Buried Water Assets System Asset Management Plan.

#### **OTHER**

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are order of magnitude estimates and are expected to change based upon the results of the on-going inspections and condition assessments. Additional costs associated with PCCP inspection/condition assessment, large valve inspection/repairs, and emergency repairs are included in the Operating Budget. WSSC Water Green Bonds will be utilized to fund a portion of this project. The annual replacement work for large diameter water mains will address the following International Capital Market Association (ICMA) Green Bond Principles 2016 category: Sustainable water management.

#### **COORDINATION**

Coordinating Agencies: Local Community Civic Associations; Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission; Montgomery County Department of Public Works and Transportation; Montgomery County Government;(including localities where work is to be performed); Prince George's County Government;(including localities where work is to be performed); Prince George's County Department of Permitting Inspection and Enforcement

Coordinating Projects: W - 000001.00 - Water Reconstruction Program; W - 000107.00 - Specialty Valve Vault Rehabilitation Program

# I-495/I-270 Traffic Relief Plan Pipeline Relocations

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Cabin John 350A; Falls Road 552A; Montgomery High					
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Cabin John 07; Muddy Branch 13; Rock Run 1; Watts Branch					
W - 000161.02	382306	Change			Planning Areas	Gaithersburg & Vicinity PA 20; Potomac-Cabin John & Vicinity					

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	25,115	374	65	24,676	2,784	7,403	7,285	4,816	2,388		
Land											
Construction	159,242	7		159,235	15,922	47,772	47,771	31,847	15,923		
Other	9,200		3	9,197	936	2,759	2,753	1,833	916		
<b>Total</b>	<b>193,557</b>	<b>381</b>	<b>68</b>	<b>193,108</b>	<b>19,642</b>	<b>57,934</b>	<b>57,809</b>	<b>38,496</b>	<b>19,227</b>		

## C. Funding Schedule (000's)

Contributions/Other	193,557	381	68	193,108	19,642	57,934	57,809	38,496	19,227		
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## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of water and sewer pipe relocations necessitated by the State of Maryland's plans to expand I-495 and I-270.

### BENEFIT

Regulatory & Other Agreements: This project is required to meet regulatory requirements, multi-jurisdictional agreements, and/or consent decrees

### JUSTIFICATION

In September 2017, the Maryland Department of Transportation (MDOT) State Highway Administration (SHA) announced a proposed highway improvement project to widen I-495 and I-270 in Montgomery and Prince George's Counties. January 2020, the Maryland Board of Public Works set a condition that the process start with Phase 1 of the project, which focuses on I-495 from the George Washington Memorial Parkway in Virginia to I-270 in Maryland and on I-270 from I-495 to I-70. February 2020, MDOT SHA issued a request for qualifications for preliminary development activities for Phase 1. July 2020, the Federal Highway Administration (FHWA) and MDOT SHA completed the draft environmental impact statement (DEIS). December 2020, a request for proposals was issued by MDOT and the Maryland Transportation Authority (MDTA) for a Phase 1 developer. January 2021, MDOT SHA recommended that Alternative 9 be identified as the preferred alternative in the DEIS. February 2021, MDOT and MDTA announced the selection of Accelerate Maryland Partners, LLC to lead the predevelopment work on Phase 1. May 2021, Alternative 9: Phase 1 South was announced as the new recommended preferred alternative by FHWA and MDOT SHA. This alternative focuses on adding two high occupancy toll (HOT) managed lanes in each direction for I-495 from the George Washington Memorial Parkway in Virginia to east of MD 187 in Maryland, for I-270 from I-495 to I-370, and on the I-270 eastern spur from east of MD 187 to I-270. This alternative includes the construction of a new American Legion Bridge.

The preliminary plans indicate that the proposed MDOT SHA project will impact water and sewer assets owned by WSSC Water that are located in the I-495 and I-270 corridors within the WSSD. The impacted pipes range from 6 to 96-inches in diameter. WSSC Water has an existing memorandum of understanding (MOU) agreement with MDOT SHA to review and coordinate potential impacts to existing WSSC Water infrastructure to accommodate MDOT SHA highway improvement projects. Negotiations on a Framework Agreement to ensure this project poses no financial impact to ratepayers are underway.

### COST CHANGE

Not applicable.

### OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are order of magnitude estimates based upon Alternative 9: Phase 1 South and are expected to change based upon site conditions and design constraints. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.

### COORDINATION

Coordinating Agencies: Maryland State Department of Transportation; Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission; Montgomery County Government; Prince George's County Government  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service		
Total Cost		
Impact on Water and Sewer Rate		

## F. Approval and Expenditure Data (000's)

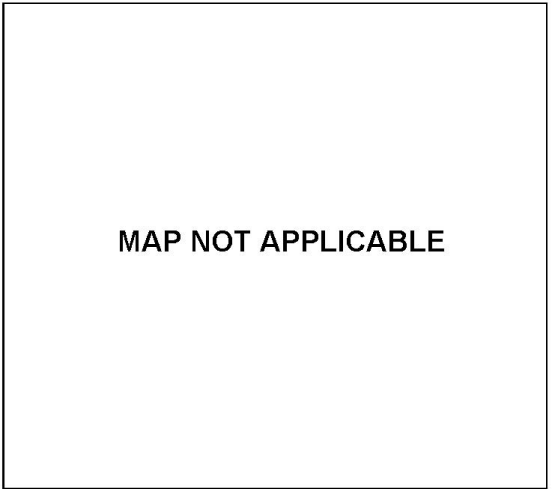
Date First in Program	FY'23
Date First Approved	FY'23
Initial Cost Estimate	182,600
Cost Estimate Last FY	182,600
Present Cost Estimate	193,557
Approved Request Last FY	18,555
Total Expense & Encumbrances	381
Approval Request Year 1	19,642

## G. Status Information

Land Status	Not Applicable
Project Phase	Planning
Percent Complete	0 %
Estimated Completion Date	TBD

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

## H. Map



# Patuxent Raw Water Pipeline

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Prince George's Main HG320A					
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins						
W - 000172.07	063804	Change			Planning Areas	Bi-County					

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	2,867	2,807	50	10	10						
Land	306	306									
Construction	29,180	19,080	9,600	500	500						
Other	1,016		965	51	51						
Total	33,369	22,193	10,615	561	561						

## C. Funding Schedule (000's)

WSSC Bonds	33,369	22,193	10,615	561	561						
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## D. Description & Justification

**DESCRIPTION**  
This project provides for the planning, design, and construction of approximately 2.5 miles of new 48-inch diameter raw water pipeline from the Rocky Gorge Raw Water Pumping Station to the Patuxent Water Filtration Plant (Plant), cleaning of the existing water lines, and replacement of valves.

**BENEFIT**  
System Reliability: This project will improve service reliability through fewer and shorter service interruptions; System Capacity: This project will enhance existing infrastructure by building additional capacity in order to meet existing and/or future demand; Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life

**JUSTIFICATION**  
The existing raw water supply facilities are hydraulically limited to 72 MGD with all pumps running at the Rocky Gorge Pumping Station. In order to convey more than 72 MGD of raw water, a new raw water pipeline is required. A fourth raw water pipeline from the Rocky Gorge Pumping Station to the Patuxent Water Filtration Plant and modification/expansion of the Rocky Gorge Pumping Station will provide a firm raw water pumping transmission capacity of 110 MGD. These improvements, in conjunction with expansion of the Patuxent Water Filtration Plant, will give the Plant a firm nominal capacity of 72 MGD, with an emergency capacity of 110 MGD.

Patuxent WFP Facility Plan (April 1997); In-House Study (April 2002).

**COST CHANGE**  
The schedule and expenditure projections were revised based upon actual bids and updated material cost information.

**OTHER**  
The project scope has remained the same. The Rocky Gorge Valve Replacement and the cleaning of existing raw water pipelines are 100% complete. The new raw water pipeline is currently in construction. The schedule and expenditure projections for the new raw water pipeline shown in Block B above are based upon actual bids received. The project has been delayed due to a lengthy permit and right-of-way acquisition process. Due to County permitting requirements the project design and construction schedule was split into two phases. As with any construction project, areas disturbed by construction will be restored. This restoration includes paving of impacted roads in accordance with Prince George's County Policy and Specifications for Utility Installation and Maintenance Manual (Section 4.7.2).

**COORDINATION**  
Coordinating Agencies: Baltimore Gas & Electric; Interstate Commission on the Potomac River Basin; Local Community Civic Associations;(West Laurel Civic Association); Maryland Department of the Environment; Maryland-National Capital Park & Planning Commission; Montgomery County Government; Prince George's County Government  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$394	25
Debt Service	\$2,171	25
Total Cost	\$2,565	25
Impact on Water and Sewer Rate	\$0.01	25

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'06
Date First Approved	FY'03
Initial Cost Estimate	18,750
Cost Estimate Last FY	30,766
Present Cost Estimate	33,369
Approved Request Last FY	8,140
Total Expense & Encumbrances	22,193
Approval Request Year 1	561

G. Status Information	
Land Status	Land Acquired
Project Phase	Construction
Percent Complete	50 %
Estimated Completion Date	June 2024

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

H. Map
MAP NOT AVAILABLE



# Regional Water Supply Resiliency

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000175.05	382101	Change			Planning Areas	Montgomery County PA

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	16,857		4,367	12,490	4,542	4,542	1,703	1,703			
Land											
Construction											
Other											
Total	16,857		4,367	12,490	4,542	4,542	1,703	1,703			

## C. Funding Schedule (000's)

Federal Aid	16,857		4,367	12,490	4,542	4,542	1,703	1,703			
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## D. Description & Justification

### DESCRIPTION

This project includes planning, preliminary engineering, community outreach, and coordination with elected officials for a regional raw water supply reservoir and raw water conveyance system to serve the long-range water supply needs of the Washington metropolitan region. A new regional reservoir is needed to mitigate against drought and contamination events in the Potomac River which could curtail or halt withdrawal from the river for days to months. This project will include the performance of a business case to evaluate conveyance alternatives and provide a recommendation for subsequent preliminary design.

### BENEFIT

System Reliability: This project will improve service reliability through fewer and shorter service interruptions

### JUSTIFICATION

Justification for the project is based in part on two independent studies. A study conducted by the Metropolitan Washington Council of Governments (COG) in 2016 concluded that the Washington metropolitan region needed, among other capital projects and initiatives, an off-river raw water storage reservoir to provide the necessary resiliency for water quantity and quality in the region in the event of a contamination in the Potomac River. A separate study conducted by the Interstate Commission for the Potomac River Basin (ICPRB) in 2017 concluded that the region needed additional off-river raw water reservoir capacity as part of the regional water supply system to ensure adequate water supply to the region in the event of a drought. A value planning evaluation for the proposed project was conducted by the USACE in 2020. In the USACE 2022 "Report to Congress on Future Water Resources Development," this project was included under the title "Securing a Secondary Water Source for the Nation's Capital" as one of 21 projects that meet the requirements of Section 7001 of WRDA. This is a step toward possible federal funding for the feasibility study.

### COST CHANGE

Not applicable.

### OTHER

This project will be contingent upon receipt of federal grant funding and the execution of other relevant cost sharing agreements between WSSC Water and other ICPRB CO-OP Operations Committee members. Placement of the proposed work in the CIP will enable WSSC Water to solicit funding opportunities in a timely fashion.

### COORDINATION

Coordinating Agencies: Federal and State Grant Agencies; Interstate Commission on the Potomac River Basin; Local Community Civic Associations; Maryland Department of the Environment; Maryland-National Capital Park & Planning Commission; Montgomery County Department of Environmental Protection; Montgomery County Government; National Park Service; Prince George's County Government; Prince George's County Department of Permitting Inspection and Enforcement; U.S. Army Corps of Engineers; Washington Metropolitan Council of Governments  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service		
Total Cost		
Impact on Water and Sewer Rate		

## F. Approval and Expenditure Data (000's)

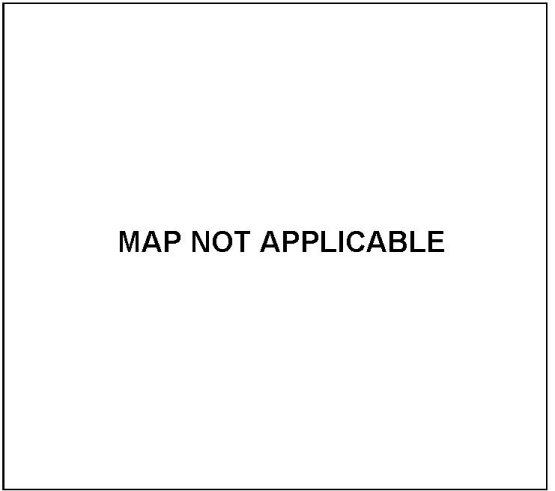
Date First in Program	FY'21
Date First Approved	FY'21
Initial Cost Estimate	15,000
Cost Estimate Last FY	15,904
Present Cost Estimate	16,857
Approved Request Last FY	4,285
Total Expense & Encumbrances	
Approval Request Year 1	4,542

## G. Status Information

Land Status	Land and R/W to be acquired
Project Phase	Planning
Percent Complete	0 %
Estimated Completion Date	TBD

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	1,900,000
Capacity	7.5 BG

## H. Map



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

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000202.00	983857	Change			Planning Areas	Bi-County

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision											
Land	8,815		1,645	6,570	1,095	1,095	1,095	1,095	1,095	1,095	600
Construction											
Other											
Total	8,815		1,645	6,570	1,095	1,095	1,095	1,095	1,095	1,095	600

C. Funding Schedule (000's)

WSSC Bonds	8,781		1,611	6,570	1,095	1,095	1,095	1,095	1,095	1,095	600
SDC	34		34								

D. Description & Justification

<p><b>DESCRIPTION</b></p> <p>This project provides a consolidated estimate of funding for the acquisition of land and rights-of-way for water projects and programs and for easement and land acquisitions for watershed protection. 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.</p> <p><b>BENEFIT</b></p> <p>Financial Efficiency: This project is expected to increase revenues, decrease expenses, or both</p> <p><b>JUSTIFICATION</b></p> <p>Consolidation of expenditures for land and rights-of-way acquisitions provides flexibility in expending funds in a specific fiscal year and permits WSSC Water 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 WSSC Water an equitable negotiation position by avoiding project-specific cost displays prior to contacting property owners.</p> <p>Acquisition needs are determined by WSSC Water and are based upon facility planning efforts, alignment studies, field surveys, realignments required by other agencies, or requirements identified within the Development Services Process.</p> <p><b>COST CHANGE</b></p> <p>Not applicable.</p> <p><b>OTHER</b></p> <p>The project scope has remained the same. The schedule and expenditure projections shown in Block B above 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.</p> <p><b>COORDINATION</b></p> <p>Coordinating Agencies: Not Applicable Coordinating Projects: Not Applicable</p>
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E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$679	
Total Cost	\$679	
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	10,465
Present Cost Estimate	8,815
Approved Request Last FY	1,095
Total Expense & Encumbrances	
Approval Request Year 1	1,095

G. Status Information	
Land Status	Land and R/W to be acquired
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	Not Applicable
Growth	
System Improvement	20%
Environmental Regulation	80%
Population Served	
Capacity	

H. Map
MAP NOT AVAILABLE

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## **Section 4 - Bi-County Sewer Projects**

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**FINANCIAL SUMMARY**

(ALL FIGURES IN THOUSANDS)

**BI-COUNTY SEWER PROJECTS**

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 22	EST. EXPEND 23	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BEYOND SIX YEARS	PAGE NUM
						YR 1 24	YR 2 25	YR 3 26	YR 4 27	YR 5 28	YR 6 29		
S - 000022.06	Blue Plains WWTP: Liquid Train Projects, Part 2	326,696	-	26,124	218,619	23,800	26,514	34,378	50,205	45,556	38,166	81,953	4-3
S - 000022.07	Blue Plains WWTP: Biosolids Management, Part 2	97,319	-	15,287	52,423	15,521	10,269	5,846	5,935	7,175	7,677	29,609	4-4
S - 000022.09	Blue Plains WWTP: Plant-wide Projects	128,926	-	13,365	99,443	15,214	18,192	22,766	22,528	8,806	11,937	16,118	4-5
S - 000022.11	Blue Plains: Pipelines & Appurtenances	225,898	-	13,714	187,081	16,452	18,446	37,132	51,669	41,235	22,147	25,103	4-6
S - 000089.24	Anacostia #2 WWPS Upgrades	64,087	2,727	10,177	51,183	24,555	23,254	3,374	-	-	-	-	4-7
S - 000103.02	Piscataway Bioenergy	334,835	234,119	64,092	36,624	29,253	7,161	210	-	-	-	-	4-8
S - 000170.09	Trunk Sewer Reconstruction Program	386,144	-	64,130	322,014	55,176	47,726	51,701	52,438	55,585	59,388	-	4-10
S - 000203.00	Land & Rights-of-Way Acquisition - Bi- County Sewer	2,180	-	210	1,970	195	595	595	195	195	195	-	4-12
	Projects Pending Close-Out	5,332	5,332	-	-	-	-	-	-	-	-	-	4-13
	<b>TOTALS</b>	1,571,417	242,178	207,099	969,357	180,166	152,157	156,002	182,970	158,552	139,510	152,783	

## **BLUE PLAINS WASTEWATER TREATMENT PLANT PROJECTS**

**(COSTS IN THOUSANDS)**

<b>AGENCY NUMBER</b>	<b>PROJECT NAME</b>	<b>ADOPTED FY'23 TOTAL COST</b>	<b>PROPOSED FY'24 TOTAL COST</b>	<b>CHANGE \$</b>	<b>CHANGE %</b>	<b>SIX-YEAR COST</b>	<b>COMPLETION DATE (est)</b>
S-22.06	Blue Plains WWTP: Liquid Train Projects, Part 2	\$354,275	\$326,696	(\$27,579)	-7.8%	\$218,619	On-Going
S-22.07	Blue Plains WWTP: Biosolids Management, Part 2	90,043	97,319	7,276	8.1%	52,423	On-Going
S-22.09	Blue Plains WWTP: Plant-wide Projects	114,208	128,926	14,718	12.9%	99,443	On-Going
S-22.11	Blue Plains: Pipelines & Appurtenances	220,994	225,898	4,904	2.2%	187,081	On-Going
<b>TOTALS</b>		<b>\$779,520</b>	<b>\$778,839</b>	<b>(\$681)</b>	<b>-0.1%</b>	<b>\$557,566</b>	

**Summary:** These four projects, with an estimated total cost of \$778.8 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 Water 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 WSSC Water’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).

**Cost Impact:** These four Blue Plains projects, which comprise one of the largest groups of expenditures in the CIP, represent 21% of the Six-Year WSSC Water 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 Water’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 Water’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 Water customers’ bills.

# Blue Plains WWTP: Liquid Train Projects, Part 2

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Bi-County 30
S - 000022.06	954811	Change			Planning Areas	Bi-County

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision											
Land											
Construction	323,461		25,865	216,454	23,564	26,251	34,038	49,708	45,105	37,788	81,142
Other	3,235		259	2,165	236	263	340	497	451	378	811
Total	326,696		26,124	218,619	23,800	26,514	34,378	50,205	45,556	38,166	81,953

## C. Funding Schedule (000's)

WSSC Bonds	308,763		24,690	206,619	22,494	25,059	32,491	47,449	43,055	36,071	77,454
City of Rockville	17,933		1,434	12,000	1,306	1,455	1,887	2,756	2,501	2,095	4,499

## D. Description & Justification

### DESCRIPTION

This project provides funding for WSSC Water's share of Blue Plains liquid train projects for which construction began after June 30, 1993. This project is comprised of 24 projects that have been identified and prioritized by DC Water in their capital program. Projects with significant spending in FY'24 include: upgrades to the grit, screening, and primary treatment systems (BQ); upgrading effluent filters (IY); replacing/upgrading the primary clarifier mechanical components (J2); improvements to the headworks influent structures (BC); and nitrification reactors/sedimentation upgrades (PE).

### BENEFIT

Regulatory & Other Agreements: This project is required to meet regulatory requirements, multi-jurisdictional agreements, and/or consent decrees; Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life

### JUSTIFICATION

This is a continuation of the DC Water's upgrading of the Blue Plains Wastewater Treatment Plant. Blue Plains Inter-Municipal Agreement of 2012; DCWASA Master Plan (1998); Blue Plains Facilities Master Plan (2016); and DC Water FY'23 Capital Improvements Program.

### COST CHANGE

The schedule and expenditure projections were updated to reflect the latest estimates available from DC Water for the constituent Blue Plains joint-use projects as of May 2022.

### OTHER

The project scope has remained the same. Project costs are derived from the DC Water Capital & Operating Budget 10-year forecast of spending and DC Water's latest project management data, and fully reflect DC Water'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.

### COORDINATION

Coordinating Agencies: City of Rockville;(responsible for a share of funding); DC Water;(responsible for design and construction)  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$20,085	
Total Cost	\$20,085	
Impact on Water and Sewer Rate	\$0.05	

## F. Approval and Expenditure Data (000's)

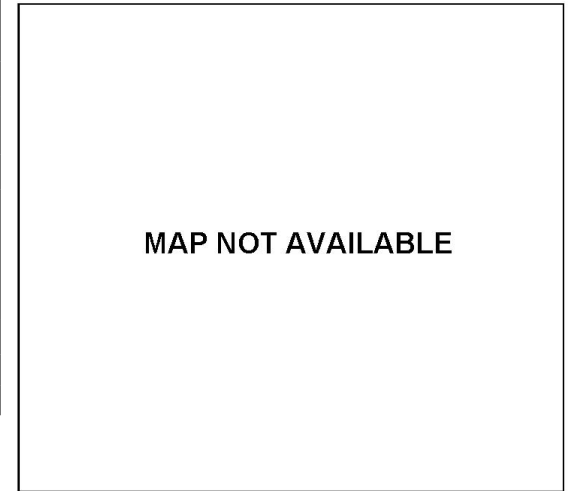
Date First in Program	FY'95
Date First Approved	FY'95
Initial Cost Estimate	
Cost Estimate Last FY	354,275
Present Cost Estimate	326,696
Approved Request Last FY	26,124
Total Expense & Encumbrances	
Approval Request Year 1	23,800

## G. Status Information

Land Status	Not Applicable
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	On-Going

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	169.6 / 370 MGD

## H. Map



Blue Plains WWTP: Biosolids Management, Part 2

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Bi-County 30
S - 000022.07	954812	Change			Planning Areas	Bi-County

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision											
Land											
Construction	96,355		15,136	51,903	15,367	10,167	5,788	5,876	7,104	7,601	29,316
Other	964		151	520	154	102	58	59	71	76	293
Total	97,319		15,287	52,423	15,521	10,269	5,846	5,935	7,175	7,677	29,609

C. Funding Schedule (000's)

WSSC Bonds	91,977		14,448	49,545	14,669	9,705	5,525	5,609	6,781	7,256	27,984
City of Rockville	5,342		839	2,878	852	564	321	326	394	421	1,625

D. Description & Justification

<p><b>DESCRIPTION</b></p> <p>This project provides funding for WSSC Water's share of the Blue Plains biosolids processes for which construction began after June 30, 1993. There are 9 projects from the DC Water capital program that are covered by the WSSC Water capital project. The projects that make up the majority of the FY'24 anticipated spending include: gravity thickener facility upgrades phase II (BX); biosolids blending development center (I3); additional centrifuges for pre-digestion dewatering (LD); biosolids process rehabilitation (RM); and upgrades to the solids processing building/DSLF (XZ). Starting in FY'28 are planned upgrades to the DAF facility (XY).</p> <p><b>BENEFIT</b></p> <p>Regulatory &amp; Other Agreements: This project is required to meet regulatory requirements, multi-jurisdictional agreements, and/or consent decrees; Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life</p> <p><b>JUSTIFICATION</b></p> <p>This project is needed to implement, upgrade, expand and rehabilitate various facilities that provide treatment and management of the Class A bio-solids program for Blue Plains. Blue Plains Inter-Municipal Agreement of 2012; DCWASA Master Plan (1998); EPMC IV Facility Plan, CH2MHILL (2001); Bio-solids Management at DCWASA Blue Plains Wastewater Treatment Plant Phase II - Design and Cost Considerations for Treatment Alternatives Report (December 2007); Blue Plains Facilities Master Plan (2016); and DC Water FY'23 Capital Improvements Program.</p> <p><b>COST CHANGE</b></p> <p>The schedule and expenditure projections were updated to reflect the latest estimates available from DC Water for the constituent Blue Plains joint-use projects as of May 2022.</p> <p><b>OTHER</b></p> <p>The project scope has remained the same. Project costs are derived from the DC Water Capital &amp; Operating Budget 10-year forecast of spending and DC Water's latest project management data, and fully reflect DC Water'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.</p> <p><b>COORDINATION</b></p> <p>Coordinating Agencies: City of Rockville;(responsible for a share of funding); DC Water;(responsible for design and construction)</p> <p>Coordinating Projects: Not Applicable</p>
--

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$5,983	
Total Cost	\$5,983	
Impact on Water and Sewer Rate	\$0.01	

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	90,043
Present Cost Estimate	97,319
Approved Request Last FY	15,287
Total Expense & Encumbrances	
Approval Request Year 1	15,521

G. Status Information	
Land Status	Not Applicable
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	On-Going

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	169.6 / 370 MGD

H. Map
MAP NOT AVAILABLE

# Blue Plains WWTP: Plant-wide Projects

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones						
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Bi-County 30					
S - 000022.09	023805	Change			Planning Areas	Bi-County					

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision											
Land											
Construction	127,650		13,233	98,459	15,063	18,012	22,541	22,305	8,719	11,819	15,958
Other	1,276		132	984	151	180	225	223	87	118	160
Total	128,926		13,365	99,443	15,214	18,192	22,766	22,528	8,806	11,937	16,118

## C. Funding Schedule (000's)

WSSC Bonds	121,848		12,631	93,984	14,379	17,193	21,516	21,291	8,323	11,282	15,233
City of Rockville	7,078		734	5,459	835	999	1,250	1,237	483	655	885

## D. Description & Justification

### DESCRIPTION

This project provides funding for WSSC Water's share of Blue Plains plant-wide projects for which construction began after June 30, 1993. There are 25 DC Water capital program projects covered by the WSSC Water capital project. Current projects with significant spending in FY'24 include: electrical system upgrades (TZ); floodwall construction (JF); plant-site drainage improvements (OE); process computer control system (IV and LX); and other miscellaneous projects.

### BENEFIT

Regulatory & Other Agreements: This project is required to meet regulatory requirements, multi-jurisdictional agreements, and/or consent decrees; Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life

### JUSTIFICATION

This is a continuation of DC Water's upgrading of the Blue Plains Wastewater Treatment Plant. Blue Plains Inter-Municipal Agreement of 2012; DCWASA Master Plan (1998); Blue Plains Facilities Master Plan (2016); and DC Water FY'23 Capital Improvements Program.

### COST CHANGE

The schedule and expenditure projections were updated to reflect the latest estimates available from DC Water for the constituent Blue Plains joint-use projects as of May 2022.

### OTHER

The project scope has remained the same. Project costs are derived from the DC Water Capital & Operating Budget 10-year forecast and latest project management data, and reflect DC Water'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.

### COORDINATION

Coordinating Agencies: City of Rockville;(responsible for a share of funding); DC Water;(responsible for design and construction)  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$7,926	
Total Cost	\$7,926	
Impact on Water and Sewer Rate	\$0.02	

## F. Approval and Expenditure Data (000's)

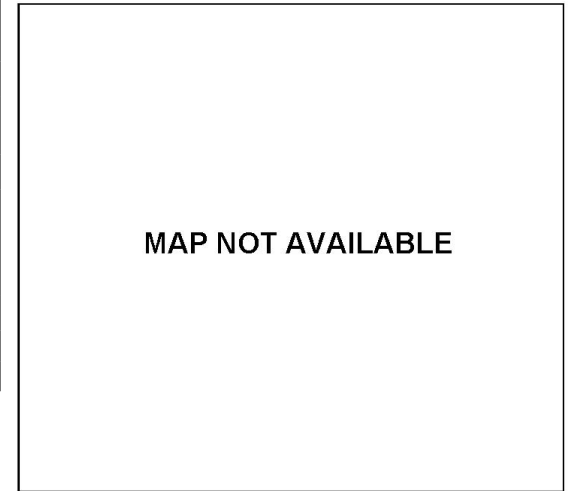
Date First in Program	FY'95
Date First Approved	FY'02
Initial Cost Estimate	
Cost Estimate Last FY	114,208
Present Cost Estimate	128,926
Approved Request Last FY	13,365
Total Expense & Encumbrances	
Approval Request Year 1	15,214

## G. Status Information

Land Status	Not Applicable
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	On-Going

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	169.6 / 370 MGD

## H. Map





# Blue Plains: Pipelines & Appurtenances

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Bi-County 30
S - 000022.11	113804	Change			Planning Areas	Bi-County

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision											
Land											
Construction	223,660		13,578	185,228	16,289	18,263	36,764	51,157	40,827	21,928	24,854
Other	2,238		136	1,853	163	183	368	512	408	219	249
Total	225,898		13,714	187,081	16,452	18,446	37,132	51,669	41,235	22,147	25,103

## C. Funding Schedule (000's)

WSSC Bonds	208,262		12,460	172,521	14,840	16,659	34,111	48,306	38,137	20,468	23,281
City of Rockville	17,636		1,254	14,560	1,612	1,787	3,021	3,363	3,098	1,679	1,822

## D. Description & Justification

### DESCRIPTION

This project provides funding for WSSC Water's share of Blue Plains-associated projects which are generally situated "outside the fence" of the treatment plant. There are 48 projects from the DC Water capital program under this project. Major projects in FY'24 include: rehabilitation of various portions of the Potomac Interceptor (LZ); reactivation of the Anacostia FM/GS (PJ); on-going construction associated with the Combined Sewer Overflow (CSO) Long Term Control Plan - for the Northeast Boundary Tunnel (CY) and the Potomac River Tunnel (CZ); rehabilitation of the BP Influent Sewers (HS); and modifications to the historic building that houses the Main PS (SD).

### BENEFIT

Regulatory & Other Agreements: This project is required to meet regulatory requirements, multi-jurisdictional agreements, and/or consent decrees; Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties

### JUSTIFICATION

This is a continuation of DC Water's upgrading of the Blue Plains-associated projects outside the fence. Blue Plains Inter-Municipal Agreement of 2012; DCWASA Master Plan (1998); Technical Memorandum No. 1, Multi-Jurisdictional Use Facilities Capital Cost Allocation (June 2013); and DC Water FY'23 Capital Improvements Program.

### COST CHANGE

The schedule and expenditure projections were updated to reflect the latest estimates available from DC Water for the constituent Blue Plains joint-use projects as of May 2022.

### OTHER

The project scope has remained the same. Project costs are derived from the DC Water Capital & Operating Budget 10-year forecast and project management data, and reflect DC Water's 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 Water's flow as derived in the Multi-Jurisdiction Use Facilities Study.

### COORDINATION

Coordinating Agencies: City of Rockville;(responsible for a share of funding); DC Water;(responsible for design and construction)  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$13,548	
Total Cost	\$13,548	
Impact on Water and Sewer Rate	\$0.03	

## F. Approval and Expenditure Data (000's)

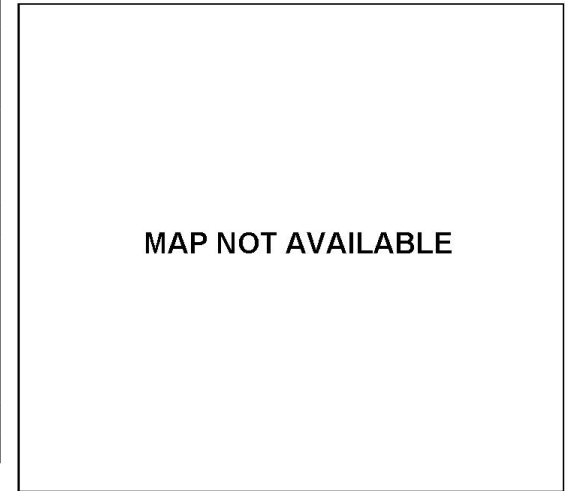
Date First in Program	FY'11
Date First Approved	FY'02
Initial Cost Estimate	
Cost Estimate Last FY	220,994
Present Cost Estimate	225,898
Approved Request Last FY	13,714
Total Expense & Encumbrances	
Approval Request Year 1	16,452

## G. Status Information

Land Status	Not Applicable
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	On-Going

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

## H. Map



# Anacostia #2 WWPS Upgrades

A. Identification and Coding Information		
Agency Number	Project Number	Update Code
S - 000089.24	382204	Change

PDF Date	October 1, 2022
Date Revised	

Pressure Zones	
Drainage Basins	Lower Anacostia 9
Planning Areas	Landover & Vicinity PA 72

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	6,058	2,727	1,252	2,079	1,323	440	316				
Land											
Construction	52,451		8,000	44,451	21,000	20,700	2,751				
Other	5,578		925	4,653	2,232	2,114	307				
Total	64,087	2,727	10,177	51,183	24,555	23,254	3,374				

## C. Funding Schedule (000's)

WSSC Bonds	48,664	1,901	5,943	40,820	18,010	19,674	3,136				
SDC	10,972	635	3,518	6,819	4,822	1,997					
DC Water Contribution	4,451	191	716	3,544	1,723	1,583	238				

## D. Description & Justification

### DESCRIPTION

This project provides for the replacement of transformers, switch gear, and MCC-A with redesign of 13.8kv switch gear in two IPA enclosures and 4.16KV switch gear in one IPA enclosure at the Anacostia #2 Wastewater Pump Station (WWPS). The Anacostia #2 WWPS is WSSC Water's largest and most critical WWPS with an average flow of 50 to 60 MGD, and storm peaks up to 260 MGD instantaneous flow. This WWPS receives wastewater from a large portion of WSSC Water's service area and delivers it to the Blue Plains Advanced Wastewater Treatment Plant in Washington, DC. Secondly, this project involves replacement of five existing bar screens and associated electrical upgrades and implementing NFPA 820 requirements for the pump station. Thirdly, the coarse screening of Beaver Dam S.A. flows will be evaluated and rehabilitated. Fourthly, this project includes replacement of the pump station's roof.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; System Capacity: This project will enhance existing infrastructure by building additional capacity in order to meet existing and/or future demand; Employee Safety: This project includes components that help protect the health and safety of employees

### JUSTIFICATION

The majority of the electrical equipment, excluding all 4.16kV MCCs and the unit substation, were installed with the original construction in the late 1970s and is beyond its useful life. In addition, several equipment parts are becoming increasingly difficult to find since the equipment is obsolete. Failure of any of the above critical components could cause serious issues in providing reliable power to the pump station. This replacement, rehabilitation, and upgrade work was recommended by various business case evaluations undertaken as part of WSSC Water's Asset Management Program.

### COST CHANGE

The schedule and expenditure projections have been updated to reflect the revised scope of the project and updated engineer's estimates.

### OTHER

The project scope has been revised to include replacement of the pump station's roof. The schedule and expenditure projections shown in Block B above are a mix of preliminary design and planning level estimates and are expected to change based upon site conditions and design constraints. DC Water will contribute a share of the electrical upgrades and bar screens project costs, which is indicated on the funding schedule shown in Block C above.

### COORDINATION

Coordinating Agencies: DC Water;(responsible for a share of funding); Maryland Department of the Environment; Potomac Electric Power Company  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$3,201	27
Total Cost	\$3,201	27
Impact on Water and Sewer Rate	\$0.01	27

## F. Approval and Expenditure Data (000's)

Date First in Program	FY'22
Date First Approved	FY'22
Initial Cost Estimate	31,298
Cost Estimate Last FY	42,473
Present Cost Estimate	64,087
Approved Request Last FY	17,475
Total Expense & Encumbrances	2,727
Approval Request Year 1	24,555

## G. Status Information

Land Status	Public/Agency owned land
Project Phase	Design
Percent Complete	30 %
Estimated Completion Date	March 2026
Growth	18%
System Improvement	82%
Environmental Regulation	
Population Served	
Capacity	199 MGD

## H. Map

MAP NOT APPLICABLE

# Piscataway Bioenergy

A. Identification and Coding Information		
Agency Number	Project Number	Update Code
S - 000103.02	063808	Change

PDF Date	October 1, 2022
Date Revised	

Pressure Zones	
Drainage Basins	
Planning Areas	Bi-County

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	64,545	51,695	7,030	5,820	4,860	950	10				
Land	61	61									
Construction	265,433	182,363	54,010	29,060	23,000	5,870	190				
Other	4,796		3,052	1,744	1,393	341	10				
<b>Total</b>	<b>334,835</b>	<b>234,119</b>	<b>64,092</b>	<b>36,624</b>	<b>29,253</b>	<b>7,161</b>	<b>210</b>				

## C. Funding Schedule (000's)

WSSC Bonds	330,914	233,549	64,092	33,273	29,253	3,810	210				
Federal Aid	570	570									
State Aid	3,351			3,351		3,351					

## D. Description & Justification

### DESCRIPTION

This project will develop a comprehensive program for the engineering, design, construction, maintenance, monitoring, and verification necessary to add sustainable energy equipment and systems to produce biogas and electricity at Piscataway WRRF. 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 Water 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.

### BENEFIT

Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties; Financial Efficiency: This project is expected to increase revenues, decrease expenses, or both; Innovation: This project utilizes new ideas, methods, and/or research to streamline processes, enhance services, and reduce costs

### JUSTIFICATION

In March 2009, WSSC Water received approval for a federal Department of Energy grant of \$570,900 for the feasibility study/conceptual design phase. On June 16, 2010, WSSC Water 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 WSSC Water 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 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 design based on a Thermal Hydrolysis/Mesophilic Anaerobic Digestion/Combined Heat & Power (TH/MAD/CHP) process supplemented by restaurant grease fuel was recommended.

The environmental benefits are estimated as follows: recover approximately 2 MW of renewable energy from wastewater biomass; reduce greenhouse gas production; reduce biosolids output; reduce lime demand; maintain permitted nutrient load limits to the Chesapeake Bay; reduce 5 million gallons/year of grease discharge to sewers; and 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; hedge against rising costs of power fuel and chemicals.

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

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other	\$1,865	26
Maintenance		
Debt Service	\$21,526	26
Total Cost	\$23,391	26
Impact on Water and Sewer Rate	\$0.05	26

## 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	333,269
Present Cost Estimate	334,835
Approved Request Last FY	74,708
Total Expense & Encumbrances	234,119
Approval Request Year 1	29,253

## G. Status Information

Land Status	Public/Agency owned land
Project Phase	Construction
Percent Complete	50 %
Estimated Completion Date	December 2024

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

## H. Map

MAP NOT AVAILABLE

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**

Not applicable.

**OTHER**

The project scope has remained the same. WSSC Water 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 Water's Damascus, Seneca, Parkway, Western Branch, and Piscataway WRRFs. 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 June 2017 WSSC Water was approved for a \$3 million grant through the Maryland Department of the Environment's Energy Water Infrastructure Program (EWIP). WSSC Water will continue to apply for other available funding sources. WSSC Water retained the following consulting services: in 2015 - Hawkins, Delafield and Wood - procurement; Raftelis Financial Consultants - financial; in 2016 - HDR Engineering, Inc. for program management and construction management for the Bioenergy project. In September 2017 WSSC Water issued a Request for Proposals (RFP) to two design-build entities for a progressive design-build delivery of the Bioenergy project. Transporting biosolids from Western Branch WRRF to Piscataway was included in the FY'19 program update. 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. In June 2018 WSSC Water awarded a Progressive Design-Build Contract to PC Construction for the Bioenergy project. In FY'19 the Solids Screenings at Four Remote WRRFs, Contract No. CD6630A19, was incorporated. In January 2020, the Maryland Energy Administration notified WSSC Water of approval of grant funding up to \$351,750 for Combined Heat & Power. WSSC Water has also applied for grants from SMECO, a local power utility. In December 2020 Phase 1 of the Bioenergy project was completed. A Gas Supply and Delivery Contract with Washington Gas Light for natural gas delivery to and from the Piscataway WRRF in the amount of \$8,510,000 was negotiated and executed on May 10, 2021.

**COORDINATION**

Coordinating Agencies: Chesapeake Bay Critical Areas; Maryland Department of the Environment; Maryland Energy Administration; Maryland-National Capital Park & Planning Commission;(Mandatory Referral Process); Montgomery County Department of Environmental Protection; Montgomery County Government; Prince George's County Government; SMECO; Washington Gas Light Company  
Coordinating Projects: S - 000096.14 - Piscataway WRRF Facility Upgrades; S - 000170.08 - Septage Discharge Facility Planning & Implementation

# Trunk Sewer Reconstruction Program

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Bi-County 30
S - 000170.09	113805	Change			Planning Areas	Bi-County

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	85,765		12,940	72,825	11,312	11,859	11,367	11,892	12,606	13,789	
Land											
Construction	265,273		45,360	219,913	38,848	31,528	35,634	35,778	37,925	40,200	
Other	35,106		5,830	29,276	5,016	4,339	4,700	4,768	5,054	5,399	
Total	386,144		64,130	322,014	55,176	47,726	51,701	52,438	55,585	59,388	

## C. Funding Schedule (000's)

WSSC Bonds	386,144		64,130	322,014	55,176	47,726	51,701	52,438	55,585	59,388	
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## D. Description & Justification

### DESCRIPTION

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 (ESAs). 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.

### BENEFIT

Regulatory & Other Agreements: This project is required to meet regulatory requirements, multi-jurisdictional agreements, and/or consent decrees; Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties

### JUSTIFICATION

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 Water 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 Water 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).

### COST CHANGE

Program costs reflect the latest schedule and expenditure estimates based upon the recommendations from the Buried Wastewater Assets System Asset Management Plan.

### OTHER

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 Water's deadline to FY'22 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 U.S. 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. 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 eight miles per year beginning in FY'25. Future land costs are included in project S-203.00.

### COORDINATION

Coordinating Agencies: Maryland Department of Natural Resources; Maryland Department of the Environment; Maryland Historical Trust; Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission; Montgomery County Department of Public Works and Transportation;

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$25,119	
Total Cost	\$25,119	
Impact on Water and Sewer Rate	\$0.06	

## 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	344,412
Present Cost Estimate	386,144
Approved Request Last FY	56,891
Total Expense & Encumbrances	
Approval Request Year 1	55,176

## G. Status Information

Land Status	Land and R/W to be acquired
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	On-Going

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

## H. Map

MAP NOT APPLICABLE



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

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
S - 000203.00	163800	Change			Planning Areas	Bi-County

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision											
Land	2,180		210	1,970	195	595	595	195	195	195	
Construction											
Other											
Total	2,180		210	1,970	195	595	595	195	195	195	

C. Funding Schedule (000's)

WSSC Bonds	1,702		196	1,506	195	297	429	195	195	195	
SDC	478		14	464		298	166				

D. Description & Justification

<p><b>DESCRIPTION</b></p> <p>This project provides a consolidated estimate of funding for the acquisition of land and rights-of-way for sewer projects and programs. 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.</p> <p><b>BENEFIT</b></p> <p>Financial Efficiency: This project is expected to increase revenues, decrease expenses, or both</p> <p><b>JUSTIFICATION</b></p> <p>Consolidation of expenditures for land and rights-of-way acquisitions provides flexibility in expending funds in a specific fiscal year and permits WSSC Water 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 WSSC Water an equitable negotiation position by avoiding project-specific cost displays prior to contacting property owners.</p> <p>Acquisition needs are determined by WSSC Water and are based upon facility planning efforts, alignment studies, field surveys, realignments required by other agencies, or requirements identified within the Development Services Process.</p> <p><b>COST CHANGE</b></p> <p>Not applicable.</p> <p><b>OTHER</b></p> <p>The project scope has remained the same. The schedule and expenditure projections shown in Block B above 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.</p> <p><b>COORDINATION</b></p> <p>Coordinating Agencies: Not Applicable Coordinating Projects: Not Applicable</p>
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E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$124	
Total Cost	\$124	
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	2,465
Present Cost Estimate	2,180
Approved Request Last FY	995
Total Expense & Encumbrances	
Approval Request Year 1	195

G. Status Information	
Land Status	Land and R/W to be acquired
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	Not Applicable
Growth	22%
System Improvement	78%
Environmental Regulation	
Population Served	
Capacity	

H. Map
MAP NOT APPLICABLE

**PENDING CLOSE-OUT PROJECT LISTING**  
**BI-COUNTY SEWER PROJECTS**  
 (ALL FIGURES IN THOUSANDS)

PROJECT NUMBER	AGENCY NUMBER	PROJECT NAME	ESTIMATED TOTAL COST	EXPENDITURES THRU FY 22	ESTIMATED EXPENDITURES FY 23	REMARKS
103802	S - 000170.08	Septage Discharge Facility Planning & Implementation	5,332	5,332	-	Staff recommended that the project be closed.
<b>TOTAL</b>			<b>5,332</b>	<b>5,332</b>	<b>-</b>	



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## **Section 5 - Prince George's County Water Projects**

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**FINANCIAL SUMMARY**  
(ALL FIGURES IN THOUSANDS)

**PRINCE GEORGE'S COUNTY WATER PROJECTS**

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 22	EST. EXPEND 23	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BEYOND SIX YEARS	PAGE NUM
						YR 1 24	YR 2 25	YR 3 26	YR 4 27	YR 5 28	YR 6 29		
W - 000012.02	Prince George's County HG415 Zone Water Main	3,938	1,976	1,840	122	115	7	-	-	-	-	-	5-2
W - 000034.02	Old Branch Avenue Water Main	34,276	4,246	11,165	18,865	11,110	7,755	-	-	-	-	-	5-3
W - 000034.04	Branch Avenue Water Transmission Improvements	50,796	22,205	1,265	27,326	17,668	8,814	811	33	-	-	-	5-4
W - 000034.05	Marlboro Zone Reinforcement Main	4,727	569	692	3,466	2,140	1,326	-	-	-	-	-	5-5
W - 000062.06	Rosaryville Water Storage Facility	9,655	-	-	-	-	-	-	-	-	-	9,655	5-6
W - 000084.03	Smith Home Farms Water Main	4,142	2,052	675	1,415	515	472	428	-	-	-	-	5-7
W - 000084.04	Westphalia Town Center Water Main	2,158	887	52	1,219	408	480	331	-	-	-	-	5-8
W - 000084.05	Prince George's County 450A Zone Water Main	41,130	2,744	99	38,287	5,555	12,760	9,598	6,435	2,602	1,337	-	5-9
W - 000093.01	Konterra Town Center East Water Main	2,713	302	9	2,402	836	952	614	-	-	-	-	5-10
W - 000105.01	Marlton Section 18 Water Main, Lake Marlton Avenue	3,039	19	2	3,018	476	511	511	505	508	507	-	5-11
W - 000137.03	South Potomac Supply Improvement, Phase 2	75,044	2,734	-	72,310	620	23,898	23,896	23,896	-	-	-	5-12
	<b>TOTALS</b>	231,618	37,734	15,799	168,430	39,443	56,975	36,189	30,869	3,110	1,844	9,655	

Prince George's County HG415 Zone Water Main

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Montgomery High Zone HG660A; Montgomery Main 495A;					
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins						
W - 000012.02		Change			Planning Areas	Patuxent PA 15					

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	445	341	100	4	4						
Land	47	47									
Construction	3,190	1,588	1,500	102	96	6					
Other	256		240	16	15	1					
Total	3,938	1,976	1,840	122	115	7					

C. Funding Schedule (000's)

WSSC Bonds	3,938	1,976	1,840	122	115	7					
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D. Description & Justification

**DESCRIPTION**  
This project provides for the planning, design, and construction of 1,990 feet of 24-inch diameter water main, 142 feet of 16-inch diameter water main, new isolation valves, and pressure reducing valves with flow control capability. It will improve system reliability by providing the flexibility of the delivery system to the Montgomery County High Zone HG660, Montgomery County Main Zone HG495A, and Patuxent Pressure Zone HG415A; it will also improve the reliability and provide a redundancy to the HG415A zone and its dependent lower zones currently supplied through the Patuxent Plant.

**BENEFIT**  
System Reliability: This project will improve service reliability through fewer and shorter service interruptions

**JUSTIFICATION**  
The new water main will provide a redundant feed to the Montgomery County High Zone HG660, Montgomery County Main Zone HG495, and Patuxent Pressure Zone HG415A in the event that the Patuxent Plant is out of service. The planning and engineering services have been provided through BOA Contract No. PM0003A05, Task Order No. 12: Patuxent Pressure Zone HG415A Redundancy Study, Whitman, Requardt & Associates, LLP (February 2009); BOA Contract No. PM0019A08, Task Order No. 11, Patuxent Pressure Zone HG415A 24-inch Transmission Main, EBA Engineering (December 2011); BOA Contract No. PM0007A13, Task Order No. 14, Patuxent Pressure Zone HG415A 24-inch Transmission Main, EBA Engineering (March 16, 2017) and BOA Contract 16654, Task Order No. 1.

**COST CHANGE**  
Not applicable.

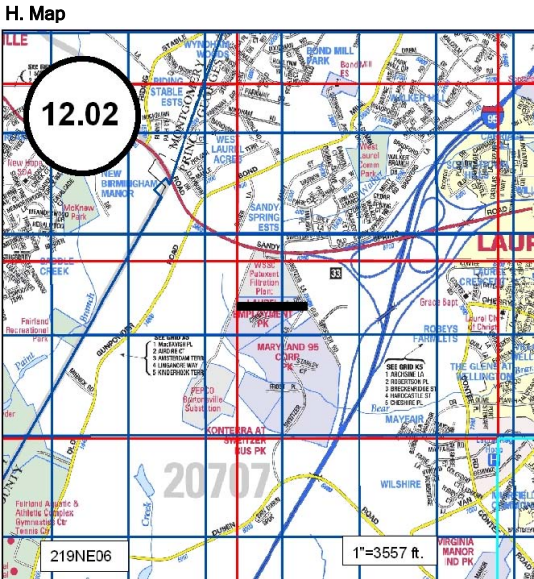
**OTHER**  
The project scope has remained the same. The schedule and expenditure projections shown in Block B above are actual bids and may change based upon site conditions and design revisions.

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

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$64	25
Debt Service	\$256	25
Total Cost	\$320	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	1,074
Cost Estimate Last FY	4,172
Present Cost Estimate	3,938
Approved Request Last FY	2,358
Total Expense & Encumbrances	1,976
Approval Request Year 1	115

G. Status Information	
Land Status	R/W acquired
Project Phase	Construction
Percent Complete	30 %
Estimated Completion Date	November 2023
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	



# Old Branch Avenue Water Main

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Clinton HG385B
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000034.02		Change			Planning Areas	Clinton & Vicinity PA 81A

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	2,719	2,419	150	150	100	50					
Land	268	268									
Construction	28,559	1,559	10,000	17,000	10,000	7,000					
Other	2,730		1,015	1,715	1,010	705					
Total	34,276	4,246	11,165	18,865	11,110	7,755					

## C. Funding Schedule (000's)

WSSC Bonds	17,138	2,123	5,582	9,433	5,555	3,878					
SDC	17,138	2,123	5,583	9,432	5,555	3,877					

## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of approximately 16,000 feet of 30-inch diameter water main and a new flow control valve along Old Branch Avenue, from Allentown Road to Piscataway Road.

### BENEFIT

System Reliability: This project will improve service reliability through fewer and shorter service interruptions; System Capacity: This project will enhance existing infrastructure by building additional capacity in order to meet existing and/or future demand

### JUSTIFICATION

This project will provide redundancy to a large area of Prince George's County, including the 85,000 customers in Clinton Pressure Zone HG385B and dependent zones. Service to these zones would be severely disrupted with the loss of the Marlboro Road Pressure Reducing Valves or associated piping. WSSC Water attempts to provide for average day demands in the event of the loss of any one water system facility and this project will meet that goal for Clinton Pressure Zone HG385B and dependent zones.

General Plan; M-NCP&PC Round 7.0 growth forecasts; WSSC Memorandum dated May 16, 2006.

### COST CHANGE

The expenditure projections were revised based upon actual bids.

### OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are actual bids and may change based upon site conditions and design revisions. Five properties have been acquired.

### COORDINATION

Coordinating Agencies: Maryland Department of the Environment; Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission; Prince George's County Government; Prince George's County Department of Permitting Inspection and Enforcement  
Coordinating Projects: W - 000062.06 - Rosaryville Water Storage Facility; W - 000084.05 - Prince George's County 450A Zone Water Main; W - 000137.03 - South Potomac Supply Improvement, Phase 2

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$477	26
Debt Service	\$1,115	26
Total Cost	\$1,592	26
Impact on Water and Sewer Rate		

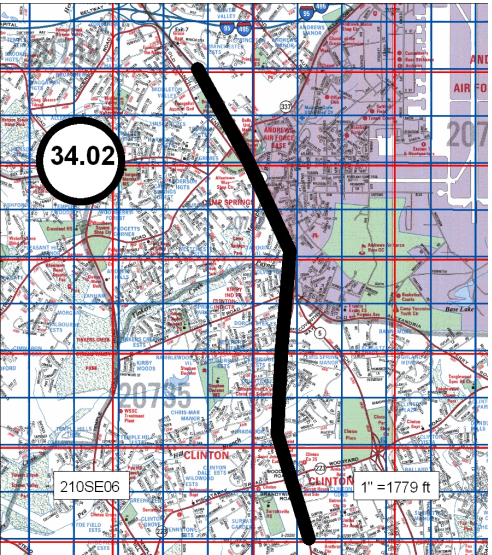
## F. Approval and Expenditure Data (000's)

Date First in Program	FY08
Date First Approved	FY08
Initial Cost Estimate	10,350
Cost Estimate Last FY	22,990
Present Cost Estimate	34,276
Approved Request Last FY	5,830
Total Expense & Encumbrances	4,246
Approval Request Year 1	11,110

## G. Status Information

Land Status	Land and R/W Acquired
Project Phase	Construction
Percent Complete	2 %
Estimated Completion Date	June 2025
Growth	50%
System Improvement	50%
Environmental Regulation	
Population Served	
Capacity	

## H. Map



# Branch Avenue Water Transmission Improvements

<b>A. Identification and Coding Information</b>			PDF Date	October 1, 2022	Pressure Zones	Clinton HG385B
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000034.04		Change			Planning Areas	Clinton & Vicinity PA 81A

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	3,996	3,361	550	85	62	13	10				
Land	244	244									
Construction	43,957	18,600	600	24,757	16,000	8,000	727	30			
Other	2,599		115	2,484	1,606	801	74	3			
<b>Total</b>	<b>50,796</b>	<b>22,205</b>	<b>1,265</b>	<b>27,326</b>	<b>17,668</b>	<b>8,814</b>	<b>811</b>	<b>33</b>			

## C. Funding Schedule (000's)

SDC	50,796	22,205	1,265	27,326	17,668	8,814	811	33			
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## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of approximately 18,121 feet of 42-inch diameter, 2,600 feet of 36-inch diameter, and 5,590 feet of 30-inch diameter water transmission mains along Branch Avenue, Brandywine Road, and Surratts Road in the Clinton area.

### BENEFIT

Economic Development: This growth project supports the economic development goals of the Counties; System Capacity: This project will enhance existing infrastructure by building additional capacity in order to meet existing and/or future demand

### JUSTIFICATION

The new water main will serve as a primary feed for the new Brandywine (formerly Clinton South) Tank.

Clinton Zone WSF & Transmission Improvements Modeling and Master Plan Report, Gannett Fleming, Inc. (February 2012).

### COST CHANGE

The schedule and expenditure projections were revised based upon updated engineer's estimates.

### OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are a mix of construction cost, design, and planning level estimates and are expected to change as design progresses. This project is split into four phases. The first phase is comprised of approximately 1,200 feet of 42-inch pipe along Surratts Road and has been constructed by Prince George's County as part of the County Surratts/Brandywine road widening project. The second phase is approximately 3,300 feet of 30-inch main along Branch Avenue and has been constructed by the Maryland State Highway Administration (SHA) under the SHA MD5/Brandywine interchange improvement project. The third phase was to construct approximately 12,400 feet of 42-inch pipe and 2,320 feet of 30-inch pipe along Branch Avenue and the construction was completed in Fall 2019 by a WSSC Water contractor. The last phase is to construct the approximately 6,900 feet of remaining pipe along Brandywine Road and Surratts Road to tie-in to the existing 30-inch pipe on Woodyard/Piscataway Road. Replacing approximately 3,000 feet of existing 16-inch PCCP pipe will also be included under this contract. Phase IV (BL5273F11) will also be bid and constructed by WSSC Water. The phase and completion percentage have been updated to reflect the status of Phase IV instead of all the phases. No WSSC Water rate supported debt will be used for this project. No additional land costs are anticipated at this time.

### COORDINATION

Coordinating Agencies: Maryland Department of Natural Resources; Maryland Department of the Environment; Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission;(Mandatory Referral Process); Prince George's County Department of Public Works and Transportation; Prince George's County Government; Prince George's County Department of Permitting Inspection and Enforcement; U.S. Army Corps of Engineers  
Coordinating Projects: W - 000062.06 - Rosaryville Water Storage Facility

<b>E. Annual Operating Budget Impact (000's)</b>		FY of Impact
Staff & Other		
Maintenance	\$785	27
Debt Service		
Total Cost	\$785	27
Impact on Water and Sewer Rate		

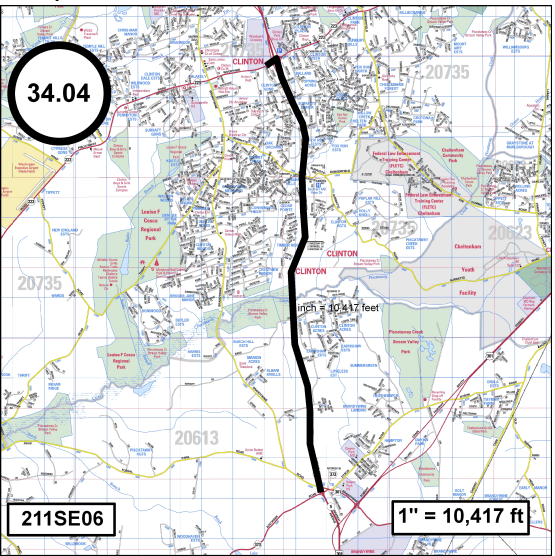
## F. Approval and Expenditure Data (000's)

Date First in Program	FY'14
Date First Approved	FY'14
Initial Cost Estimate	23,705
Cost Estimate Last FY	44,748
Present Cost Estimate	50,796
Approved Request Last FY	14,645
Total Expense & Encumbrances	22,205
Approval Request Year 1	17,668

## G. Status Information

Land Status	Land and R/W Acquired
Project Phase	Design
Percent Complete	70 %
Estimated Completion Date	May 2026
Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	

## H. Map





Marlboro Zone Reinforcement Main

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Clinton HG385B
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000034.05		Change			Planning Areas	Clinton & Vicinity PA 81A

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	714	564	50	100	50	50					
Land	3	3									
Construction	3,468	2	552	2,914	1,811	1,103					
Other	542		90	452	279	173					
Total	4,727	569	692	3,466	2,140	1,326					

C. Funding Schedule (000's)

WSSC Bonds	4,727	569	692	3,466	2,140	1,326					
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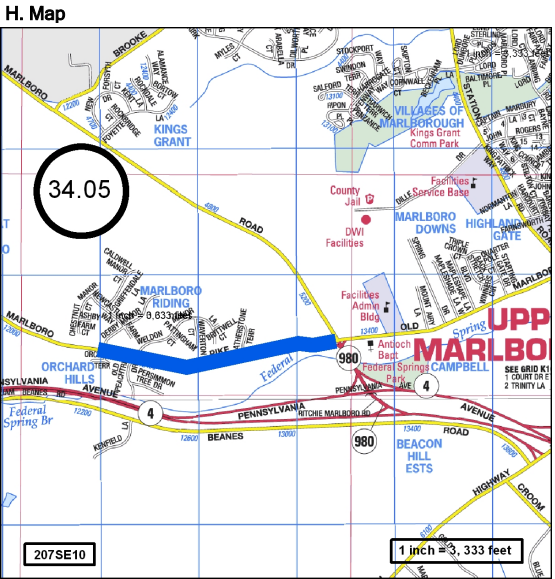
D. Description & Justification

<p><b>DESCRIPTION</b></p> <p>This project provides for the planning, design, and construction of approximately 4,000 feet of 16-inch diameter water transmission main and a flow control valve along Old Marlboro Pike in the Clinton area.</p> <p><b>BENEFIT</b></p> <p>System Reliability: This project will improve service reliability through fewer and shorter service interruptions</p> <p><b>JUSTIFICATION</b></p> <p>This new water main will provide system reliability and redundancy by connecting the 385B and 280A pressure zones. Clinton Zone WSF &amp; Transmission Improvements Modeling and Master Plan Report, Gannett Fleming, Inc. (February 2012).</p> <p><b>COST CHANGE</b></p> <p>Not applicable.</p> <p><b>OTHER</b></p> <p>The project scope has remained the same. The schedule and expenditure projections shown in Block B above are design level estimates and may change based upon site conditions and design constraints.</p> <p><b>COORDINATION</b></p> <p>Coordinating Agencies: Maryland State Highway Administration; Maryland-National Capital Park &amp; Planning Commission;(Mandatory Referral Process); Prince George's County Department of Environmental Resources; Prince George's County Government; Prince George's County Department of Permitting Inspection and Enforcement</p> <p>Coordinating Projects: W - 000062.06 - Rosaryville Water Storage Facility</p>
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E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$119	26
Debt Service	\$307	26
Total Cost	\$426	26
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	5,234
Cost Estimate Last FY	4,414
Present Cost Estimate	4,727
Approved Request Last FY	2,022
Total Expense & Encumbrances	569
Approval Request Year 1	2,140

G. Status Information	
Land Status	R/W acquired
Project Phase	Design
Percent Complete	100 %
Estimated Completion Date	December 2024
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	



# Rosaryville Water Storage Facility

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Southern 385B
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000062.06		Change			Planning Areas	Rosaryville PA 82A

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	900										900
Land											
Construction	7,496										7,496
Other	1,259										1,259
<b>Total</b>	<b>9,655</b>										<b>9,655</b>

## C. Funding Schedule (000's)

SDC	9,655										9,655
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## D. Description & Justification

<p><b>DESCRIPTION</b></p> <p>This project provides for the planning, design, and construction of approximately 2.0 million gallons (MG) of water storage to serve the Rosaryville area in the Clinton Pressure Zone.</p> <p><b>BENEFIT</b></p> <p>System Capacity: This project will enhance existing infrastructure by building additional capacity in order to meet existing and/or future demand; System Reliability: This project will improve service reliability through fewer and shorter service interruptions</p> <p><b>JUSTIFICATION</b></p> <p>Clinton Pressure Zone HG385B serves a large and growing area of Southern Prince George's County. Since storage facilities must be periodically removed from service for maintenance, having only one in a large zone creates operational problems. The Modeling and Master Plan Report indicates that there will be approximately 4.0 MG of storage deficit in Clinton Pressure Zone HG385B. WSSC Memorandum dated May 9, 2005, from Timothy Hirrel, Unit Coordinator, to Craig Fricke, Planning Group Leader; 2006 Water Production Projections; 2005 Water Storage Volume Criteria; Clinton Zone WSF &amp; Transmission Improvements Modeling and Master Plan Report, Gannett Fleming, Inc. (February 2012); Finished Water Storage Analysis Report (June 2013).</p> <p><b>COST CHANGE</b></p> <p>Not applicable.</p> <p><b>OTHER</b></p> <p>The project scope has remained the same. The schedule and expenditure projections shown in Block B above are planning level estimates and are expected to change based upon site conditions and design constraints. No WSSC Water rate supported debt will be used for this project.</p> <p><b>COORDINATION</b></p> <p>Coordinating Agencies: Maryland Department of the Environment; Maryland-National Capital Park &amp; Planning Commission; Prince George's County Department of Environmental Resources; Prince George's County Government</p> <p>Coordinating Projects: W - 000034.02 - Old Branch Avenue Water Main; W - 000034.03 - Water Transmission Improvements 385B Pressure Zone; W - 000034.04 - Branch Avenue Water Transmission Improvements; W - 000034.05 - Marlboro Zone Reinforcement Main</p>
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E. Annual Operating Budget Impact (000's)	FY of Impact
Staff & Other	
Maintenance	
Debt Service	
Total Cost	
Impact on Water and Sewer Rate	

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'21
Date First Approved	FY'13
Initial Cost Estimate	8,510
Cost Estimate Last FY	9,108
Present Cost Estimate	9,655
Approved Request Last FY	
Total Expense & Encumbrances	
Approval Request Year 1	

G. Status Information	
Land Status	Public/Agency owned land
Project Phase	Design
Percent Complete	0 %
Estimated Completion Date	TBD
Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	2.0 MG



Smith Home Farms Water Main

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Southern 385B					
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins						
W - 000084.03		Change			Planning Areas	Westphalia & Vicinity PA 78					

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	970	658	110	202	72	70	60				
Land											
Construction	2,899	1,394	477	1,028	376	340	312				
Other	273		88	185	67	62	56				
Total	4,142	2,052	675	1,415	515	472	428				

C. Funding Schedule (000's)

Contributions/Other	4,142	2,052	675	1,415	515	472	428				
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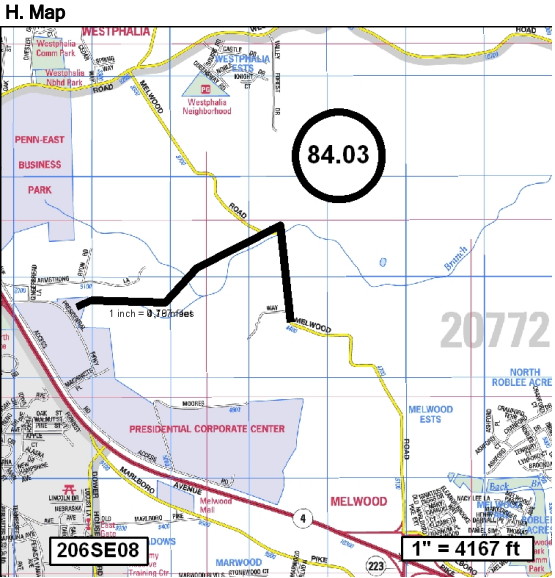
D. Description & Justification

<b>DESCRIPTION</b> This project provides for the planning, design, and construction of 7,600 feet of 16-inch diameter water main to serve the Smith Home Farms Subdivision.
<b>BENEFIT</b> Economic Development: This growth project supports the economic development goals of the Counties
<b>JUSTIFICATION</b> Smith Home Farm Subdivision Hydraulic Planning Analysis (Amended March 2015).
<b>COST CHANGE</b> Not applicable.
<b>OTHER</b> The project scope has remained the same. The schedule and expenditure projections shown in Block B above 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 Water rate supported debt will be used for this project.
<b>COORDINATION</b> Coordinating Agencies: Maryland-National Capital Park & Planning Commission;(Westphalia Sector Plan); Prince George's County Government Coordinating Projects: W - 000084.04 - Westphalia Town Center Water Main

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$227	
Debt Service		
Total Cost	\$227	
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	1,600
Cost Estimate Last FY	3,806
Present Cost Estimate	4,142
Approved Request Last FY	449
Total Expense & Encumbrances	2,052
Approval Request Year 1	515

G. Status Information	
Land Status	Not Applicable
Project Phase	Construction
Percent Complete	75 %
Estimated Completion Date	Developer Dependent
Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	





Westphalia Town Center Water Main

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Clinton HG385B
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000084.04		Change			Planning Areas	Westphalia & Vicinity PA 78

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	257	43	45	169	80	58	31				
Land											
Construction	1,735	844		891	275	359	257				
Other	166		7	159	53	63	43				
Total	2,158	887	52	1,219	408	480	331				

C. Funding Schedule (000's)

Contributions/Other	2,158	887	52	1,219	408	480	331				
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D. Description & Justification

**DESCRIPTION**  
This project provides for the planning, design, and construction of 4,700 feet of 16-inch diameter water main to serve Westphalia Town Center and vicinity.

**BENEFIT**  
Economic Development: This growth project supports the economic development goals of the Counties

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

**COST CHANGE**  
The schedule and expenditure projections have been updated based upon information provided by the developer.

**OTHER**  
The project scope has remained the same. The schedule and expenditure projections shown in Block B above 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 Water rate supported debt will be used for this project.

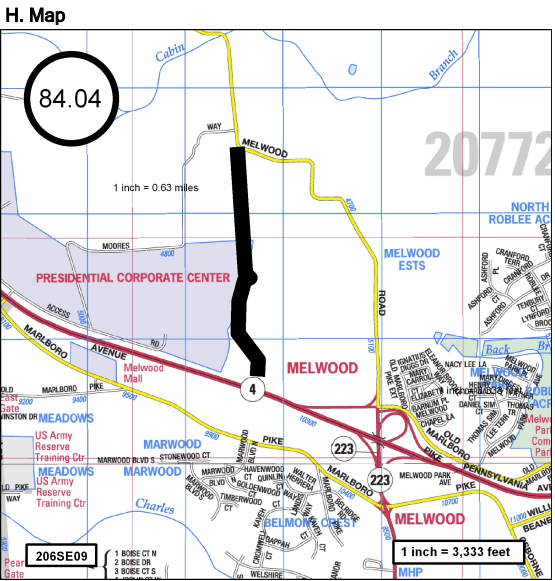
**COORDINATION**  
Coordinating Agencies: Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission; Prince George's County Government; Prince George's County Department of Permitting Inspection and Enforcement  
Coordinating Projects: W - 000084.03 - Smith Home Farms Water Main

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$140	
Debt Service		
Total Cost	\$140	
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	1,396
Cost Estimate Last FY	1,834
Present Cost Estimate	2,158
Approved Request Last FY	373
Total Expense & Encumbrances	887
Approval Request Year 1	408

G. Status Information	
Land Status	Not Applicable
Project Phase	Construction
Percent Complete	40 %
Estimated Completion Date	Developer Dependent

Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	



# Prince George's County 450A Zone Water Main

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Prince George's High HG450A
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000084.05		Change			Planning Areas	Prince George's County

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	3,314	2,744	90	480	50	100	100	100	65	65	
Land											
Construction	34,325			34,325	5,000	11,500	8,625	5,750	2,300	1,150	
Other	3,491		9	3,482	505	1,160	873	585	237	122	
Total	41,130	2,744	99	38,287	5,555	12,760	9,598	6,435	2,602	1,337	

## C. Funding Schedule (000's)

WSSC Bonds	41,130	2,744	99	38,287	5,555	12,760	9,598	6,435	2,602	1,337	
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## D. Description & Justification

### DESCRIPTION

This project provides for a capacity and alignment study, design, and construction of approximately 3.5 miles of new 48-inch diameter redundant transmission main for Prince George's High Pressure Zone HG450A. Portions of the transmission main that currently serve the HG450A and HG290B Pressure Zones will be out of service almost every year to meet the goals of the PCCP inspection program. A redundant transmission main is required to continue to provide service to our customers while the existing transmission main is planned to be out of service and to provide service in case the existing main fails.

### BENEFIT

System Reliability: This project will improve service reliability through fewer and shorter service interruptions

### JUSTIFICATION

When portions of the existing main are out of service, the remaining mains lack sufficient capacity and pumping against these restrictions can cause high pressure that may result in pipe failure. The new transmission main may parallel or replace existing mains as determined by modeling. The new main should be a minimum of 30-inch diameter and will start where the existing 54-inch diameter main inside the beltway connects to an existing 30-inch diameter main just north of Pennsylvania Avenue and tie in to the new 30-inch diameter main to be constructed under project W-34.02.

### COST CHANGE

The schedule and expenditure projections have been updated to reflect the revised scope of the project.

### OTHER

The project scope has been revised to remove approximately 1,800 feet of pipe due to SHA right-of-way adjustments. The schedule and expenditure projections shown in Block B above are preliminary design level estimates and are expected to change based upon site conditions and design constraints. An alignment and capacity study has been performed and final alignment and pipeline diameter has been selected. Northern alignment change required due to SHA permitting requirements change. This design change also required the relocation of an existing PRV (May 2021). Future land costs are included in project W-202.00.

### COORDINATION

Coordinating Agencies: Maryland Department of Natural Resources; Maryland Historical Trust; Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission;(Mandatory Referral Process); National Park Service; Prince George's County Department of Public Works and Transportation; Prince George's County Government; Prince George's County Department of Permitting Inspection and Enforcement; U.S. Army Corps of Engineers;Joint Base Andrews military base; Washington Metropolitan Area Transit Authority  
Coordinating Projects: W - 000034.02 - Old Branch Avenue Water Main; W - 000137.03 - South Potomac Supply Improvement, Phase 2

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$545	30
Debt Service	\$2,676	30
Total Cost	\$3,221	30
Impact on Water and Sewer Rate	\$0.01	30

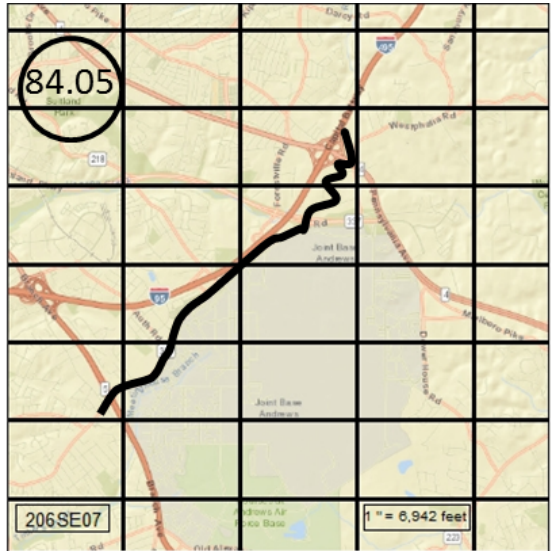
## F. Approval and Expenditure Data (000's)

Date First in Program	FY'13
Date First Approved	FY'13
Initial Cost Estimate	374
Cost Estimate Last FY	50,036
Present Cost Estimate	41,130
Approved Request Last FY	
Total Expense & Encumbrances	2,744
Approval Request Year 1	5,555

## G. Status Information

Land Status	Land and R/W to be acquired
Project Phase	Design
Percent Complete	90 %
Estimated Completion Date	July 2028
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

## H. Map



Konterra Town Center East Water Main

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Prince George's 415A
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000093.01		Change			Planning Areas	Northwestern Area PA 60

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	398	117	8	273	95	108	70				
Land											
Construction	2,001	185		1,816	632	720	464				
Other	314		1	313	109	124	80				
Total	2,713	302	9	2,402	836	952	614				

C. Funding Schedule (000's)

Contributions/Other	2,713	302	9	2,402	836	952	614				
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D. Description & Justification

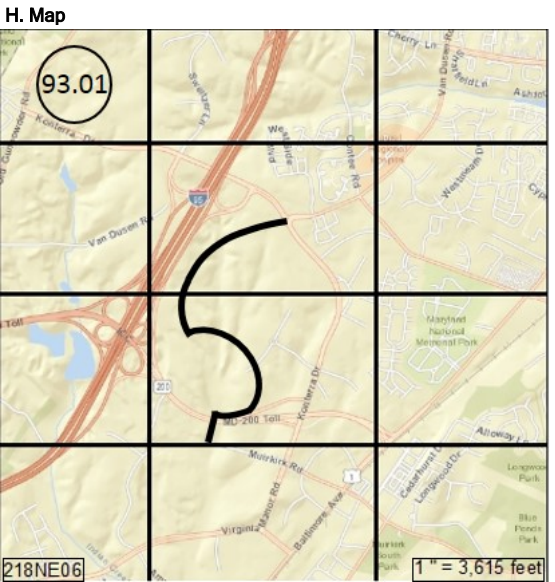
<b>DESCRIPTION</b> This project provides for the planning, design, and construction of 9,200 feet of 16-inch diameter water main to serve Konterra Town Center East, located in the area bounded by Interstate 95, the Intercounty Connector, and Konterra Drive. The sleeve for the water main crossing the Intercounty Connector was built under project S-28.18.
<b>BENEFIT</b> Economic Development: This growth project supports the economic development goals of the Counties
<b>JUSTIFICATION</b> Letter of Findings DA4623Z07 (October 19, 2018).
<b>COST CHANGE</b> Not applicable.
<b>OTHER</b> The project scope has remained the same. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. Design and construction will be performed by the developer under a Systems Extension Permit. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.
<b>COORDINATION</b> Coordinating Agencies: Prince George's County Government Coordinating Projects: S - 000028.18 - Konterra Town Center East Sewer

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$274	
Debt Service		
Total Cost	\$274	
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'09
Date First Approved	FY'09
Initial Cost Estimate	610
Cost Estimate Last FY	2,497
Present Cost Estimate	2,713
Approved Request Last FY	788
Total Expense & Encumbrances	302
Approval Request Year 1	836

G. Status Information	
Land Status	Not Applicable
Project Phase	Construction
Percent Complete	9 %
Estimated Completion Date	Developer Dependent

Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	



Marlton Section 18 Water Main, Lake Marlton Avenue

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Clinton HG385B
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000105.01		Change			Planning Areas	Rosaryville PA 82A

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	447	19	1	427	46	77	77	76	76	75	
Land											
Construction	2,198		1	2,197	368	367	367	363	366	366	
Other	394			394	62	67	67	66	66	66	
Total	3,039	19	2	3,018	476	511	511	505	508	507	

C. Funding Schedule (000's)

Contributions/Other	3,039	19	2	3,018	476	511	511	505	508	507	
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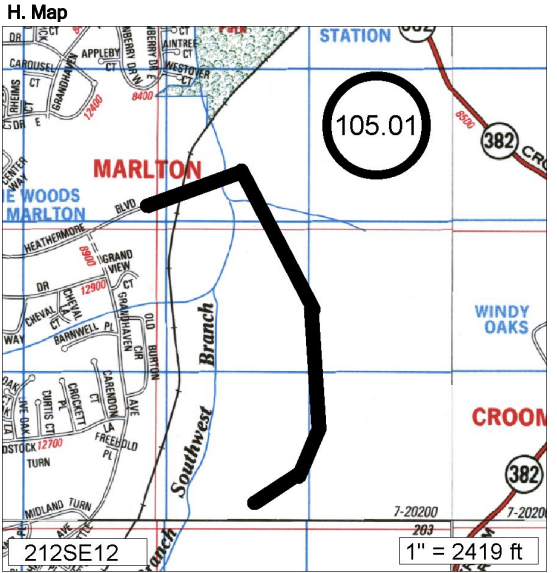
D. Description & Justification

<b>DESCRIPTION</b> This project provides for the planning, design, and construction of 5,400 feet of 16-inch diameter water main to provide service to East Marlton, Section 18, along Heathermore Boulevard and Lake Marlton Avenue.
<b>BENEFIT</b> Economic Development: This growth project supports the economic development goals of the Counties
<b>JUSTIFICATION</b> East Marlton Hydraulic Planning Analysis (February 2008).
<b>COST CHANGE</b> Not applicable.
<b>OTHER</b> The project scope has remained the same. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. Design and construction will be performed by the developer under a Systems Extension Permit. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.
<b>COORDINATION</b> Coordinating Agencies: Maryland Department of the Environment; Maryland-National Capital Park & Planning Commission; Prince George's County Government Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$161	
Debt Service		
Total Cost	\$161	
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'02
Date First Approved	FY'02
Initial Cost Estimate	398
Cost Estimate Last FY	2,925
Present Cost Estimate	3,039
Approved Request Last FY	460
Total Expense & Encumbrances	19
Approval Request Year 1	476

G. Status Information	
Land Status	Not Applicable
Project Phase	Design
Percent Complete	20 %
Estimated Completion Date	Developer Dependent
Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	





# South Potomac Supply Improvement, Phase 2

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Potomac 290B; Prince George's High HG450A; Rosecroft
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000137.03		Change			Planning Areas	Henson Creek PA 76B

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	3,470	2,734		736	590	50	48	48			
Land											
Construction	68,130			68,130		22,710	22,710	22,710			
Other	3,444			3,444	30	1,138	1,138	1,138			
<b>Total</b>	<b>75,044</b>	<b>2,734</b>		<b>72,310</b>	<b>620</b>	<b>23,898</b>	<b>23,896</b>	<b>23,896</b>			

## C. Funding Schedule (000's)

WSSC Bonds	49,528	1,804		47,724	409	15,773	15,771	15,771			
SDC	25,516	930		24,586	211	8,125	8,125	8,125			

## D. Description & Justification

### DESCRIPTION

This project provides for the design and construction of 4.4 miles of 42-inch diameter ductile iron transmission main, 6.0 miles of distribution mains (diameters ranging from 10 to 16-inches), and a new flow control valve and vault. The project will replace 3.5 miles of existing 42-inch diameter PCCP transmission main located within the Henson Creek corridor and will replace parallel aged distribution infrastructure located along the project limits.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties; System Capacity: This project will enhance existing infrastructure by building additional capacity in order to meet existing and/or future demand

### JUSTIFICATION

During design of the 42-inch PCCP transmission main replacement under CIP W-137.02, South Potomac Supply Improvement, Phase 1, WSSC Water and the Maryland Department of the Environment discussed extensive requirements for stream restoration of Henson Creek. At that time, WSSC Water staff identified up to 3.5 miles of pipe south of the project area that is exposed along eroding stretches of Henson Creek. An alignment study began under CIP W-137.03, South Potomac Supply Improvement, Phase 2, to evaluate possible relocation of the existing 42-inch PCCP main between Rosecroft Drive and Piscataway Highway. The 3.5 miles of PCCP main will be relocated out of Henson Creek and into a roadway alignment between Temple Hill Road and Piscataway Highway, for a total of 4.4 miles of new 42-inch ductile iron pipe. The transmission main will be relocated out of the 290B pressure zone and into the 450A pressure zone. Phase 2 includes the installation of a flow control valve between pressure zones 450A and 290B.

Concept Finalization Report, O'Brien & Gere Engineers Inc. (January 2014); Alignment Study - Final: Henson Creek 42-Inch Water Main Replacement, O'Brien & Gere Engineers Inc. (April 2017).

### COST CHANGE

Not applicable.

### OTHER

The project scope has remained the same. The Phase 1 alignment study was completed in April 2017. Notice to Proceed for Phase 2 (Design) was issued in February 2018. The schedule and expenditure projections for Phase 2 are preliminary design estimates and are expected to change based upon design constraints, site-specific conditions, and stream restoration requirements for Henson Creek. Future land costs are included in project W-202.00.

### COORDINATION

Coordinating Agencies: Maryland Department of Natural Resources; Maryland Department of the Environment; Maryland-National Capital Park & Planning Commission; Prince George's County Government; Prince George's County Department of Permitting Inspection and Enforcement; U.S. Army Corps of Engineers; Washington Gas Light Company  
Coordinating Projects: W - 000034.02 - Old Branch Avenue Water Main; W - 000084.05 - Prince George's County 450A Zone Water Main

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$1,087	28
Debt Service	\$3,222	28
Total Cost	\$4,309	28
Impact on Water and Sewer Rate	\$0.01	28

## F. Approval and Expenditure Data (000's)

Date First in Program	FY'18
Date First Approved	FY'07
Initial Cost Estimate	53,374
Cost Estimate Last FY	71,143
Present Cost Estimate	75,044
Approved Request Last FY	
Total Expense & Encumbrances	2,734
Approval Request Year 1	620

## G. Status Information

Land Status	Land and R/W to be acquired
Project Phase	Design
Percent Complete	70 %
Estimated Completion Date	June 2027
Growth	34%
System Improvement	66%
Environmental Regulation	
Population Served	
Capacity	

## H. Map



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## **Section 6 - Prince George's County Sewer Projects**

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**FINANCIAL SUMMARY**

(ALL FIGURES IN THOUSANDS)

**PRINCE GEORGE'S COUNTY SEWER PROJECTS**

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 22	EST. EXPEND 23	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BEYOND SIX YEARS	PAGE NUM
						YR 1 24	YR 2 25	YR 3 26	YR 4 27	YR 5 28	YR 6 29		
S - 000027.08	Westphalia Town Center Sewer Main	1,768	944	542	282	192	74	16	-	-	-	-	6-3
S - 000028.18	Konterra Town Center East Sewer	7,742	5,320	93	2,329	-	2,329	-	-	-	-	-	6-4
S - 000028.20	Pumpkin Hill WWPS & FM	8,072	521	1,510	6,041	3,781	1,955	305	-	-	-	-	6-5
S - 000068.01	Landover Mall Redevelopment	1,397	-	109	1,286	668	426	48	48	48	48	2	6-6
S - 000068.02	Carsondale WWPS & FM	5,987	258	-	5,729	366	3,056	2,307	-	-	-	-	6-7
S - 000075.21	Mattawoman WWTP Upgrades	25,302	-	3,553	17,740	4,207	3,370	3,623	3,174	2,197	1,169	4,009	6-8
S - 000075.23	Brandywine Woods WWPS & FM	3,718	27	305	3,386	1,312	1,218	703	153	-	-	-	6-9
S - 000077.21	Parkway WRRF Facility & Electrical Upgrades	23,920	426	2,860	20,634	2,563	7,205	6,204	3,355	1,307	-	-	6-10
S - 000086.20	National Capital Business Park Sewer	1,795	4	60	1,731	897	536	171	127	-	-	-	6-11
S - 000087.19	Horsepen WWPS & FM	36,150	2,406	3,991	29,753	4,376	11,781	7,986	5,610	-	-	-	6-12
S - 000087.20	Freeway Airport WWPS & FM	3,758	68	305	3,385	1,311	1,219	702	153	-	-	-	6-13
S - 000089.26	Colmar Manor WWPS & FM	7,030	385	-	6,645	305	244	610	2,743	2,743	-	-	6-14
S - 000096.14	Piscataway WRRF Facility Upgrades	191,193	119,042	34,477	37,674	25,085	10,085	2,504	-	-	-	-	6-15
S - 000113.13	Forest Heights WWPS & FM	9,402	380	-	9,022	183	61	244	610	3,962	3,962	-	6-16
S - 000118.10	Viva White Oak Sewer Augmentation	1,193	-	-	1,193	475	299	179	120	60	60	-	6-17
S - 000131.05	Pleasant Valley Sewer Main, Part 2	1,009	-	242	767	478	197	92	-	-	-	-	6-18
S - 000131.07	Pleasant Valley Sewer Main, Part 1	2,053	55	562	1,436	1,171	265	-	-	-	-	-	6-19
S - 000131.11	Calm Retreat Sewer Main	749	209	420	120	120	-	-	-	-	-	-	6-20
S - 000131.12	Swan Creek WWPS & FM	14,633	9,340	550	4,743	1,543	3,087	113	-	-	-	-	6-21
S - 000157.02	Western Branch WRRF Process Train Improvements	94,391	4,239	13,550	76,602	17,360	25,582	18,225	9,756	4,667	1,012	-	6-22
	Projects Pending Close-Out	775	682	93	-	-	-	-	-	-	-	-	6-23
	<b>TOTALS</b>	<b>442,037</b>	<b>144,306</b>	<b>63,222</b>	<b>230,498</b>	<b>66,393</b>	<b>72,989</b>	<b>44,032</b>	<b>25,849</b>	<b>14,984</b>	<b>6,251</b>	<b>4,011</b>	

**NEW PROJECT LISTING**  
**PRINCE GEORGE'S COUNTY SEWER PROJECTS**  
 (ALL FIGURES IN THOUSANDS)

AGENCY NUMBER	PROJECT NAME	TOTAL PROJECT COST	BUDGET YEAR COST	PAGE NUMBER
S - 000086.20	National Capital Business Park Sewer	1,795	897	6-11
<b>TOTAL</b>		<b>1,795</b>	<b>897</b>	



Westphalia Town Center Sewer Main

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Western Branch 14
S - 000027.08		Change			Planning Areas	Westphalia & Vicinity PA 78

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	223	134	37	52	30	15	7				
Land											
Construction	1,437	810	434	193	137	49	7				
Other	108		71	37	25	10	2				
Total	1,768	944	542	282	192	74	16				

C. Funding Schedule (000's)

Contributions/Other	1,768	944	542	282	192	74	16				
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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.

**BENEFIT**

Economic Development: This growth project supports the economic development goals of the Counties

**JUSTIFICATION**

Westphalia Town Center Hydraulic Planning Analysis (June 2009).

**COST CHANGE**

Not applicable.

**OTHER**

The project scope has remained the same. The schedule and expenditure projections shown in Block B above 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 Water rate supported debt will be used for this project.

**COORDINATION**

Coordinating Agencies: Local Community Civic Associations;(Interaction with state, county and regulatory staff); Maryland-National Capital Park & Planning Commission; Prince George's County Department of Environmental Resources; Prince George's County Government; Prince George's County Department of Permitting Inspection and Enforcement

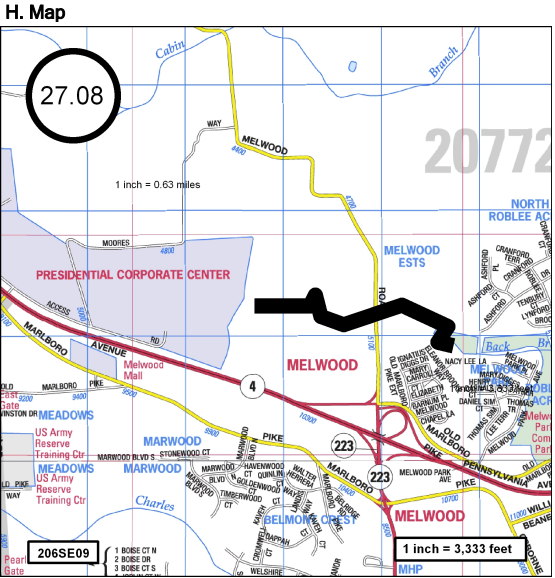
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$97	
Debt Service		
Total Cost	\$97	
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	1,632
Present Cost Estimate	1,768
Approved Request Last FY	161
Total Expense & Encumbrances	944
Approval Request Year 1	192

G. Status Information	
Land Status	Not Applicable
Project Phase	Construction
Percent Complete	40 %
Estimated Completion Date	Developer Dependent

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



Konterra Town Center East Sewer

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Northeast Branch Branch 08
S - 000028.18		Change			Planning Areas	Northwestern Area PA 60

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	2,616	2,271	81	264		264					
Land											
Construction	4,810	3,049		1,761		1,761					
Other	316		12	304		304					
Total	7,742	5,320	93	2,329		2,329					

C. Funding Schedule (000's)

Contributions/Other	7,742	5,320	93	2,329		2,329					
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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.

**BENEFIT**  
Economic Development: This growth project supports the economic development goals of the Counties

**JUSTIFICATION**  
Letter of Findings DA4623Z07 (October 19, 2018).

**COST CHANGE**  
Not applicable.

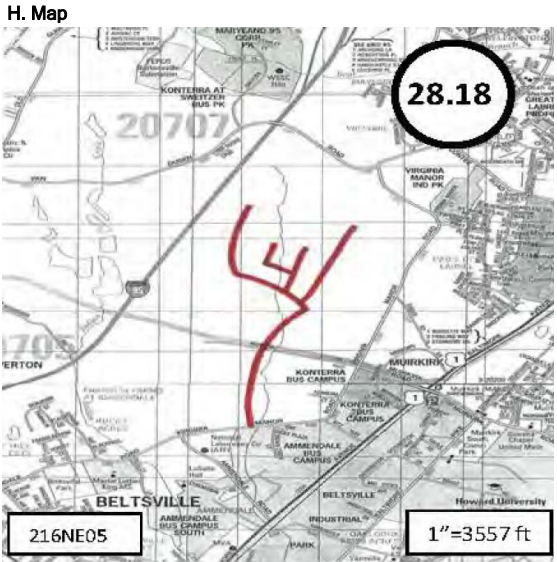
**OTHER**  
The project scope has remained the same. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. Design and construction will be performed by the developer under a System Extension Permit. The estimated completion date is developer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

**COORDINATION**  
Coordinating Agencies: Prince George's County Government  
Coordinating Projects: W - 000093.01 - Konterra Town Center East Water Main

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$308	
Debt Service		
Total Cost	\$308	
Impact on Water and Sewer Rate		

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	6,872
Present Cost Estimate	7,742
Approved Request Last FY	
Total Expense & Encumbrances	5,320
Approval Request Year 1	

G. Status Information	
Land Status	Not Applicable
Project Phase	Construction
Percent Complete	66 %
Estimated Completion Date	Developer Dependent
Growth	100%
System Improvement	
Environmental Regulation	
Population Served	11,300
Capacity	8.11 MGD



# Pumpkin Hill WWPS & FM

A. Identification and Coding Information		
Agency Number	Project Number	Update Code
S - 000028.20		Change

PDF Date	October 1, 2022
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'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	1,482	521	813	148	108	40					
Land											
Construction	5,605		500	5,105	3,180	1,660	265				
Other	985		197	788	493	255	40				
<b>Total</b>	<b>8,072</b>	<b>521</b>	<b>1,510</b>	<b>6,041</b>	<b>3,781</b>	<b>1,955</b>	<b>305</b>				

## C. Funding Schedule (000's)

WSSC Bonds	8,072	521	1,510	6,041	3,781	1,955	305				
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## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of the modifications to the Pumpkin Hill Wastewater Pumping Station and replacement of the Pumpkin Hill Force Main. The rehabilitation will replace both pumps maintaining the pumping station's 2.11 MGD capacity. In addition, the existing 3,200 linear feet of 16-inch force main will be replaced.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties

### JUSTIFICATION

The existing pumping station was put in service in 1974. The pumps were rebuilt in 1992 and have reached the end of their useful life. Replacement of the existing force main, constructed in 1965, is in accordance with an initiative to prioritize replacing force mains that have reached their anticipated life expectancy.

Hydraulics Analysis Memorandum (July 2019).

### COST CHANGE

The schedule and expenditure projections were revised based upon updated engineer's estimates.

### OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are design level estimates and are expected to change based upon site conditions and design constraints.

### COORDINATION

Coordinating Agencies: Maryland Department of Natural Resources; Maryland Department of the Environment  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$525	27
Total Cost	\$525	27
Impact on Water and Sewer Rate		

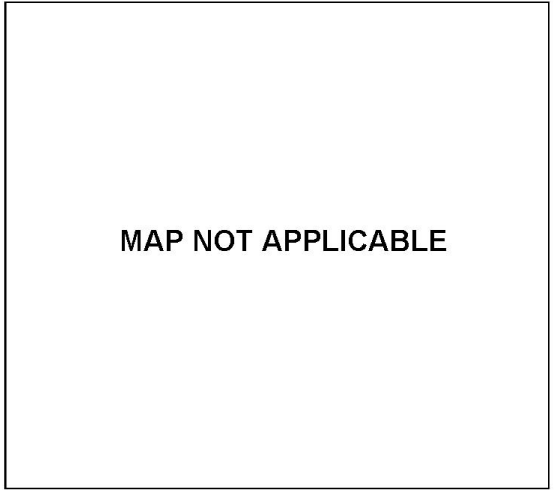
## F. Approval and Expenditure Data (000's)

Date First in Program	FY'22
Date First Approved	FY'22
Initial Cost Estimate	4,496
Cost Estimate Last FY	4,542
Present Cost Estimate	8,072
Approved Request Last FY	1,221
Total Expense & Encumbrances	521
Approval Request Year 1	3,781

## G. Status Information

Land Status	Public/Agency owned land
Project Phase	Design
Percent Complete	0 %
Estimated Completion Date	January 2026
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	2.11 MGD

## H. Map



Landover Mall Redevelopment

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Beaverdam Branch 3
S - 000068.01		Change			Planning Areas	Prince George's County

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	217		38	177	80	48	13	12	12	12	2
Land											
Construction	999		57	942	501	322	29	30	30	30	
Other	181		14	167	87	56	6	6	6	6	
Total	1,397		109	1,286	668	426	48	48	48	48	2

C. Funding Schedule (000's)

Contributions/Other	1,397		109	1,286	668	426	48	48	48	48	2
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D. Description & Justification

**DESCRIPTION**

This project provides for the planning, design, and construction of 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.

**BENEFIT**

Economic Development: This growth project supports the economic development goals of the Counties

**JUSTIFICATION**

Hydraulic Planning Analysis (May 2009).

**COST CHANGE**

Not applicable.

**OTHER**

The project scope has remained the same. The project is on hold due to lack of activity and will need to be re-evaluated when the Owner/Developer approaches WSSC Water to restart the project. The current estimated total project cost shown above reflects the original plans for the project. A new cost estimate and schedule will be required at restart. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.

**COORDINATION**

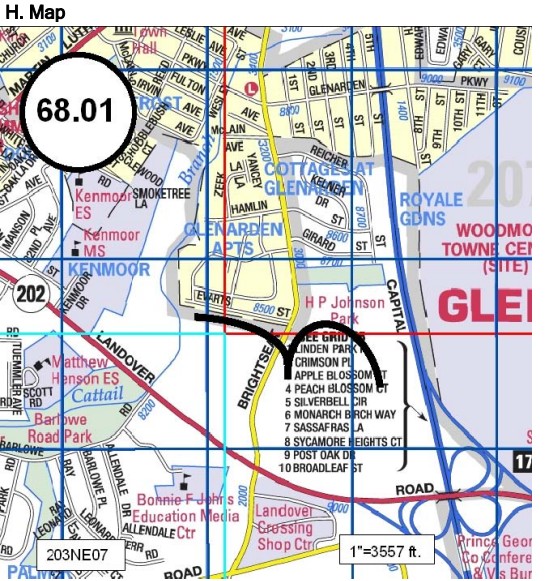
Coordinating Agencies: Prince George's County Government  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$91	
Debt Service		
Total Cost	\$91	
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	1,397
Present Cost Estimate	1,397
Approved Request Last FY	668
Total Expense & Encumbrances	
Approval Request Year 1	668

G. Status Information	
Land Status	Not Applicable
Project Phase	Planning
Percent Complete	20 %
Estimated Completion Date	Developer Dependent

Growth	100%
System Improvement	
Environmental Regulation	
Population Served	3,347
Capacity	5.63 MGD



Carsondale WWPS & FM

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones						
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Beaverdam Branch 3					
S - 000068.02		Change			Planning Areas	Landover & Vicinity PA 72					

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	1,264	258		1,006	318	582	106				
Land											
Construction	3,975			3,975		2,075	1,900				
Other	748			748	48	399	301				
Total	5,987	258		5,729	366	3,056	2,307				

C. Funding Schedule (000's)

WSSC Bonds	5,987	258		5,729	366	3,056	2,307				
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D. Description & Justification

<p><b>DESCRIPTION</b></p> <p>This project provides for the planning, design, and construction of the modifications to the Carsondale Wastewater Pumping Station and replacement of the Carsondale Force Main. The rehabilitation will replace both pumps maintaining the pumping station's 0.6 MGD capacity. The existing 3,000 linear feet of 8-inch force main will be replaced. In addition, replacement of all electrical components, including the generator, replacement of the HVAC system, general upgrade to the pump station building and grounds as needed, and the addition of a restroom are included.</p> <p><b>BENEFIT</b></p> <p>Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life</p> <p><b>JUSTIFICATION</b></p> <p>The existing pumping station and force main were built in 1960. In 1989 the pump station and meter vault were modified to the current configuration and have reached the end of their useful life. Replacement of the existing force main is in accordance with an initiative to prioritize replacing force mains that have reached their anticipated life expectancy.</p> <p>Hydraulics Analysis Memorandum (July 2019).</p> <p><b>COST CHANGE</b></p> <p>Not applicable.</p> <p><b>OTHER</b></p> <p>The project scope has remained the same. The schedule and expenditure projections shown in Block B above are planning level estimates and are expected to change based upon site conditions and design constraints. Planning work for the upgrades began in FY'21 under ESP S-642.25, Carsondale WWPS Upgrades with Forcemain.</p> <p><b>COORDINATION</b></p> <p>Coordinating Agencies: Maryland Department of Natural Resources; Maryland Department of the Environment; Prince George's County Government</p> <p>Coordinating Projects: Not Applicable</p>
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E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$389	27
Total Cost	\$389	27
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'23
Date First Approved	FY'23
Initial Cost Estimate	5,645
Cost Estimate Last FY	5,645
Present Cost Estimate	5,987
Approved Request Last FY	
Total Expense & Encumbrances	258
Approval Request Year 1	366

G. Status Information	
Land Status	Public/Agency owned land
Project Phase	Planning
Percent Complete	100 %
Estimated Completion Date	April 2026
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	0.6 MGD

H. Map
MAP NOT APPLICABLE

# Mattawoman WWTP Upgrades

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones						
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Mattawoman 21					
S - 000075.21		Change			Planning Areas	Accokeek PA 83; Brandywine & Vicinity PA 85A; Cedarville &					

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision											
Land											
Construction	25,051		3,518	17,564	4,165	3,337	3,587	3,143	2,175	1,157	3,969
Other	251		35	176	42	33	36	31	22	12	40
Total	25,302		3,553	17,740	4,207	3,370	3,623	3,174	2,197	1,169	4,009

## C. Funding Schedule (000's)

WSSC Bonds	25,302		3,553	17,740	4,207	3,370	3,623	3,174	2,197	1,169	4,009
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## D. Description & Justification

### DESCRIPTION

This project provides for WSSC Water's share of the evaluation, design, and construction of capital projects to upgrade and repair Charles County's Mattawoman Interceptor and WWTP. Current projects include: SCADA/Plant Automation, Electrical System Replacement, In-Plant Water System Improvement, Clarifier and Thickener Upgrades, Belt Filter Press Replacement - Ph II, Additional Effluent Filters and Filtered Water Disinfection Improvements, upgrades to UV disinfection, upgrade headworks, and miscellaneous projects to improve performance of various processes and plant facilities.

### BENEFIT

Regulatory & Other Agreements: This project is required to meet regulatory requirements, multi-jurisdictional agreements, and/or consent decrees; Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life

### JUSTIFICATION

Prior evaluations of equipment and structural facilities concluded the need existed for various upgrade, repair, and replacement projects to meet treatment requirements under the NPDES permit. 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. Agreement dated October 22, 1980; Agreement Addendum No. 1 dated April 15, 2004.

### COST CHANGE

The schedule and expenditure estimates reflect the latest information provided by Charles County.

### OTHER

The project scope has remained the same. Under the terms of the 1980 Agreement with Charles County, WSSC Water 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'07, the total plant capacity increased to 20 MGD, and WSSC Water's proportionate cost share decreased to 15% under the terms of Agreement Addendum No.1. This project is expected to continue indefinitely.

### COORDINATION

Coordinating Agencies: Charles County Government  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$1,646	
Total Cost	\$1,646	
Impact on Water and Sewer Rate		

## F. Approval and Expenditure Data (000's)

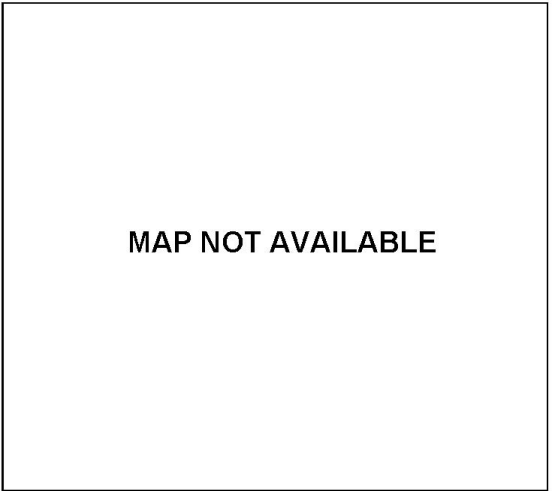
Date First in Program	FY'08
Date First Approved	FY'08
Initial Cost Estimate	760
Cost Estimate Last FY	20,758
Present Cost Estimate	25,302
Approved Request Last FY	3,553
Total Expense & Encumbrances	
Approval Request Year 1	4,207

## G. Status Information

Land Status	Not Applicable
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	On-Going

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	3.0 / 20.0 MGD

## H. Map



Brandywine Woods WWPS & FM

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones						
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Mattawoman 21; Patuxent South 22					
S - 000075.23		Change			Planning Areas	Brandywine & Vicinity PA 85A					

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	800	27	265	508	294	107	80	27			
Land											
Construction	2,436			2,436	847	952	531	106			
Other	482		40	442	171	159	92	20			
Total	3,718	27	305	3,386	1,312	1,218	703	153			

C. Funding Schedule (000's)

Contributions/Other	3,718	27	305	3,386	1,312	1,218	703	153			
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D. Description & Justification

<b>DESCRIPTION</b> This project provides for the planning, design, and construction of a 0.28 MGD wastewater pumping station and 1,160 feet of force main to serve the Brandywine Woods property.
<b>BENEFIT</b> Economic Development: This growth project supports the economic development goals of the Counties
<b>JUSTIFICATION</b> Brandywine Woods Hydraulic Planning Analysis (June 2021).
<b>COST CHANGE</b> Not applicable.
<b>OTHER</b> The project scope has remained the same. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.
<b>COORDINATION</b> Coordinating Agencies: Maryland Department of Natural Resources; Maryland Department of the Environment; Maryland-National Capital Park & Planning Commission; Prince George's County Government Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$25	
Debt Service		
Total Cost	\$25	
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'23
Date First Approved	FY'23
Initial Cost Estimate	3,515
Cost Estimate Last FY	3,515
Present Cost Estimate	3,718
Approved Request Last FY	1,237
Total Expense & Encumbrances	27
Approval Request Year 1	1,312

G. Status Information	
Land Status	Not Applicable
Project Phase	Planning
Percent Complete	0 %
Estimated Completion Date	Developer Dependent
Growth	100%
System Improvement	
Environmental Regulation	
Population Served	700
Capacity	0.28 MGD

H. Map





Parkway WRRF Facility & Electrical Upgrades

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Parkway 17
S - 000077.21		Change			Planning Areas	South Laurel-Montpelier PA 62

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	5,616	426	1,200	3,990	1,000	800	800	800	590		
Land											
Construction	16,168		1,400	14,768	1,330	5,750	4,840	2,250	598		
Other	2,136		260	1,876	233	655	564	305	119		
Total	23,920	426	2,860	20,634	2,563	7,205	6,204	3,355	1,307		

C. Funding Schedule (000's)

WSSC Bonds	23,920	426	2,860	20,634	2,563	7,205	6,204	3,355	1,307		
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D. Description & Justification

<p><b>DESCRIPTION</b></p> <p>This project provides for the planning, design, and construction of improvements at the Parkway WRRF required to replace the transformers and associated feeders; to replace the generator building switchgear; to replace the blowers and associated electrical gear; to replace motor control centers in multiple buildings; to upgrade the plant utility water system, including the pumping equipment and distribution system; and to upgrade the influent pump station, including pump replacement and related structural, mechanical, and electrical improvements.</p> <p><b>BENEFIT</b></p> <p>Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; Employee Safety: This project includes components that help protect the health and safety of employees</p> <p><b>JUSTIFICATION</b></p> <p>The Parkway WRRF systems were originally constructed in the 1970s. The equipment has exceeded its useful life, replacement parts are obsolete, and repair/maintenance represents a safety risk. There is an increasing risk of critical system failure and prolonged outage recovery. This replacement, rehabilitation, and upgrade work was recommended as part of WSSC Water's Asset Management Program (CNPV #48, CNPV #66, CNPV #137 and CNPV #184). Parkway WRRF Electrical Upgrades and Backup Power Business Case (January 2020).</p> <p><b>COST CHANGE</b></p> <p>The expenditure projections were revised based upon updated engineer's estimates.</p> <p><b>OTHER</b></p> <p>The project scope has remained the same. The schedule and expenditure projections shown in Block B above are preliminary design level estimates and are expected to change based upon site conditions and design constraints. Planning work began under multiple ESP projects, including S-627.17 Parkway WRRF Electrical Upgrades, S-627.19 Parkway WRRF Plant Utility Water System Upgrades, and S-627.20 Parkway Influent Pump Replacements.</p> <p><b>COORDINATION</b></p> <p>Coordinating Agencies: Maryland Department of the Environment Coordinating Projects: Not Applicable</p>
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E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$1,556	29
Total Cost	\$1,556	29
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'22
Date First Approved	FY'22
Initial Cost Estimate	11,066
Cost Estimate Last FY	20,859
Present Cost Estimate	23,920
Approved Request Last FY	5,152
Total Expense & Encumbrances	426
Approval Request Year 1	2,563

G. Status Information	
Land Status	Public/Agency owned land
Project Phase	Design
Percent Complete	20 %
Estimated Completion Date	March 2028
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

H. Map
MAP NOT APPLICABLE



National Capital Business Park Sewer

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones						
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Western Branch 14					
S - 000086.20		Add			Planning Areas	Upper Marlboro & Vicinity PA 79					

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	626	4	52	570	313	206	40	11			
Land											
Construction	935			935	467	260	109	99			
Other	234		8	226	117	70	22	17			
Total	1,795	4	60	1,731	897	536	171	127			

C. Funding Schedule (000's)

Contributions/Other	1,795	4	60	1,731	897	536	171	127			
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D. Description & Justification

<b>DESCRIPTION</b> This project provides for the planning, design, and construction of 2,200 feet of 15-inch sanitary sewer main to serve the National Capital Business Park.
<b>BENEFIT</b> Economic Development: This growth project supports the economic development goals of the Counties
<b>JUSTIFICATION</b> National Capital Business Park Hydraulic Planning Analysis (May 2022).
<b>COST CHANGE</b> Not applicable.
<b>OTHER</b> The present project scope was developed for the FY'24 CIP and has an estimated total cost of \$1,795,000. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.
<b>COORDINATION</b> Coordinating Agencies: Maryland Department of the Environment; Prince George's County Government Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$47	
Debt Service		
Total Cost	\$47	
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'24
Date First Approved	FY'24
Initial Cost Estimate	1,795
Cost Estimate Last FY	
Present Cost Estimate	1,795
Approved Request Last FY	
Total Expense & Encumbrances	4
Approval Request Year 1	897

G. Status Information	
Land Status	Not Applicable
Project Phase	Design
Percent Complete	0 %
Estimated Completion Date	Developer Dependent

Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	2.0 MGD

H. Map



# Horsepen WWPS & FM

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Horsepen 19
S - 000087.19		Change			Planning Areas	Bowie & Vicinity PA 71A

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	3,982	2,406	628	948	478	210	160	100			
Land											
Construction	29,100		3,000	26,100	3,500	10,500	7,100	5,000			
Other	3,068		363	2,705	398	1,071	726	510			
Total	36,150	2,406	3,991	29,753	4,376	11,781	7,986	5,610			

## C. Funding Schedule (000's)

WSSC Bonds	3,614	240	399	2,975	437	1,178	799	561			
SDC	32,536	2,166	3,592	26,778	3,939	10,603	7,187	5,049			

## D. Description & Justification

<b>DESCRIPTION</b> This project provides for the planning, design, and construction of the modifications to the Horsepen Wastewater Pumping Station and replacement of the Horsepen Force Main. The rehabilitation will increase the pumping station's capacity from 4.22 MGD to 8.40 MGD. In addition, the approximately 21,500-foot force main will be relocated and upsized from 18-inch to 24-inch diameter to accommodate the additional flow.
<b>BENEFIT</b> Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties; System Capacity: This project will enhance existing infrastructure by building additional capacity in order to meet existing and/or future demand
<b>JUSTIFICATION</b> Peak flow rates experienced at the station have exceeded the station's safe capacity; the projected peak flow conditions have increased to 8.40 MGD. Additionally, the existing pumping station equipment is over 30 years old and has reached the end of its useful life. The replacement of the force main is critical due to its age of service and location within environmentally sensitive areas. Breaks occurred along the force main in 2011, 2012, 2013, and 2018.
<b>COST CHANGE</b> Not applicable.
<b>OTHER</b> The project scope has remained the same. The schedule and expenditure projections shown in Block B above are design level estimates and are expected to change based upon site conditions and design constraints. Planning work for the pump station began in FY'18 under ESP S-640.02, Horsepen WWPS Reliable Capacity Expansion. Future land costs are included in project S-203.00.
<b>COORDINATION</b> Coordinating Agencies: City of Bowie; Maryland Department of Natural Resources; Maryland Department of the Environment; Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission; Prince George's County Government Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$235	28
Total Cost	\$235	28
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'22
Date First Approved	FY'22
Initial Cost Estimate	35,349
Cost Estimate Last FY	36,461
Present Cost Estimate	36,150
Approved Request Last FY	5,923
Total Expense & Encumbrances	2,406
Approval Request Year 1	4,376

G. Status Information	
Land Status	Public/Agency owned land
Project Phase	Design
Percent Complete	60 %
Estimated Completion Date	December 2026
Growth	90%
System Improvement	10%
Environmental Regulation	
Population Served	
Capacity	8.40 MGD

H. Map
MAP NOT APPLICABLE

Freeway Airport WWPS & FM

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Western Branch 14
S - 000087.20		Change			Planning Areas	Mitchellville & Vicinity PA 74A

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	838	68	265	505	292	106	80	27			
Land											
Construction	2,438			2,438	848	954	530	106			
Other	482		40	442	171	159	92	20			
Total	3,758	68	305	3,385	1,311	1,219	702	153			

C. Funding Schedule (000's)

Contributions/Other	3,758	68	305	3,385	1,311	1,219	702	153			
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D. Description & Justification

<b>DESCRIPTION</b> This project provides for the planning, design, and construction of 3,600 feet of force main and a new wastewater pumping station to provide service to the Freeway Airport subdivision.
<b>BENEFIT</b> Economic Development: This growth project supports the economic development goals of the Counties
<b>JUSTIFICATION</b> Freeway Airport Hydraulic Planning Analysis (May 2021).
<b>COST CHANGE</b> Not applicable.
<b>OTHER</b> The project scope has remained the same. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.
<b>COORDINATION</b> Coordinating Agencies: Maryland Department of the Environment; Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission; Prince George's County Government Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$77	
Debt Service		
Total Cost	\$77	
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'23
Date First Approved	FY'23
Initial Cost Estimate	3,533
Cost Estimate Last FY	3,533
Present Cost Estimate	3,758
Approved Request Last FY	1,237
Total Expense & Encumbrances	68
Approval Request Year 1	1,311

G. Status Information	
Land Status	Not Applicable
Project Phase	Planning
Percent Complete	0 %
Estimated Completion Date	Developer Dependent
Growth	100%
System Improvement	
Environmental Regulation	
Population Served	1,600
Capacity	0.5 MGD



# Colmar Manor WWPS & FM

A. Identification and Coding Information		
Agency Number	Project Number	Update Code
S - 000089.26		Change

PDF Date	October 1, 2022
Date Revised	

Pressure Zones	
Drainage Basins	Lower Anacostia 9
Planning Areas	Hyattsville-Riverdale-Mount Rainier PA 68

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	1,922	385		1,537	265	212	530	265	265		
Land											
Construction	4,240			4,240				2,120	2,120		
Other	868			868	40	32	80	358	358		
<b>Total</b>	<b>7,030</b>	<b>385</b>		<b>6,645</b>	<b>305</b>	<b>244</b>	<b>610</b>	<b>2,743</b>	<b>2,743</b>		

## C. Funding Schedule (000's)

WSSC Bonds	7,030	385		6,645	305	244	610	2,743	2,743		
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## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and rehabilitation of a 0.799 MGD wastewater pumping station and 726 linear feet of force main.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life

### JUSTIFICATION

The existing pumping station and force main were installed in 1956 and have reached the end of their useful lives. The station is outdated and could be considered "piece-meal" due to a number of in-house modifications through the decades. Replacement of the existing force main is in accordance with an initiative to prioritize replacing force mains that have reached their anticipated life expectancy. This upgrade work was recommended as part of WSSC Water's Asset Management Program (CNPV #189).

### COST CHANGE

Not applicable.

### OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are preliminary planning level estimates and are expected to change based upon site conditions and design constraints. Planning work began in FY'21 under ESP S-636.75, Colmar Manor WWPS Upgrade with Forcemain.

### COORDINATION

Coordinating Agencies: Maryland-National Capital Park & Planning Commission; National Park Service; Prince George's County Government; Town of Colmar Manor  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$457	29
Total Cost	\$457	29
Impact on Water and Sewer Rate		

## F. Approval and Expenditure Data (000's)

Date First in Program	FY'23
Date First Approved	FY'23
Initial Cost Estimate	6,567
Cost Estimate Last FY	6,567
Present Cost Estimate	7,030
Approved Request Last FY	
Total Expense & Encumbrances	385
Approval Request Year 1	305

## G. Status Information

Land Status	Not Applicable
Project Phase	Planning
Percent Complete	30 %
Estimated Completion Date	June 2028

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	0.799 MGD

## H. Map



Piscataway WRRF Facility Upgrades

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones						
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Piscataway Creek 4					
S - 000096.14		Change			Planning Areas	Accokeek PA 83					

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	22,918	18,578	2,275	2,065	1,450	490	125				
Land											
Construction	164,839	100,464	30,560	33,815	22,440	9,115	2,260				
Other	3,436		1,642	1,794	1,195	480	119				
Total	191,193	119,042	34,477	37,674	25,085	10,085	2,504				

C. Funding Schedule (000's)

WSSC Bonds	191,193	119,042	34,477	37,674	25,085	10,085	2,504				
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D. Description & Justification

<p><b>DESCRIPTION</b></p> <p>This project provides for the planning, design, and construction of improvements at the Piscataway WRRF 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><b>BENEFIT</b></p> <p>System Capacity: This project will enhance existing infrastructure by building additional capacity in order to meet existing and/or future demand; Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties</p> <p><b>JUSTIFICATION</b></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 Water's Asset Management Strategy guidelines, based on life cycle costs, business risk exposure, and needs prioritization. Piscataway WRRF Asset Management Plan, GHD, Inc. (March 2011); Piscataway WRRF Facility Plan, AECOM (January 2014); Wastewater Treatment System Asset Management Plan (December 2016).</p> <p><b>COST CHANGE</b></p> <p>The schedule and expenditure projections were revised based upon actual bids.</p> <p><b>OTHER</b></p> <p>The project scope has remained the same. The schedule and expenditure projections shown in Block B above are actual bids and may change based upon site conditions and design revisions. The Asset Management Division has determined the priority of the recommended projects.</p> <p><b>COORDINATION</b></p> <p>Coordinating Agencies: Maryland Department of Natural Resources; Maryland Department of the Environment; Prince George's County Department of Environmental Resources; Prince George's County Government; U.S. Army Corps of Engineers Coordinating Projects: A - 000103.00 - Energy Performance Program; S - 000103.02 - Piscataway Bioenergy; S - 000170.08 - Septage Discharge Facility Planning &amp; Implementation</p>
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E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$12,437	27
Total Cost	\$12,437	27
Impact on Water and Sewer Rate	\$0.03	27

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	172,441
Present Cost Estimate	191,193
Approved Request Last FY	22,995
Total Expense & Encumbrances	119,042
Approval Request Year 1	25,085

G. Status Information	
Land Status	Public/Agency owned land
Project Phase	Construction
Percent Complete	58 %
Estimated Completion Date	June 2026
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	30 MGD

H. Map
MAP NOT AVAILABLE

Forest Heights WWPS & FM

A. Identification and Coding Information		
Agency Number	Project Number	Update Code
S - 000113.13		Change

PDF Date	October 1, 2022
Date Revised	

Pressure Zones	
Drainage Basins	Oxon Run 18
Planning Areas	The Heights PA 76A

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	1,864	380		1,484	159	53	212	530	265	265	
Land											
Construction	6,360			6,360					3,180	3,180	
Other	1,178			1,178	24	8	32	80	517	517	
Total	9,402	380		9,022	183	61	244	610	3,962	3,962	

C. Funding Schedule (000's)

WSSC Bonds	1,692	68		1,624	33	11	44	110	713	713	
SDC	7,710	312		7,398	150	50	200	500	3,249	3,249	

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of the modifications to the existing 2.28 MGD wastewater pumping station and replacement of approximately 1,940 feet of existing force main.

BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; System Capacity: This project will enhance existing infrastructure by building additional capacity in order to meet existing and/or future demand

JUSTIFICATION

The existing pumping station and 14-inch diameter cast iron force main were built in 1946 and have reached the end of their useful life. In addition, replacement parts are unavailable since the equipment is obsolete. Replacement of the existing force main is in accordance with an initiative to prioritize replacing force mains that have reached their anticipated life expectancy. This upgrade work was recommended as part of WSSC Water's Asset Management Program (CNPV #192).

COST CHANGE

Not applicable.

OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are preliminary planning level estimates and are expected to change based upon site conditions and design constraints. Planning work began in FY'21 under ESP S-650.25, Forest Heights WWPS Upgrades/Improvements. Future land costs are included in project S-203.00.

COORDINATION

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

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$110	30
Total Cost	\$110	30
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)

Date First in Program	FY'23
Date First Approved	FY'23
Initial Cost Estimate	8,958
Cost Estimate Last FY	8,958
Present Cost Estimate	9,402
Approved Request Last FY	
Total Expense & Encumbrances	380
Approval Request Year 1	183

G. Status Information

Land Status	Land and R/W to be acquired
Project Phase	Planning
Percent Complete	25 %
Estimated Completion Date	June 2029
Growth	82%
System Improvement	18%
Environmental Regulation	
Population Served	
Capacity	2.28 MGD

H. Map





Viva White Oak Sewer Augmentation

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Paint Branch 2
S - 000118.10		Change			Planning Areas	Colesville-White Oak & Vicinity PA 33; Fairland-Beltsville (PG)

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	205			205	81	52	31	21	10	10	
Land											
Construction	832			832	332	208	125	83	42	42	
Other	156			156	62	39	23	16	8	8	
Total	1,193			1,193	475	299	179	120	60	60	

C. Funding Schedule (000's)

Contributions/Other	1,193			1,193	475	299	179	120	60	60	
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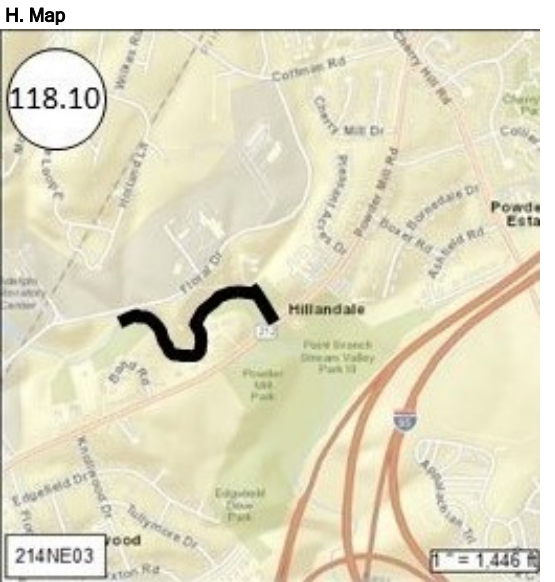
D. Description & Justification

<b>DESCRIPTION</b> This project provides for the planning, design, and construction of 2,500 feet of 24-inch and 30-inch diameter sewer mains. These sewers will replace existing 21-inch and 27-inch diameter sewer mains in the Paint Branch Basin downstream of the West Farm Creek Tributary and terminate at Powder Mill Road.
<b>BENEFIT</b> Economic Development: This growth project supports the economic development goals of the Counties
<b>JUSTIFICATION</b> Viva White Oak Hydraulic Planning Analysis (July 2019).
<b>COST CHANGE</b> Not applicable.
<b>OTHER</b> The project scope has remained the same. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.
<b>COORDINATION</b> Coordinating Agencies: Maryland Department of the Environment; Maryland-National Capital Park & Planning Commission; Prince George's County Department of Environmental Resources; Prince George's County Department of Permitting Inspection and Enforcement Coordinating Projects: S - 000118.09 - Viva White Oak Sewer Main; W - 000113.21 - Viva White Oak Water Main

E. Annual Operating Budget Impact (000's)	FY of Impact
Staff & Other	
Maintenance	
Debt Service	
Total Cost	
Impact on Water and Sewer Rate	

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'22
Date First Approved	FY'22
Initial Cost Estimate	1,080
Cost Estimate Last FY	1,126
Present Cost Estimate	1,193
Approved Request Last FY	450
Total Expense & Encumbrances	
Approval Request Year 1	475

G. Status Information	
Land Status	Not Applicable
Project Phase	Planning
Percent Complete	20 %
Estimated Completion Date	Developer Dependent
Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	11.5 MGD



Pleasant Valley Sewer Main, Part 2

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Piscataway Creek 4
S - 000131.05		Change			Planning Areas	Piscataway & Vicinity PA 84

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	155		72	83	65	11	7				
Land											
Construction	722		138	584	351	160	73				
Other	132		32	100	62	26	12				
Total	1,009		242	767	478	197	92				

C. Funding Schedule (000's)

Contributions/Other	1,009		242	767	478	197	92				
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D. Description & Justification

**DESCRIPTION**  
This project provides for the planning, design, and construction of 2,750 feet of 21-inch and 24-inch diameter sewer main to provide service to the Estates of Pleasant Valley and the Ridges III Subdivisions.

**BENEFIT**  
Economic Development: This growth project supports the economic development goals of the Counties

**JUSTIFICATION**  
Saddle Creek Hydraulic Planning Analysis (Approved April 2022).

**COST CHANGE**  
Not applicable.

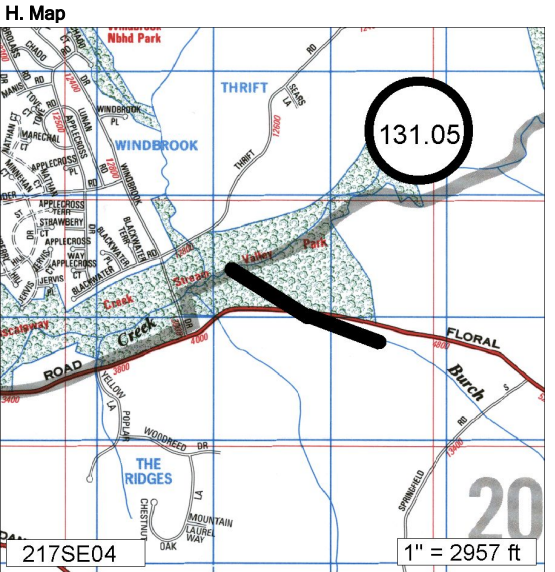
**OTHER**  
The project scope has remained the same. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.

**COORDINATION**  
Coordinating Agencies: Maryland Department of the Environment; Maryland-National Capital Park & Planning Commission; Prince George's County Government  
Coordinating Projects: S - 000131.07 - Pleasant Valley Sewer Main, Part 1

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$59	
Debt Service		
Total Cost	\$59	
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	1,000
Present Cost Estimate	1,009
Approved Request Last FY	451
Total Expense & Encumbrances	
Approval Request Year 1	478

G. Status Information	
Land Status	Not Applicable
Project Phase	Design
Percent Complete	60 %
Estimated Completion Date	Developer Dependent
Growth	100%
System Improvement	
Environmental Regulation	
Population Served	2,000
Capacity	4.06 MGD





Pleasant Valley Sewer Main, Part 1

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Piscataway Creek 4
S - 000131.07		Change			Planning Areas	Accokeek PA 83

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	399	55	187	157	129	28					
Land											
Construction	1,393		302	1,091	889	202					
Other	261		73	188	153	35					
Total	2,053	55	562	1,436	1,171	265					

C. Funding Schedule (000's)

Contributions/Other	2,053	55	562	1,436	1,171	265					
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D. Description & Justification

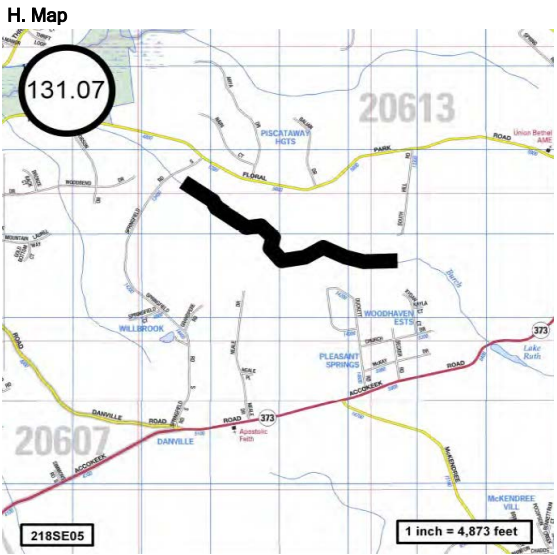
<b>DESCRIPTION</b> This project provides for the planning, design, and construction of 10,000 feet of 15-inch, 18-inch and 21-inch diameter sewer main to serve the Saddle Creek subdivision.
<b>BENEFIT</b> Economic Development: This growth project supports the economic development goals of the Counties
<b>JUSTIFICATION</b> Saddle Creek Hydraulic Planning Analysis (Approved April 2022).
<b>COST CHANGE</b> Not applicable.
<b>OTHER</b> The project scope has remained the same. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.
<b>COORDINATION</b> Coordinating Agencies: Maryland Department of the Environment; Maryland-National Capital Park & Planning Commission; Potomac Electric Power Company; Prince George's County Government Coordinating Projects: S - 000131.05 - Pleasant Valley Sewer Main, Part 2

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$213	
Debt Service		
Total Cost	\$213	
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	1,957
Present Cost Estimate	2,053
Approved Request Last FY	1,104
Total Expense & Encumbrances	55
Approval Request Year 1	1,171

G. Status Information	
Land Status	Not Applicable
Project Phase	Design
Percent Complete	80 %
Estimated Completion Date	Developer Dependent

Growth	100%
System Improvement	
Environmental Regulation	
Population Served	2,800
Capacity	2.0 to 2.7 MGD



# Calm Retreat Sewer Main

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Mattawoman 21
S - 000131.11		Change			Planning Areas	Brandywine & Vicinity PA 85A

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	281	155	60	66	66						
Land											
Construction	397	54	305	38	38						
Other	71		55	16	16						
Total	749	209	420	120	120						

## C. Funding Schedule (000's)

Contributions/Other	749	209	420	120	120						
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## D. Description & Justification

<b>DESCRIPTION</b> This project provides for the planning, design, and construction of 2,914 feet of 15-inch diameter sewer main to serve the Calm Retreat Subdivision.
<b>BENEFIT</b> Economic Development: This growth project supports the economic development goals of the Counties
<b>JUSTIFICATION</b> Milestone Letter of Findings (May 2020). Amended Letter of Findings #2 (May 2021).
<b>COST CHANGE</b> The schedule and expenditure projections have been updated based upon information provided by the developer.
<b>OTHER</b> The project scope has remained the same. The schedule and expenditure projections shown in Block B above are based upon information provided by the developer. The estimated completion date is developer dependent. No WSSC Water rate supported debt will be used for this project.
<b>COORDINATION</b> Coordinating Agencies: Maryland-National Capital Park & Planning Commission; Prince George's County Government Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$62	
Debt Service		
Total Cost	\$62	
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'22
Date First Approved	FY'22
Initial Cost Estimate	981
Cost Estimate Last FY	1,020
Present Cost Estimate	749
Approved Request Last FY	852
Total Expense & Encumbrances	209
Approval Request Year 1	120

G. Status Information	
Land Status	Not Applicable
Project Phase	Design
Percent Complete	50 %
Estimated Completion Date	Developer Dependent

Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	



# Swan Creek WWPS & FM

<b>A. Identification and Coding Information</b>			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Piscataway Creek 4
S - 000131.12		Change			Planning Areas	South Potomac Sector PA 80

### B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	2,664	1,952	500	212	53	106	53				
Land											
Construction	11,488	7,388		4,100	1,350	2,700	50				
Other	481		50	431	140	281	10				
<b>Total</b>	<b>14,633</b>	<b>9,340</b>	<b>550</b>	<b>4,743</b>	<b>1,543</b>	<b>3,087</b>	<b>113</b>				

### C. Funding Schedule (000's)

WSSC Bonds	14,633	9,340	550	4,743	1,543	3,087	113				
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### D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of the modifications to the existing 3.90 MGD wastewater pumping station and replacement of approximately 5,500 feet of existing force main.

## BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties

### JUSTIFICATION

The existing pumping station and 24-inch diameter PCCP force main were built in 1966 and have reached the end of their useful life. Replacement parts are obsolete and unavailable.

**COST CHANGE**

Not applicable.

**OTHER**

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are a mix of construction costs and design level estimates and are expected to change based upon site conditions and design constraints. The WWPS costs are based on actual construction costs as the WWPS construction has been completed. The force main replacement costs are based on design level estimates. The force main work is estimated to be completed in FY'26. Early work on Swan Creek WWPS Upgrades began in FY'16 under ESP S-653.01, Swan Creek Facility Evaluation and Pump Replacement.

## COORDINATION

Coordinating Agencies: Maryland Department of the Environment; Maryland State Highway Administration; Maryland-National Capital Park & Planning Commission; Prince George's County Department of Public Works and Transportation; Prince George's County Department of Permitting Inspection and Enforcement  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$952	27
Total Cost	\$952	27
Impact on Water and Sewer Rate		

#### **F. Approval and Expenditure Data (000's)**

Date First in Program	FY'22
Date First Approved	FY'22
Initial Cost Estimate	12,186
Cost Estimate Last FY	14,136
Present Cost Estimate	14,633
Approved Request Last FY	1,540
Total Expense & Encumbrances	9,340
Approval Request Year 1	1,543

## G. Status Information

Land Status	Public/Agency owned land
Project Phase	Design
Percent Complete	30 %
Estimated Completion Date	September 2025
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	3.90 MGD

## H. Map

MAP NOT APPLICABLE

# Western Branch WRRF Process Train Improvements

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Western Branch 14
S - 000157.02		Change			Planning Areas	Upper Marlboro & Vicinity PA 79

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	16,432	3,414	3,069	9,949	2,747	2,469	2,028	1,670	795	240	
Land											
Construction	69,763	825	9,249	59,689	13,035	20,787	14,540	7,199	3,448	680	
Other	8,196		1,232	6,964	1,578	2,326	1,657	887	424	92	
Total	94,391	4,239	13,550	76,602	17,360	25,582	18,225	9,756	4,667	1,012	

## C. Funding Schedule (000's)

WSSC Bonds	94,391	4,239	13,550	76,602	17,360	25,582	18,225	9,756	4,667	1,012	
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## D. Description & Justification

### DESCRIPTION

This project provides for the planning, design, and construction of improvements at the Western Branch WRRF required to replace the influent flow splitter box and main electrical substation; to rehabilitate aging concrete treatment structures and tertiary filters; to upgrade clarifier equipment, the potable water system and the solids truck loading operations; and to provide back-up power capability for treatment reliability.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties; Employee Safety: This project includes components that help protect the health and safety of employees

### JUSTIFICATION

The Plant was originally built in the early 1970s. Weathering and corrosion of concrete structures and metal equipment require rehabilitation and replacement to extend the useful life and maintain safe access and operation of the process treatment reactors, clarifiers, and filters. Medium voltage electrical distribution equipment is at the end of its useful life, replacement parts are obsolete, and repair/maintenance represents a safety risk. Back-up power generators are being added to the Plant to provide power reliability to maintain treatment operations during weather related power outages. The potable water well and distribution system is over 50 years old and requires replacement and upgrade.

This replacement, rehabilitation, and upgrade work was recommended by various business case evaluations undertaken as part of WSSC Water's Asset Management Program.

### COST CHANGE

The schedule and expenditure projections were revised based upon actual bids and updated engineer's estimates.

### OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are a mix of construction cost, design, and planning level estimates and are expected to change based upon site conditions and design constraints. Early work began under multiple ESP projects.

### COORDINATION

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

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$6,140	31
Total Cost	\$6,140	31
Impact on Water and Sewer Rate	\$0.01	31

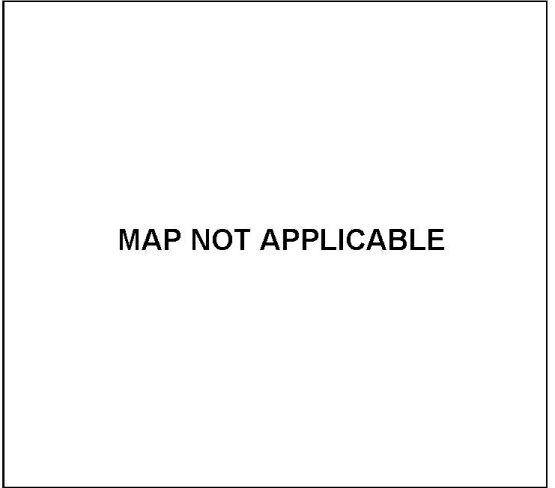
## F. Approval and Expenditure Data (000's)

Date First in Program	FY'20
Date First Approved	FY'20
Initial Cost Estimate	14,859
Cost Estimate Last FY	72,722
Present Cost Estimate	94,391
Approved Request Last FY	10,446
Total Expense & Encumbrances	4,239
Approval Request Year 1	17,360

## G. Status Information

Land Status	Public/Agency owned land
Project Phase	Design
Percent Complete	15 %
Estimated Completion Date	December 2029
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	30.6 MGD

## H. Map



**PENDING CLOSE-OUT PROJECT LISTING**  
**PRINCE GEORGE'S COUNTY SEWER PROJECTS**  
 (ALL FIGURES IN THOUSANDS)

AGENCY NUMBER	PROJECT NAME	ESTIMATED TOTAL COST	EXPENDITURES THRU FY 22	ESTIMATED EXPENDITURES FY 23	REMARKS
S - 000086.19	Southlake Subdivision Sewer	775	682	93	Project completion expected in FY 22.
<b>TOTAL</b>		<b>775</b>	<b>682</b>	<b>93</b>	

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## **Section 7 - Information Only Projects**

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**FINANCIAL SUMMARY**

(ALL FIGURES IN THOUSANDS)

**INFORMATION ONLY PROJECTS**

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 22	EST. EXPEND 23	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BEYOND SIX YEARS	PAGE NUM
						YR 1 24	YR 2 25	YR 3 26	YR 4 27	YR 5 28	YR 6 29		
W - 000001.00	Water Reconstruction Program	913,101	-	76,694	836,407	87,182	103,946	124,506	148,982	173,369	198,422	-	7-2
S - 000001.01	Sewer Reconstruction Program	437,820	-	57,793	380,027	65,439	58,959	60,345	63,233	64,059	67,992	-	7-4
A - 000100.01	Anacostia Depot Reconfiguration	46,674	584	-	46,090	1,870	29,260	14,960	-	-	-	-	7-6
A - 000101.04	Laboratory Division Building Expansion	36,745	3,004	18,284	15,457	10,726	2,011	2,720	-	-	-	-	7-7
A - 000101.06	RGH Building Upgrades	14,763	177	385	14,201	5,038	8,327	836	-	-	-	-	7-8
A - 000102.00	Engineering Support Program	132,301	-	12,301	120,000	20,000	20,000	20,000	20,000	20,000	20,000	-	7-9
A - 000103.00	Energy Performance Program	16,717	-	3,775	12,942	4,079	1,243	3,048	3,048	1,524	-	-	7-10
W - 000105.00	Water Storage Facility Rehabilitation Program	51,213	-	4,321	46,892	6,692	12,225	12,425	4,850	7,950	2,750	-	7-11
W - 000107.00	Specialty Valve Vault Rehabilitation Program	22,795	-	1,843	19,261	3,072	5,650	9,673	360	429	77	1,691	7-12
A - 000110.00	Other Capital Programs	435,440	-	50,777	384,663	58,585	54,269	63,034	67,665	68,380	72,730	-	7-13
S - 000300.01	D'Arcy Park North Relief Sewer	850	-	275	575	290	285	-	-	-	-	-	7-14
<b>TOTALS</b>		2,108,419	3,765	226,448	1,876,515	262,973	296,175	311,547	308,138	335,711	361,971	1,691	

# Water Reconstruction Program

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Bi-County
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000001.00		Change			Planning Areas	Bi-County

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	120,727		8,159	112,568	11,543	13,291	16,238	21,157	24,254	26,085	
Land											
Construction	694,409		59,451	634,958	65,752	79,277	94,902	112,112	131,055	151,860	
Other	97,965		9,084	88,881	9,887	11,378	13,366	15,713	18,060	20,477	
Total	913,101		76,694	836,407	87,182	103,946	124,506	148,982	173,369	198,422	

## C. Funding Schedule (000's)

WSSC Bonds	913,101		76,694	836,407	87,182	103,946	124,506	148,982	173,369	198,422	
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## D. Description & Justification

### DESCRIPTION

The purpose of this program is to renew and extend the useful life of water mains, house connections, and large water services. Portions of the water system are more than 80 years old. Bare cast iron mains, installed generally before 1965, permit the build-up of tuberculation which can reduce flow and cause discoloration at the customer's tap. Selected replacement is necessary to supply water in sufficient quantity, quality, and pressure for domestic use and firefighting. As the system ages, water main breaks are increasing. Selected mains are chronically breaking, and other mains are undersized for the current flow standards. Replacement, rehabilitation via structural lining, and the addition of cathodic protection to these mains provides added value to the customer. Galvanized, copper, and cast-iron water mains, as well as all other water main appurtenances including meter and PRV vaults are replaced on an as needed basis when they have exceeded their useful life.

\*EXPENDITURES FOR WATER RECONSTRUCTION ARE EXPECTED TO CONTINUE INDEFINITELY.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; System Reliability: This project will improve service reliability through fewer and shorter service interruptions; Water Quality: This project supports WSSC Water's mission to provide safe, clean water by improving the quality and/or safety of drinking water

### JUSTIFICATION

The program's projected work units and expenditure levels for FY'24 are as follows: design and construction of main replacement and associated water house connection renewals, 27 miles - \$69.3M; cathodic protection - \$2.9M; design and construction of large water service replacements - \$8.9M; emergency contracts at depots - \$5.5M; pipe armoring - \$0.6M. Note: The specific mix and type of water main reconstruction may vary in any given year depending on the nature and priority of the work to be addressed. The program level may be adjusted in future years based upon the results of the Asset Management Plan. Based upon the prioritization and recommendations in the FY'24 Enterprise Asset Management Plan, the number of miles of water main replacement should begin to ramp back up by approximately 5 miles per year.

Flow studies, water system modeling, and field surveys are routinely conducted. The annual Buried Water Assets System Asset Management Plan identifies the business risk exposure of the water distribution system. FY'24 Enterprise Asset Management Plan (May 2022).

### COST CHANGE

Program costs reflect the latest expenditure and schedule estimates based on the recommendations from the FY'24 Enterprise Asset Management Plan (May 2022).

### OTHER

The water reconstruction program has been ongoing since 1979. Funding in the six-year program period is subject to Spending Affordability Guideline limits. The following work accomplishments through FY'21 summarize the magnitude of the reconstruction effort: 1,982 miles rehabilitated or replaced; 347 large water service/meters replaced. It is anticipated water reconstruction activity will be a perpetual element of future work programs.

### COORDINATION

Coordinating Agencies: Local Community Civic Associations; Maryland State Highway Administration; Montgomery County Department of Public Works and

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$59,399	
Total Cost	\$59,399	
Impact on Water and Sewer Rate	\$0.13	

## F. Approval and Expenditure Data (000's)

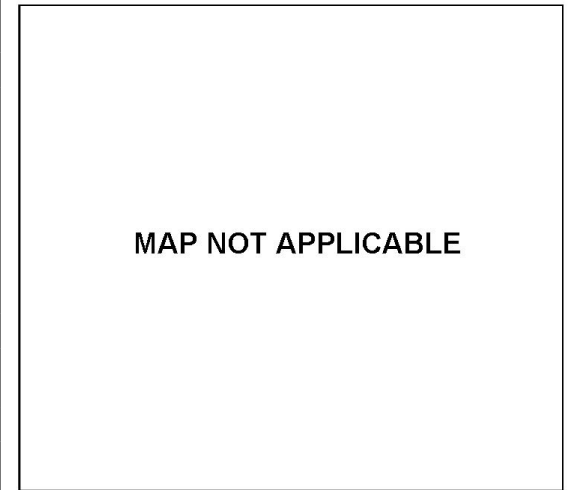
Date First in Program	
Date First Approved	
Initial Cost Estimate	
Cost Estimate Last FY	854,674
Present Cost Estimate	913,101
Approved Request Last FY	71,611
Total Expense & Encumbrances	
Approval Request Year 1	87,182

## G. Status Information

Land Status	Not Applicable
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	On-Going

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

## H. Map







# Sewer Reconstruction Program

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Bi-County 30
S - 000001.01		Change			Planning Areas	Bi-County

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	34,531		5,315	29,216	5,186	5,261	4,448	4,550	4,700	5,071	
Land											
Construction	363,369		47,224	316,145	54,283	48,315	50,380	52,899	53,528	56,740	
Other	39,920		5,254	34,666	5,970	5,383	5,517	5,784	5,831	6,181	
Total	437,820		57,793	380,027	65,439	58,959	60,345	63,233	64,059	67,992	

## C. Funding Schedule (000's)

WSSC Bonds	297,820		37,793	260,027	45,439	38,959	40,345	43,233	44,059	47,992	
State Aid	140,000		20,000	120,000	20,000	20,000	20,000	20,000	20,000	20,000	

## D. Description & Justification

### DESCRIPTION

This program provides for comprehensive sewer system rehabilitation in residential areas of sewer mains less than 15-inches in diameter and sewer house connections, addressing infiltration and inflow control, and exposed pipe problems. This program does not include any major capital projects (e.g. CIP size relief or replacement sewers). These are funded separately in the CIP.

\*EXPENDITURES FOR SEWER RECONSTRUCTION ARE EXPECTED TO CONTINUE INDEFINITELY.

### BENEFIT

Regulatory & Other Agreements: This project is required to meet regulatory requirements, multi-jurisdictional agreements, and/or consent decrees; Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties

### JUSTIFICATION

The projected work units and expenditure levels for FY'24 are as follows: 25 miles of main and lateral design & construction - \$50.2M; sewer house connection renewals - \$9.6M; enhanced grouting - \$3.3M; emergency repairs - \$2.4M. Note: The specific mix and type of sewer reconstruction may vary in any given year depending on identified system defects. Projections are based on historical experience with regards to timing of design and construction work and availability of authorized contractors.

Comprehensive Basin Studies, Sewer System Evaluation Surveys, Line Blockage Assessments, field surveys, closed-circuit TV inspections, and/or other activities investigating specific portions of the collection system. Annual Buried Wastewater Assets System Asset Management Plan. FY'24 Enterprise Asset Management Plan (May 2022).

### COST CHANGE

Program costs reflect the latest schedule and expenditure estimates based upon the current plan for the completion of Phase 2 (Priority 2 and Priority 3) Consent Decree work and the recommendations from the Buried Wastewater Assets System Asset Management Plan.

### OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above reflect the terms of the Sanitary Sewer Overflow Consent Decree between WSSC Water, Maryland Department of the Environment (MDE), and the EPA, entered into on December 7, 2005. WSSC Water has applied for low interest loans through the MDE's Water Quality Administration State Revolving Loan Program and grant funding from the MDE Bay Restoration Fund for portions of this program. The sewer reconstruction program was established in 1979. Some expenditures for grouting repairs are included in the operating budget. The following work accomplishments through FY'21 summarize the magnitude of this reconstruction effort: sewer main reconstruction, 549 miles; and sewer house connection renewals, 23,380. It is anticipated that sewer reconstruction activity will be a perpetual element of future work programs.

### COORDINATION

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$19,374	
Total Cost	\$19,374	
Impact on Water and Sewer Rate	\$0.04	

## F. Approval and Expenditure Data (000's)

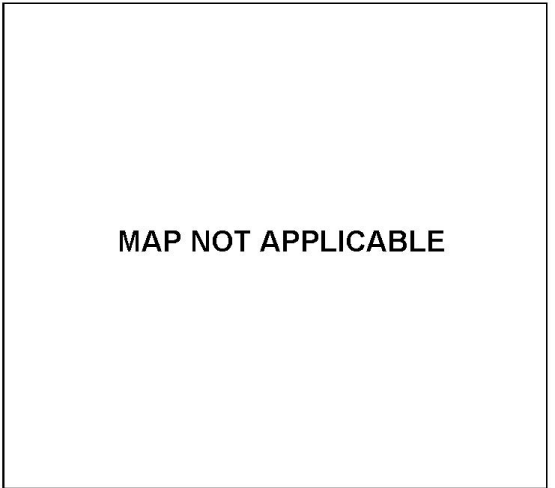
Date First in Program	
Date First Approved	
Initial Cost Estimate	
Cost Estimate Last FY	366,920
Present Cost Estimate	437,820
Approved Request Last FY	50,540
Total Expense & Encumbrances	
Approval Request Year 1	65,439

## G. Status Information

Land Status	Not Applicable
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	On-Going

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

## H. Map



Coordinating Agencies: Local Community Civic Associations; Maryland Department of the Environment; Maryland State Highway Administration; Montgomery County Department of Public Works and Transportation; Montgomery County Government; Prince George's County Government; Prince George's County Department of Permitting Inspection and Enforcement; U.S. Environmental Protection Agency, Region III  
Coordinating Projects: S - 000170.09 - Trunk Sewer Reconstruction Program

Anacostia Depot Reconfiguration

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
A - 000100.01		Change			Planning Areas	Landover & Vicinity PA 72

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	5,484	584		4,900	1,700	1,600	1,600				
Land											
Construction	37,000			37,000		25,000	12,000				
Other	4,190			4,190	170	2,660	1,360				
Total	46,674	584		46,090	1,870	29,260	14,960				

C. Funding Schedule (000's)

WSSC Bonds	46,674	584		46,090	1,870	29,260	14,960				
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D. Description & Justification

<p><b>DESCRIPTION</b></p> <p>This project provides for the planning, design, and construction of a reconfiguration of the Anacostia Depot to improve the efficiency of operations; to update to current building codes, regulations, and Americans with Disabilities Act (ADA) requirements; to improve the energy efficiency of the facilities; to address floodplain vulnerabilities due to climate change; and to replace assets that are at or beyond their useful lives.</p> <p><b>BENEFIT</b></p> <p>Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; Workplace Optimization: This project supports WSSC Water's commitment to provide a productive work environment for its employees and secure its critical infrastructure; Employee Safety: This project includes components that help protect the health and safety of employees</p> <p><b>JUSTIFICATION</b></p> <p>The Anacostia Depot is the largest of WSSC Water's four depots that support water and sewer field operations. The existing buildings were generally constructed in the 1970s. The depot houses several critical functions for WSSC Water, including the workshop and administrative space for the Facility Maintenance Division, the water meter testing and hydrant shop, the heavy equipment shop, the Fleet Services Division building and one of the fleet garages, and the main warehouse. The depot is constrained by CSX railroad tracks that traverse the site, leading to operational inefficiencies when vehicles and staff must wait for trains to pass. The site also has floodplain vulnerabilities due to the effects of climate change.</p> <p>A facility-wide condition assessment was undertaken in June 2019 to identify deficiencies in the existing facilities and provide a recommended course of action to remedy the issues. The study identified a significant number of deficiencies, including electrical, mechanical, accessibility, and safety deficiencies. The study examined potential remedies, including renovation and new build scenarios. A facility master plan was subsequently commissioned to provide a more detailed analysis of the potential renovation and new build alternatives, which was finalized in June 2021. Anacostia Depot Facility Condition Assessment, Louis Berger (July 2020); Anacostia Depot Master Plan, Samaha Associates (June 2021).</p> <p><b>COST CHANGE</b></p> <p>Not applicable.</p> <p><b>OTHER</b></p> <p>The project scope has remained the same. The schedule and expenditure projections shown in Block B above are preliminary planning level estimates and are expected to change based upon site conditions and design constraints. Planning work began under ESP A-859.11, Anacostia Depot Reconfiguration.</p> <p><b>COORDINATION</b></p> <p>Coordinating Agencies: Montgomery County Government; Prince George's County Government</p> <p>Coordinating Projects: Not Applicable</p>
--

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$3,036	27
Total Cost	\$3,036	27
Impact on Water and Sewer Rate	\$0.01	27
<b>F. Approval and Expenditure Data (000's)</b>		
Date First in Program		FY'23
Date First Approved		FY'23
Initial Cost Estimate		42,838
Cost Estimate Last FY		42,838
Present Cost Estimate		46,674
Approved Request Last FY		
Total Expense & Encumbrances		584
Approval Request Year 1		1,870

G. Status Information	
Land Status	Public/Agency owned land
Project Phase	Design
Percent Complete	10 %
Estimated Completion Date	February 2026
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

<p><b>H. Map</b></p> <p>MAP NOT APPLICABLE</p>
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Laboratory Division Building Expansion

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
A - 000101.04		Change			Planning Areas	Fairland (MC) PA 34

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	5,413	2,777	1,147	1,489	725	539	225				
Land											
Construction	28,264	227	15,474	12,563	9,026	1,289	2,248				
Other	3,068		1,663	1,405	975	183	247				
Total	36,745	3,004	18,284	15,457	10,726	2,011	2,720				

C. Funding Schedule (000's)

WSSC Bonds	36,745	3,004	18,284	15,457	10,726	2,011	2,720				
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D. Description & Justification

<p><b>DESCRIPTION</b></p> <p>This project provides for the planning, design, and construction of a 19,720 square-foot expansion to the Consolidated Laboratory Facility and replacement of equipment in the existing building to accommodate the increased workload, ensure that all data meets requirements set by the regulators, and to improve the safety of employees and customers.</p> <p><b>BENEFIT</b></p> <p>Regulatory &amp; Other Agreements: This project is required to meet regulatory requirements, multi-jurisdictional agreements, and/or consent decrees; Water Quality: This project supports WSSC Water's mission to provide safe, clean water by improving the quality and/or safety of drinking water; Workplace Optimization: This project supports WSSC Water's commitment to provide a productive work environment for its employees and secure its critical infrastructure</p> <p><b>JUSTIFICATION</b></p> <p>The Consolidated Laboratory Facility is an MDE-certified lab constructed in 2000 to meet the original workload of a maximum of 500,000 tests/year. Since the lab was built, it has experienced a significant increase in the analytical workload, number of employees, and number of instruments, and also added new functions with the creation of the Water Quality Division. The historical workload of 500,000 tests/year is expected to grow to over 750,000 tests/year. Currently, WSSC Water depends on subcontract laboratories for critical and regulatory analysis that cannot be handled in-house due to space, infrastructure, and instrument constraints. Lack of control and supervision by qualified WSSC Water staff on the regulatory samples tested in subcontract laboratories has resulted in errors in the past that could potentially lead to a citation/violation for WSSC Water. Additionally, increased analytical time involved with subcontract analysis may delay response to critical water contamination events, which could jeopardize the safety of WSSC Water's customers. An MDE Laboratory audit recommended having separate rooms for analyzing wastewater and drinking water microbiological samples. Lab Expansion Business Case Evaluation, CDM Smith (March 2019).</p> <p><b>COST CHANGE</b></p> <p>The schedule and expenditure projections were updated based upon actual bids for the expansion.</p> <p><b>OTHER</b></p> <p>The project scope has remained the same. The schedule and expenditure projections shown in Block B above are a mix of actual bids and preliminary planning level estimates and are expected to change based upon site conditions and design constraints. The project is being implemented in two phases, with the first phase encompassing the expansion and the second phase comprising the replacement of equipment in the existing building. The Water Quality Division is implementing a Water Quality Surveillance and Response System to continuously monitor and respond to drinking water contamination events on a real-time basis from a centralized Water Quality Control Center. The Water Quality Division also manages the Contamination Rapid Response Team (CRRT) and the response to all water quality related customer complaints.</p> <p><b>COORDINATION</b></p> <p>Coordinating Agencies: Maryland Department of the Environment; Montgomery County Government; Prince George's County Government; 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 & Other		
Maintenance		
Debt Service	\$2,390	27
Total Cost	\$2,390	27
Impact on Water and Sewer Rate	\$0.01	27

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'21
Date First Approved	FY'21
Initial Cost Estimate	21,844
Cost Estimate Last FY	27,288
Present Cost Estimate	36,745
Approved Request Last FY	12,320
Total Expense & Encumbrances	3,004
Approval Request Year 1	10,726

G. Status Information	
Land Status	Public/Agency owned land
Project Phase	Construction
Percent Complete	0 %
Estimated Completion Date	March 2026
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	750,000 tests annually

H. Map
MAP NOT APPLICABLE

RGH Building Upgrades

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
A - 000101.06		Change			Planning Areas	Northwestern Area PA 60

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	737	177	350	210	80	70	60				
Land											
Construction	12,700			12,700	4,500	7,500	700				
Other	1,326		35	1,291	458	757	76				
Total	14,763	177	385	14,201	5,038	8,327	836				

C. Funding Schedule (000's)

WSSC Bonds	14,763	177	385	14,201	5,038	8,327	836				
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D. Description & Justification

<p><b>DESCRIPTION</b></p> <p>This program provides for the planning, design, and construction of projects to replace and upgrade assets at the Richard G. Hoyer (RGH) Building that have reached the end of their useful lives. The program will maintain or enhance existing operating conditions and reliability of the building systems. The work includes the following: replacement of the primary 13.2 kV switchgear and associated equipment that supply power to the building; and replacement of the emergency generators and fuel tanks.</p> <p><b>BENEFIT</b></p> <p>Employee Safety: This project includes components that help protect the health and safety of employees; Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life</p> <p><b>JUSTIFICATION</b></p> <p>Most of the electrical equipment at the RGH Building was installed during the initial building construction in 1990 and has reached the end of its useful life. Parts are not readily available in most cases and are increasingly more difficult to find. There is an increasing risk of critical system failure and prolonged outage recovery. The emergency generators are needed for building life safety systems, the Systems Control Center, and backup power to the Data Center systems in the event primary power is lost.</p> <p>This work was recommended as part of WSSC Water's Asset Management Program (CNPV #149 and CNPV #178).</p> <p><b>COST CHANGE</b></p> <p>Not applicable.</p> <p><b>OTHER</b></p> <p>The project scope has remained the same. The schedule and expenditure projections shown in Block B above are preliminary planning level estimates and are expected to change based upon site conditions and design constraints. Planning work began under ESP A-890.63, RGH Switchgear and Generator Replacement.</p> <p><b>COORDINATION</b></p> <p>Coordinating Agencies: Montgomery County Government; Prince George's County Government</p> <p>Coordinating Projects: Not Applicable</p>
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E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$960	27
Total Cost	\$960	27
Impact on Water and Sewer Rate		

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'23
Date First Approved	FY'23
Initial Cost Estimate	13,750
Cost Estimate Last FY	13,750
Present Cost Estimate	14,763
Approved Request Last FY	1,100
Total Expense & Encumbrances	177
Approval Request Year 1	5,038

G. Status Information	
Land Status	Public/Agency owned land
Project Phase	Planning
Percent Complete	50 %
Estimated Completion Date	February 2026
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

H. Map
MAP NOT APPLICABLE

# Engineering Support Program

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Bi-County
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Bi-County 30
A - 000102.00		Change			Planning Areas	Bi-County

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision											
Land											
Construction	118,935		10,935	108,000	18,000	18,000	18,000	18,000	18,000	18,000	
Other	13,366		1,366	12,000	2,000	2,000	2,000	2,000	2,000	2,000	
Total	132,301		12,301	120,000	20,000	20,000	20,000	20,000	20,000	20,000	

## C. Funding Schedule (000's)

WSSC Bonds	132,301		12,301	120,000	20,000	20,000	20,000	20,000	20,000	20,000	
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## D. Description & Justification

### DESCRIPTION

The Engineering Support Program (ESP) represents a consolidation of a diverse group of projects whose unified purpose is to support the extensive water and sewer infrastructure and numerous support facilities that are owned, operated, and maintained by WSSC Water.

\*EXPENDITURES FOR ENGINEERING SUPPORT ARE EXPECTED TO CONTINUE INDEFINITELY.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; Workplace Optimization: This project supports WSSC Water's commitment to provide a productive work environment for its employees and secure its critical infrastructure; Employee Safety: This project includes components that help protect the health and safety of employees

### JUSTIFICATION

ESP projects are identified primarily through WSSC Water's Asset Management Program. Engineering services are provided for planning, design, and construction to meet a wide range of needs. As such, ESP projects are diverse in scope and typically include work needed to upgrade operating efficiency, modify existing processes, satisfy regulatory requirements, improve safety and security, or rehabilitate aging facilities. The ESP does not include proposed "major projects" which, by law, must be programmed in WSSC Water's Six-Year Capital Improvements Program or projects to serve new development.

Asset Management Implementation Plan, Stearns & Wheler (April 2008); FY 2024 Enterprise Asset Management Plan (May 2022).

### COST CHANGE

Not applicable.

### OTHER

The ESP process provides a stable funding level for projects that require engineering support. Each year, the requested projects will be prioritized and then initiated subject to the available funding for the fiscal year.

### COORDINATION

Coordinating Agencies: Not Applicable

Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$8,606	
Total Cost	\$8,606	
Impact on Water and Sewer Rate	\$0.02	

## F. Approval and Expenditure Data (000's)

Date First in Program	FY'87
Date First Approved	FY'87
Initial Cost Estimate	
Cost Estimate Last FY	130,301
Present Cost Estimate	132,301
Approved Request Last FY	12,301
Total Expense & Encumbrances	
Approval Request Year 1	20,000

## G. Status Information

Land Status	Not Applicable
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	On-Going

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

## H. Map

MAP NOT APPLICABLE

# Energy Performance Program

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
A - 000103.00		Change			Planning Areas	Bi-County

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	2,442		310	2,132	227	580	530	530	265		
Land											
Construction	12,092		2,972	9,120	3,320	500	2,120	2,120	1,060		
Other	2,183		493	1,690	532	163	398	398	199		
Total	16,717		3,775	12,942	4,079	1,243	3,048	3,048	1,524		

## C. Funding Schedule (000's)

WSSC Bonds	15,717		3,375	12,342	3,479	1,243	3,048	3,048	1,524		
State Aid	1,000		400	600	600						

## D. Description & Justification

### DESCRIPTION

This program provides for the planning, design, and construction of projects to replace and upgrade energy consuming equipment and systems to reduce energy consumption and costs (electricity, fuel oil, natural gas, or other fuel) at all WSSC Water facilities. The program will maintain or enhance existing operating conditions and reliability while continuing to meet all permit requirements and ensuring a continued commitment to environmental stewardship. Projects may include, but are not limited to, the replacement or upgrade of water and wastewater process equipment, water and wastewater pumps, peak shaving and backup power generation systems, variable speed drives, HVAC equipment/systems, and lighting. Current projects include: Piscataway WRRF blower system upgrades; Piscataway WRRF mixer replacement/upgrade; Potomac WFP LCI drives replacement; and Western Branch WRRF dewatering upgrades.

### BENEFIT

Environmental Sustainability: This project supports WSSC Water's commitment to protect the natural environment of Prince George's and Montgomery Counties; Financial Efficiency: This project is expected to increase revenues, decrease expenses, or both; Innovation: This project utilizes new ideas, methods, and/or research to streamline processes, enhance services, and reduce costs

### JUSTIFICATION

Previous projects under this program were implemented through various energy service companies (ESCOs) and power purchase agreement (PPA) procurements. The current projects are moving forward as standalone projects implemented by WSSC Water. WSSC Water will continue to identify energy savings efforts through the implementation of energy audit calculations and methods developed as part of the program. Future projects will be validated by WSSC Water's Asset Management Program.

### COST CHANGE

Program costs reflect the latest schedule and expenditure projections based on the information available for each of the constituent projects.

### OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are a mix of preliminary planning, design, and construction level estimates and are expected to change based upon site conditions and design constraints. Costs for monitoring and verification are included in the Operating Budget. 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, as well as through the Maryland Department of the Environment's Energy Water Infrastructure Program (EWIP). The Piscataway WRRF blower replacement/upgrade project will be partially funded by an EWIP grant.

### COORDINATION

Coordinating Agencies: Maryland Department of the Environment; Montgomery County Government; Prince George's County Government  
Coordinating Projects: S - 000096.14 - Piscataway WRRF Facility Upgrades

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$1,022	
Total Cost	\$1,022	
Impact on Water and Sewer Rate		

## F. Approval and Expenditure Data (000's)

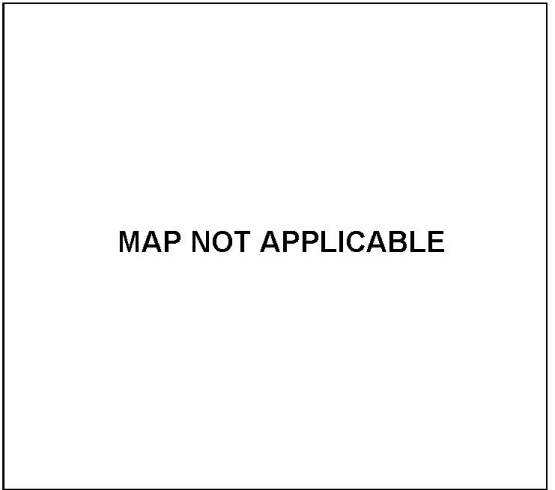
Date First in Program	FY'03
Date First Approved	FY'03
Initial Cost Estimate	
Cost Estimate Last FY	21,074
Present Cost Estimate	16,717
Approved Request Last FY	5,717
Total Expense & Encumbrances	
Approval Request Year 1	4,079

## G. Status Information

Land Status	Public/Agency owned land
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	On-Going

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

## H. Map





# Water Storage Facility Rehabilitation Program

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	Bi-County
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000105.00		Change			Planning Areas	Bi-County

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	12,494		2,157	10,337	2,542	1,989	2,170	1,409	1,227	1,000	
Land											
Construction	34,063		1,771	32,292	3,542	9,125	9,125	3,000	6,000	1,500	
Other	4,656		393	4,263	608	1,111	1,130	441	723	250	
Total	51,213		4,321	46,892	6,692	12,225	12,425	4,850	7,950	2,750	

## C. Funding Schedule (000's)

WSSC Bonds	51,213		4,321	46,892	6,692	12,225	12,425	4,850	7,950	2,750	
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## D. Description & Justification

<b>DESCRIPTION</b> <p>The Water Storage Facility Rehabilitation Program provides for the comprehensive rehabilitation of WSSC Water's more than 60 water storage facilities located throughout the WSSC Water service area, holding over 200 million gallons of finished drinking water. The program provides for structural metal and concrete foundation repairs, equipment upgrades to meet current OSHA standards, lead paint removal, security upgrades, advanced mixing systems to improve water quality, and altitude valve vault and supply pipe replacements.</p>
<b>BENEFIT</b> <p>Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; Water Quality: This project supports WSSC Water's mission to provide safe, clean water by improving the quality and/or safety of drinking water; Employee Safety: This project includes components that help protect the health and safety of employees</p>
<b>JUSTIFICATION</b> <p>Currently, there are more than 20 steel tanks whose last painting contract was finished 10 or more years ago. Many older tanks have accumulated significant layers of paint which have lost their bonding strength to the steel. Old coatings will be completely removed and costly lead abatement techniques will be required in many cases. The recommended practice is to do this extra work every third re-coating to extend the service life of the structure. Modern coating systems should extend the length of service between coatings from the current 10 years to somewhere between 15 to 20 years.</p>
<b>COST CHANGE</b> <p>Program costs reflect the latest schedule and expenditure projections based on the plan for the water storage facilities currently included in the program.</p>
<b>OTHER</b> <p>The project scope has remained the same. The schedule and expenditure projections shown in Block B above are a mix of planning, design, and construction level estimates and are expected to change based upon site conditions and design constraints. Tanks are prioritized based on the condition of the existing coating and structural integrity issues. The program plan for FY'24 will include the following water storage facilities: North Woodside Standpipe, Pointer Ridge Elevated Tank, Greenbelt Standpipe, Andrews Elevated Tank, Wall Lane Standpipe, Brink Elevated Tank, Bradley Hills 1 and 2, and Cedar Heights Reservoir.</p>
<b>COORDINATION</b> <p>Coordinating Agencies: Maryland Department of the Environment; Montgomery County Government; Prince George's County Government Coordinating Projects: Not Applicable</p>

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$3,331	
Total Cost	\$3,331	
Impact on Water and Sewer Rate	\$0.01	

F. Approval and Expenditure Data (000's)	
Date First in Program	FY'09
Date First Approved	FY'09
Initial Cost Estimate	
Cost Estimate Last FY	39,000
Present Cost Estimate	51,213
Approved Request Last FY	4,000
Total Expense & Encumbrances	
Approval Request Year 1	6,692

G. Status Information	
Land Status	Public/Agency owned land
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	On-Going
Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

H. Map
MAP NOT APPLICABLE

# Specialty Valve Vault Rehabilitation Program

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
W - 000107.00		Change			Planning Areas	Bi-County

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	4,023		203	3,720	1,211	1,161	1,133	105	43	67	100
Land											
Construction	15,798		1,400	13,028	1,460	3,752	7,278	208	330		1,370
Other	2,974		240	2,513	401	737	1,262	47	56	10	221
Total	22,795		1,843	19,261	3,072	5,650	9,673	360	429	77	1,691

## C. Funding Schedule (000's)

WSSC Bonds	22,795		1,843	19,261	3,072	5,650	9,673	360	429	77	1,691
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## D. Description & Justification

### DESCRIPTION

This program provides for the planning, design, and construction of improvements and replacement of specialty valves and their associated vaults throughout the water distribution system, including pressure reducing valves, pressure relief valves, and altitude and metering valves. The program includes valves ranging in size from 8-inches to 60-inches in diameter. The program will systematically evaluate the condition of individual installations, some of which were constructed as early as the 1930s, and upgrade or relocate the structures and equipment as necessary. This program will improve reliability and increase the efficiency of system operations.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life; System Reliability: This project will improve service reliability through fewer and shorter service interruptions

### JUSTIFICATION

The facilities included in this program are in need of rehabilitation due to factors such as: location within heavily traveled roadways, age deterioration, obsolescence, and operational improvements. Candidate PRVs were originally identified in an October 26, 2005 memo from Jeff Asner to Karen Wright and a subsequent May 7, 2007 memo from Karen Wright to Thomas Heikkinen. Originally, there were 23 candidate vaults within this program, as identified by the Systems Control Group; PRV Vault Rehabilitation Evaluation Study, EBA Engineering, Inc. (September 2010). Additional valves and vaults were recommended as part of WSSC Water's Asset Management Program; 290B Business Case Report (January 2016); CNPV #244 Central Avenue Water Pumping Station Valve Vaults Replacement (June 2022).

### COST CHANGE

Program costs reflect the latest schedule and expenditure projections based on the plan for the valves and vaults currently included in the program. The FY'24 program plan incorporates the addition of work to replace 7 valves, vaults, and associated piping at the Central Avenue Water Pumping Station due to their poor condition.

### OTHER

The project scope has remained the same. The schedule and expenditure projections shown in Block B above are a mix of planning, design, and construction level estimates and are expected to change based upon site conditions and design constraints. Additional vaults may be added to or removed from the program based upon recommendations from WSSC Water's Asset Management Program. Future land and rights-of-way costs are included in project W-202.00.

### COORDINATION

Coordinating Agencies: Maryland State Highway Administration; Maryland Water Management Administration; Montgomery County Department of Public Works and Transportation; Montgomery County Government; Prince George's County Government; Prince George's County Department of Permitting Inspection and Enforcement  
Coordinating Projects: W - 000161.01 - Large Diameter Water Pipe & Large Valve Rehabilitation Program

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$1,483	
Total Cost	\$1,483	
Impact on Water and Sewer Rate		

## F. Approval and Expenditure Data (000's)

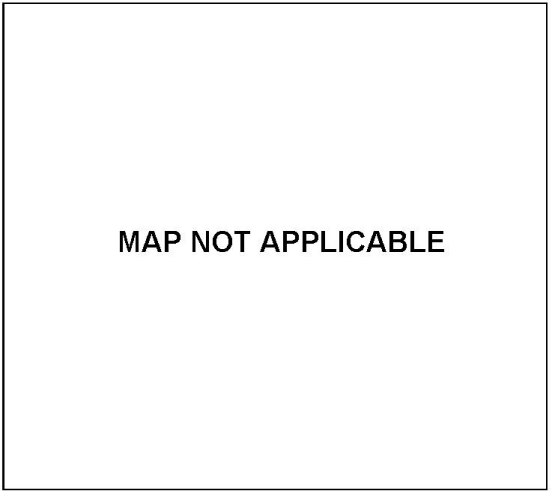
Date First in Program	FY'11
Date First Approved	FY'11
Initial Cost Estimate	17,560
Cost Estimate Last FY	7,594
Present Cost Estimate	22,795
Approved Request Last FY	1,691
Total Expense & Encumbrances	
Approval Request Year 1	3,072

## G. Status Information

Land Status	Land and R/W to be acquired
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	On-Going

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

## H. Map



# Other Capital Programs

<b>A. Identification and Coding Information</b>			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	
A - 000110.00		Change			Planning Areas	Bi-County

## B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	69,169		8,962	60,207	9,240	9,533	9,844	10,174	10,523	10,893	
Land											
Construction	287,945		28,184	259,761	41,802	42,352	42,935	43,555	44,211	44,906	
Other	78,326		13,631	64,695	7,543	2,384	10,255	13,936	13,646	16,931	
<b>Total</b>	<b>435,440</b>		<b>50,777</b>	<b>384,663</b>	<b>58,585</b>	<b>54,269</b>	<b>63,034</b>	<b>67,665</b>	<b>68,380</b>	<b>72,730</b>	

## C. Funding Schedule (000's)

WSSC Bonds	435,440		50,777	384,663	58,585	54,269	63,034	67,665	68,380	72,730	
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## D. Description & Justification

### DESCRIPTION

Other Capital Programs (OCP) includes miscellaneous capital projects, programs, and expenditures for common, non-CIP, enterprise-wide activities such as relocations, new water and sewer house connections, purchase of water meters, paving, and general construction of local lines.

\*EXPENDITURES FOR OTHER CAPITAL PROGRAMS ARE EXPECTED TO CONTINUE INDEFINITELY.

### BENEFIT

Infrastructure Reinvestment: This project replaces existing infrastructure that has exceeded its useful life

### JUSTIFICATION

The OCP does not include proposed "major projects" which, by law, must be programmed in WSSC Water's Six-Year Capital Improvements Program (CIP) or projects to serve new development.

### COST CHANGE

Not applicable.

### OTHER

The OCP summarizes capital expenditures and allocated costs that are not already included in the CIP or in other Information Only projects. Expenditures for the budget year are estimated during the annual CIP update cycle each summer for the Proposed CIP document. The estimates will be revised and updated during the annual budget update cycle each fall for the Proposed Operating & Capital Budget document. Future years are Order of Magnitude estimates and are expected to change with each update cycle.

### COORDINATION

Coordinating Agencies: Not Applicable  
Coordinating Projects: Not Applicable

<b>E. Annual Operating Budget Impact (000's)</b>		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$31,141	
Total Cost	\$31,141	
Impact on Water and Sewer Rate	\$0.07	

## F. Approval and Expenditure Data (000's)

Date First in Program	FY'21
Date First Approved	FY'21
Initial Cost Estimate	
Cost Estimate Last FY	478,716
Present Cost Estimate	435,440
Approved Request Last FY	52,473
Total Expense & Encumbrances	
Approval Request Year 1	58,585

## G. Status Information

Land Status	Not Applicable
Project Phase	On-Going
Percent Complete	0 %
Estimated Completion Date	On-Going

Growth	
System Improvement	100%
Environmental Regulation	
Population Served	
Capacity	

## H. Map

MAP NOT APPLICABLE

D'Arcy Park North Relief Sewer

A. Identification and Coding Information			PDF Date	October 1, 2022	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Western Branch 14
S - 000300.01		Change			Planning Areas	Suitland-District Heights & Vicinity PA 75A

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'22	Estimate FY'23	Total 6 Years	Year 1 FY'24	Year 2 FY'25	Year 3 FY'26	Year 4 FY'27	Year 5 FY'28	Year 6 FY'29	Beyond 6 Years
Planning, Design & Supervision	191		99	92	48	44					
Land											
Construction	548		140	408	204	204					
Other	111		36	75	38	37					
Total	850		275	575	290	285					

C. Funding Schedule (000's)

Contributions/Other	850		275	575	290	285					
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D. Description & Justification

**DESCRIPTION**  
This project provides for the planning, design, and construction of 1,110 feet of 12-inch diameter (non-SDC eligible) PVC relief sewer to provide service to D'Arcy Park North.

**BENEFIT**  
Economic Development: This growth project supports the economic development goals of the Counties

**JUSTIFICATION**  
D'Arcy Park North Hydraulic Planning Analysis (September 2008).

**COST CHANGE**  
Not applicable.

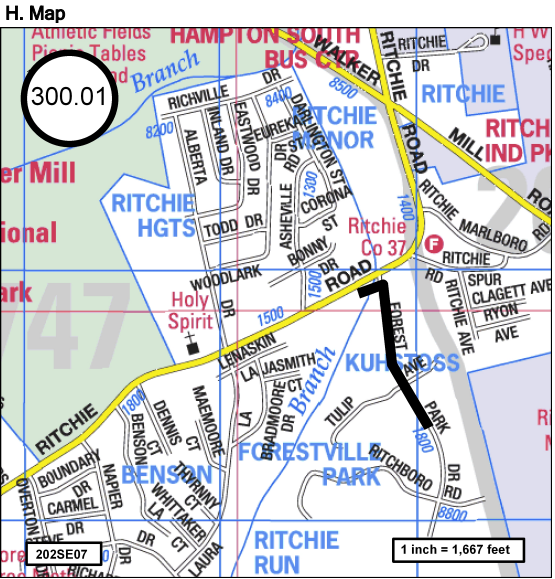
**OTHER**  
The project scope has remained the same. The project is on hold due to lack of activity and will need to be re-evaluated when the Owner/Developer approaches WSSC Water to restart the project. The current estimated total project cost shown above reflects the original plans for the subdivision. A new cost estimate and schedule will be required at restart. The estimated completion date is developer dependent. This project is not eligible for SDC credits. No WSSC Water rate supported debt will be used for this project.

**COORDINATION**  
Coordinating Agencies: Local Community Civic Associations; Prince George's County Department of Environmental Resources; Prince George's County Government  
Coordinating Projects: Not Applicable

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance	\$24	
Debt Service		
Total Cost	\$24	
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	824
Cost Estimate Last FY	850
Present Cost Estimate	850
Approved Request Last FY	290
Total Expense & Encumbrances	
Approval Request Year 1	290

G. Status Information	
Land Status	Not Applicable
Project Phase	Design
Percent Complete	20 %
Estimated Completion Date	Developer Dependent
Growth	100%
System Improvement	
Environmental Regulation	
Population Served	
Capacity	1.6 MGD



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## Appendices

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RESOLUTION NO. 2022-2314

Adopted: June 15, 2022

Effective Date: July 1, 2022

## WASHINGTON SUBURBAN SANITARY COMMISSION

**SUBJECT:** A RESOLUTION modifying the System Development Charge (SDC) to help finance the capital costs of expanding and augmenting water and sewerage systems to accommodate service to subscribers in the Washington Suburban Sanitary District (WSSD) and to provide a financing mechanism to aid the Washington Suburban Sanitary Commission (Commission) in paying for the capital projects thereof by providing methods and procedures by which the SDC is to be implemented and/or collected.

**WHEREAS**, the Maryland Annotated Code, Public Utilities Article (PUA) §§ 25-401, *et seq.* authorizes the Montgomery and Prince George's County Councils to establish a System Development Charge which will be paid by applicants for new water and sewer service; and

**WHEREAS**, PUA §§ 25-402 and 25-403 govern the schedule for the payment of the System Development Charge to the Commission for certain properties and establishes a maximum System Development Charge that may be charged; and

**WHEREAS**, PUA § 25-403(b) provides that the Montgomery and Prince George's County Councils shall grant a full or partial exemption from the SDC charge for public sponsored or affordable housing; and

**WHEREAS**, PUA § 25-403(b) provides that the Montgomery and Prince George's County Councils may grant a full or partial exemption from the SDC charge for revitalization projects, elderly housing, biotechnology, and for certain properties used primarily for recreational and educational programs for youth, properties used for child care or after-school care, or properties used for programs and services for the developmentally disabled; and

**WHEREAS**, the Commission owns and operates various water treatment and sewage treatment disposal plants and facilities within the WSSD and has an equity share in sewage treatment plants operated by other jurisdictions to treat sewage generated in portions of the WSSD; and

**WHEREAS**, it is necessary that the Commission, with the advice and consent of the local governing bodies within the WSSD, develop alternative funding to cover the costs of providing quality water and sewer service in the WSSD and to similarly accommodate new growth therein as authorized by the County Governments; and

RESOLUTION NO. 2022-2314Adopted: June [15], 2022Effective Date: July 1, 2022

**WHEREAS**, the System Development Charge is a component of the Commission's Fiscal Year 2023 capital and operating budgets prepared pursuant to PUA §17-202; and

**WHEREAS**, the Commission last modified the System Development Charge effective July 1, 2021 by Commission Resolution No. 2021-2287; and

**WHEREAS**, for all of the foregoing reasons it is necessary or desirable to continue the imposition of a System Development Charge fee; and

**WHEREAS**, PUA § 25-403 provides that the Montgomery and Prince George's County Councils may adopt and the Commission may implement a System Development Charge not to exceed \$200.00 per fixture unit or, for residential properties with five or fewer toilets, not to exceed certain enumerated amounts based on the number of toilets per dwelling unit; and

**WHEREAS**, PUA § 25-403 provides that on July 1, 1999 and each July 1 of each succeeding year, the maximum charge may be changed by an amount equal to the prior calendar year's change in the consumer price index published by the Bureau of Labor Statistics of the United States Department of Labor for urban wage earners and clerical workers for all items for the Washington, D.C. metropolitan area; and

**WHEREAS**, the consumer price index published by the Bureau of Labor Statistics of the United States Department of Labor for urban wage earners and clerical workers for all items for the Washington, D.C. metropolitan area increased 6.4% from November 2020 to November 2021; and

**WHEREAS**, the Commission recommends keeping the System Development Charge rates unchanged for FY 2023. However, the Commission recommends increasing the maximum allowable charge by 6.4% from FY 2022 limits in order to maintain future rate flexibility to address future potential growth funding gaps; and

**WHEREAS**, the County Councils of Prince George's County and Montgomery County met and approved the modifications to the System Development Charge set forth below on May 12, 2022; and

**NOW, THEREFORE, BE IT RESOLVED** THIS 15th day of June, 2022, that the Commission hereby adopts the approved System Development Charge fee schedule as set forth herein. For the purposes of this Resolution, the following definitions apply:

RESOLUTION NO. 2022-2314Adopted: June [15], 2022Effective Date: July 1, 2022Definitions:

- 1) Apartment Unit means one of several single family residential units within one building that is not a “multi-unit dwelling.” An “apartment unit” must contain at least one full bath and kitchen, but not more than two toilets. An “apartment unit” typically includes, but is not limited to, an individual dwelling unit in a garden, medium or high-rise type residential building.
- 2) Biotechnology Research and Development or Manufacturing means any development as jointly defined and approved by the Montgomery and Prince George’s County Councils as eligible for a waived System Development Charge, more particularly described in Schedule C, attached.
- 3) Drainage Charge is the portion of the System Development Charge applicable to drainage fixture units for apartments and residential properties having five or fewer toilets.
- 4) Drainage Fixture Unit Value is a measure of the probable discharge into the drainage system by a particular plumbing fixture in terms of volume rate of discharge and duration of a single drainage operation and the time between successive operations.
- 5) Dwelling Unit means a single-family housing unit used as a residence, including trailers and mobile homes.
- 6) Elderly Housing means residential units as jointly defined and approved by the Montgomery and Prince George’s County Councils as eligible for a waived System Development Charge, more particularly described in Schedule D, attached.
- 7) Hookup means the joining of the on-site water and/or sewer line(s) to the Commission’s service connection or the installation of plumbing fixtures in a building served by the Commission’s water and/or sewer facilities.
- 8) Multi-Unit Dwelling means a building that will accommodate several housing units on a lateral basis; namely, semi-attached houses, row houses, or townhouses used as residences.
- 9) New Service means:
  - a) the first-time hook-up of a property to the Commission’s water and/or sewer system, including
    - 1) a direct connection of an improvement or building; or
    - 2) a connection of the improvement or building through an existing on-site system; or
  - b) a new connection or increased water meter size for a property previously or currently served by the Commission if the new connection or increased meter



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size is needed because of a change in the use of the property or an increase in demand for service at the property.

- 10) Non-Residential Unit is a structure not otherwise defined as a Residential Unit, generally commercial or industrial in nature. Examples may include shopping malls, non-residential townhouses, warehouses, industrial buildings, restaurants, schools, dormitories, hospitals, hotels, motels, nursing homes, office buildings, churches, theaters, and similar commercial or industrial buildings.
- 11) Property Used Primarily for Recreational and Educational Programs and Services to Youth means real property, owned in fee simple, by a Community Based Organization that is jointly defined and approved by the Montgomery and Prince George's County Councils as eligible for a System Development Charge exemption, more particularly described in Schedule F, attached.
- 12) Property Used Primarily for Child Care and After-School Care means improved property owned in fee simple by an individual or organization licensed by the State of Maryland to provide day care services, on which a child day care use or after-school care use, as defined in the Montgomery County or Prince George's County Zoning Ordinance (as applicable), operates as a principal use thereon.
- 13) Property Used Primarily for Programs and Services for Developmentally Disabled Individuals means improved property owned in fee simple by an individual or organization licensed by the State of Maryland to provide services to developmentally disabled individuals, on which a use defined in the Montgomery County or Prince George's County Zoning Ordinance (as applicable) as one that provides services to developmentally disabled individuals, operates as a principal use thereon.
- 14) Public Sponsored or Affordable Housing means residential units as jointly defined and approved by the Montgomery and Prince George's County Councils as eligible for a waived System Development Charge, more particularly described in Schedule A, attached.
- 15) Residential Unit means any housing unit defined in Paragraphs 1, 5, 6, 8 and 11 above used as a residence.
- 16) Revitalization means any development as jointly defined and approved by the Montgomery and Prince George's County Councils as eligible for a waived System Development Charge, more particularly described in Schedule B, attached.
- 17) System Development Charge means that charge imposed by the Commission pursuant to the provisions of §25-403, Division II of the Public Utilities Article,

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Annotated Code of Maryland. (Maximum allowable System Development Charge is the maximum charge authorized by law, but not necessarily imposed in a given year.)

- 18) Toilet is a water closet as set forth in the WSSC Code of Regulations, Chapter 14.25—the Plumbing and Fuel Gas Code; and
- 19) Water Supply Charge is the portion of the System Development Charge applicable to water supply fixture units for apartments and residential properties having five or fewer toilets; and
- 20) Water Supply Fixture Unit Value is a measure of the probable hydraulic demand on the water supply by a particular plumbing fixture in terms of volume rate of supply and duration of a single supply operation and the time between successive operations; and

**BE IT FURTHER RESOLVED**, that the System Development Charge rates for FY'23 shall be as follows:

Property Type	FY'23 Charge	Maximum Allowable Charge
Apartment Unit		
Water	\$896	\$1,456
Sewer	1,140	1,852
1-2 Toilets / Residential		
Water	1,344	2,185
Sewer	1,710	2,776
3-4 Toilets / Residential		
Water	2,240	3,641
Sewer	2,850	4,633
5 Toilets / Residential		
Water	3,135	5,095
Sewer	3,991	6,486
6 or More Toilets / Residential*		
Water	88	145
Sewer	115	189
Non-Residential*		
Water	88	145
Sewer	115	189

\*Per Fixture Unit

(The System Development Charge for non-residential properties and dwelling units or multi-unit dwellings with more than five toilets shall be based on the number of plumbing fixtures and the assigned values for those fixtures as set forth in the

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WSSC Code of Regulations, Chapter 14.25—the Plumbing and Fuel Gas Code.);  
and

**BE IT FURTHER RESOLVED**, that the System Development Charge, as established herein, shall be paid to the Commission at the time of application for plumbing permit to install fixtures or hookup(s) to the Commission's water and/or sewage system(s) except that an applicant for a plumbing permit for a residential unit may pay the System Development Charge in two payments as follows:

- 1) One-half at the time of Plumbing Permit Application;
- 2) The remaining one-half within 12 months after the first payment or prior to the transfer of title to the property, whichever occurs first.

At the time of the first payment, the applicant for the plumbing permit for a residential unit shall deposit with the Commission security for the second payment in an amount and form established and approved by the Commission; and

**BE IT FURTHER RESOLVED**, that the fees established herein shall be in addition to, and not a substitution for, any other fees, rates, charges, or assessments allowed by law; and

**BE IT FURTHER RESOLVED**, that the County Councils for Prince George's and Montgomery Counties shall grant a full or partial exemption from the System Development Charge, as set forth in PUA §25-403(b)(1), for any public sponsored or affordable housing as defined in Schedule A; and

**BE IT FURTHER RESOLVED**, that the County Councils for Prince George's and Montgomery Counties may grant a full or partial exemption from the System Development Charge, as set forth in PUA §25-403(b)(2)(i), for revitalization projects, as defined in Schedule B; and

**BE IT FURTHER RESOLVED**, that the County Councils for Prince George's and Montgomery Counties may grant a full or partial exemption from the System Development Charge, as set forth in PUA §25-403(b)(3), for elderly housing as defined in Schedule D, and subject to the maximum exemptions established by County Councils and set forth in Schedule E; and

**BE IT FURTHER RESOLVED**, that the County Councils for Prince George's and Montgomery Counties may grant a full or partial exemption from the System Development Charge, up to \$80,000, as set forth in PUA §25-403(b)(2)(ii) for Properties Used Primarily for Recreational and Educational Programs and Service to Youth as defined in Schedule F; and

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**BE IT FURTHER RESOLVED**, that the County Councils for Prince George's and Montgomery Counties may grant a full or partial exemption from the System Development Charge, as set forth in PUA §25-403(b)(2)(iii), for properties used primarily for child care or after-school care, as defined in Definition 12 herein; and

**BE IT FURTHER RESOLVED**, that the County Councils for Prince George's and Montgomery Counties may grant a full or partial exemption from the System Development Charge, as set forth in PUA §25-403(b)(2)(iv), for properties used primarily for programs and services for developmentally disabled individuals, as defined in Definition 13 herein; and

**BE IT FURTHER RESOLVED**, that the County Councils for Prince George's and Montgomery Counties may grant a full or partial exemption from the System Development Charge, as set forth in PUA §25-403(b)(3)(iv), for properties used for manufacturing or biotechnology research and development, as defined in Schedule C;

**BE IT FURTHER RESOLVED**, that the County Councils of Prince George's and Montgomery Counties may adopt implementing resolutions for the aforesaid System Development Charge exemptions, which resolutions govern the administration of the exemptions for projects within each County.

**BE IT FURTHER RESOLVED**, that nothing herein shall be construed as creating a contract between the Commission and the applicant for service, and that the providing of water and/or sewer service to an applicant's property shall be subject to intervention of other governmental authority; the duly adopted policies of Montgomery and Prince George's Counties, and the Commission's ability to otherwise provide such service; and

**BE IT FURTHER RESOLVED**, that Commission Resolution No. 2021-2287 adopted June 16, 2021 on the same subject matter be, and the same is hereby superseded by this Commission Resolution No. 2022-2314; and

**BE IT FURTHER RESOLVED**, that the System Development Charge established herein shall take effect on July 1, 2022.

RESOLUTION NO. 2022-2314  
Adopted: June [15], 2022  
Effective Date: July 1, 2022

A True Copy

Attest:

\_\_\_\_\_  
Julianne M. Montes De Oca, Esq., Corporate Secretary

**SCHEDULE A**

“Public sponsored or affordable housing” means:

- 1) any dwelling unit built or financed under a government program, regulation, or binding agreement that limits for at least 10 years the price or rent charged for the unit in order to make the unit affordable to households earning less than 80% of the area median income, adjusted for family size;
- 2) any Moderately Priced Dwelling Unit built under Chapter 25A of the Montgomery County Code or Subtitles 13 and 27 of the Prince George’s County Code;
- 3) any Productivity Housing Unit, as defined in Section 25B-17 (k) of the Montgomery County Code;
- 4) any unit in an Opportunity Housing Project built under Sections 56-28 through 56-32 of the Montgomery County Code or Subtitle 13, Division 8, of the Prince George’s County Code, which is reserved for occupancy only by persons with low or moderate incomes (as defined in applicable provisions of State and County Law);
- 5) any dwelling unit constructed pursuant to the Capturing Housing Opportunities in Communities Everywhere (CHOICE) Program in Prince George’s County which is reserved for occupancy only by persons with low or moderate incomes (as defined in applicable provisions of State and County Law).

**SCHEDULE B**

“Revitalization” means:

- 1) a project meeting any additional criteria that may be adopted by the respective county council or applicable municipal council that is located in:
  - a) any state-designated revitalization area as defined by the Maryland Department of Housing and Community Development (DHCD).
  - b) any state-designated enterprise zone as defined by the Maryland Department of Business and Economic Development (DBED).
  - c) any federally-designated economic development district as defined by the U.S. Department of Commerce, Economic Development Administration (EDA).
  - d) any federally-designated empowerment zone and developable sites as defined by the U.S. Department of Housing and Urban Development (HUD).
  - e) any Transit District Overlay Zone (T-D-O Zone) as defined by Subtitle 27, Part 10A, Division 1, of the Prince George’s County Code.
  - f) any Prince George’s County designated revitalization area as defined in Subtitle 10 of the Prince George’s County Code.
  - g) any state designated Neighborhood Business Development Program as defined in Subtitle 3, of Title 6, of the Housing and Community Development Article of the Annotated Code of Maryland.
  - h) any Montgomery County designated neighborhoods, as determined by the Montgomery County Executive and County Council, as a revitalization neighborhood for activities that will act to preserve, stabilize, and enhance the social, physical, and economic conditions of the neighborhood. Activities may include concentrated housing code inspections and enforcement, housing rehabilitation, social service programs, public infrastructure improvements, and private and/or public capital investment.
- 2) A property used for the production of alcoholic beverages.

### **SCHEDULE C**

“Biotechnology Research and Development or Manufacturing” means:

Any activity that substantially involves research, development, or manufacturing of:

- a. Biologically-active molecules;
- b. Devices that employ or affect biological processes; or
- c. Devices and software for production or management of specific biological information.



**SCHEDULE D**

“Elderly Housing” include the following types of housing:

As defined in the Prince George’s County Zoning Ordinance:

**Sec. 27-107.01. Definitions**

(a) **Terms in the Zoning Ordinance are defined as follows:**

(20.3)Assisted Living Facility  
(54)Congregate Living Facility  
(151)Mixed Retirement Development

**Sec. 27-352.01 Elderly Housing (one-family attached dwellings)**

**Sec. 27-374 Medical / residential campus**

**Sec. 27-395 Planned retirement community**

OR

As defined in the Montgomery County Zoning Ordinance:

**Sec. 59-G-2.35 Housing and related facilities for elderly or handicapped persons**

**Sec. 59-G-2.35.1 Life Care (continuing care) facility**

**Sec. 59-C-7.4 Housing constructed in a planned retirement community zone**

OR

As defined in a municipal zoning ordinance in a municipality having separate zoning powers and that is found by the Director of the Department of Housing and Community Affairs to be equivalent to the definition for the county in which the municipality is located. The review of equivalency should be based upon age of occupants and the inclusion of assisted living dwelling units.

**SCHEDULE E**

Maximum “elderly housing” exemptions are as follows:

- |    |   |  |
|----|---|--|
| 1. | Apartment unit  | \$436.00   |
| 2. | Dwelling unit or housing unit within a multi-unit dwelling with one or two toilets    | \$654.00   |
| 3. | Dwelling unit or housing unit within a multi-unit dwelling with three or four toilets | \$1,090.00   |
| 4. | Dwelling unit or housing unit with a multi-unit dwelling with five toilets            | \$1,526.00   |
| 5. | For other housing that meets the elderly housing exemption criteria                   | Not more than \$43 per combined fixture unit value |

**SCHEDULE F**

1. “Property Used Primarily for Recreational and Educational Programs and Services to Youth” means:

Real property, owned in fee simple, by a Community Based Organization, located within the Washington Suburban Sanitary District, which is used to advance the mission and purpose of providing recreational and educational program and services to youth in Prince George’s and/or Montgomery County.

2. “Community Based Organization” means:

A not-for-profit entity duly incorporated in or authorized to do business by the State of Maryland and in good standing under the laws of the State of Maryland, which has as its primary mission and purpose to provide recreational and educational programs and services to youth in Prince George’s and/or Montgomery County.

3. “Exempt From Taxation” means:

A not-for-profit, charitable or educational organization as determined by the Internal Revenue Service, under Section 501(c) (3) of the Internal Revenue Code.

## Chapter 5.90

### SYSTEM DEVELOPMENT CHARGE LEVY AND COLLECTION

Sections:

- 5.90.010 Purpose.**
- 5.90.020 Definitions.**
- 5.90.030 General.**
- 5.90.040 Exemptions.**
- 5.90.050 Refunds.**
- 5.90.060 Authority clause.**

#### **5.90.010 Purpose.**

- (a) To document the levy, collection and deposit of the system development charge (SDC) in accordance with the Public Utilities Article, § [25-401](#) et seq., Annotated Code of Maryland and WSSC's Resolution No. 98-1555.
- (b) Define terms and phrases referencing SDC as commonly used in the issuance of plumbing permits. (Amended during 2019 codification; CUS 98-01 § 1)

#### **5.90.020 Definitions.**

- (a) "Apartment unit" means one of several single-family housing units within one building and not specifically classified as a multi-unit dwelling; e.g., individual dwelling units in garden, medium and high-rise type residential buildings.
- (b) "Base SDC fee" means the WSSC approved dollar charge for a plumbing fixture having a drainage fixture unit value and/or a water supply fixture unit value of one for nonresidential properties or residential units with more than five toilets. The base SDC fee for residential units with five or fewer toilets is the WSSC approved dollar charge based upon the unit's number of toilets.
- (c) "Drainage fixture unit value" means a measure of the probable discharge into the drainage system by a particular plumbing fixture in terms of volume rate of discharge and duration of a single drainage operation and the time period between successive operations.
- (d) "Dwelling unit" means a single-family housing unit used as a residence, including trailers and mobile homes.
- (e) "Hookup" means the joining of a property's on-site water and/or sewer line(s) to the Commission's service connection or the installation of plumbing fixtures in a building served by the Commission's water and/or sewer facilities.

- (f) "Multi-unit dwelling" means a building that will accommodate several housing units on a lateral basis; namely, semi-attached houses, row houses or townhouses used as residences.
- (g) "New service" means:
- (1) The first-time hookup of a property to the Commission's water and/or sewer system; or
  - (2) A new connection or increased water meter size for a property, previously or currently served by the Commission, if the new connection or increased meter size is needed because of a change in the use of the property or an increase in demand for service at the property.
- (h) "Nonresidential unit" means a structure not otherwise defined as a residential unit, generally commercial or industrial in nature. Examples may include shopping malls, nonresidential townhouses, warehouses, industrial buildings, restaurants, schools, dormitories, hospitals, hotels, motels, nursing homes, office buildings, churches, theaters and similar commercial or industrial buildings.
- (i) "Plumbing permit" means the approved instrument, resulting from an application filed by a registered master plumber, which allows for hookup of fixtures or on-site piping to the Commission's water and/or sewer systems.
- (j) "Property" means an improvement(s) or building(s) on a lot or parcel of land containing plumbing fixtures described in terms of drainage fixture unit values or water supply fixture unit values.
- (k) "Public sponsored and affordable housing" means:
- (1) Any dwelling unit built or financed under a government program, regulation, or binding agreement that limits for at least 10 years the price or rent charged for the unit in order to make the unit affordable to households earning less than 80 percent of the area median income, adjusted for family size;
  - (2) Any moderately priced dwelling unit built under Chapter 25A of the Montgomery County Code or Subtitles 13 and 27 of the Prince George's County Code;
  - (3) Any productivity housing unit, as defined in Section 25B-17(m) of the Montgomery County Code;
  - (4) Any unit in an opportunity housing project built under Sections 56-28 through 56-32 of the Montgomery County Code or Subtitle 13, Division 8, of the Prince George's County Code, which is reserved for occupancy only by persons with low or moderate incomes (as defined in applicable provisions of state and county law);
  - (5) Any dwelling unit constructed pursuant to the Capturing Housing Opportunities in Communities Everywhere (CHOICE) program in Prince George's County which is reserved for occupancy only by persons with low or moderate incomes (as defined in applicable provisions of state and county law).
- (l) "Residential applicant" means a builder on whose behalf a registered master plumber applies for and receives from the Commission plumbing permits for construction of new residential units.
- (m) "Residential unit" means any apartment unit, dwelling unit or multi-unit dwelling, as defined in this section, used as a residence.

- (n) "SDC sewer charge" means the product of a fixture's drainage fixture unit value and its associated base SDC fee for nonresidential properties or dwelling and multi-unit housing units with more than five toilets. For residential properties with five or fewer toilets, the SDC sewer charge is the Commission approved drainage portion of the base SDC fee.
- (o) "SDC water charge" means the product of a fixture's water supply fixture unit value and its associated base SDC fee for nonresidential properties or dwelling and multi-unit housing units with more than five toilets. For residential properties with five or fewer toilets, the SDC water charge is the Commission approved water supply portion of the base SDC fee.
- (p) "Sub-district charge" means that charge established by the Commission pursuant to the provisions of the Public Utilities Article, § [25-101\(b\)](#), Annotated Code of Maryland.
- (q) "Toilet" means a water closet, as set forth in WSSC Chapter [14.25](#).
- (r) "Water supply fixture unit value" means a measure of the probable hydraulic demand on the water supply by a particular plumbing fixture in terms of volume rate of supply and duration of a single supply operation and the time period between successive operations. (Amended during 2019 codification; CUS 98-01 § 2)

### **5.90.030 General.**

- (a) SDC is a fee established pursuant to provisions of the Public Utilities Article, § [25-403\(b\)](#), Annotated Code of Maryland, to help finance the capital cost of upgrading existing plants and facilities as well as the construction of new capital projects attributable to the addition of new service.
- (b) The base SDC fee level is established by Commission resolution representing a formal adoption of the fee level mutually agreed upon by the Montgomery and Prince George County Councils.
- (c) The SDC fee for a nonresidential property or a dwelling unit or housing unit within multi-unit dwelling with more than five toilets is determined by the type and number of fixtures, existing and/or proposed, for which hookup to the WSSC's water and/or sewerage system(s) is proposed. The SDC levy is the sum of SDC water charges and SDC sewer charges, prevailing at the time of application for hookup, which are associated with the individual fixtures proposed for hookup.
- (d) The SDC fee for a residential unit with five or fewer toilets is determined by the number of toilets, existing and/or proposed, for which hookup to the WSSC's water and/or sewerage system(s) is proposed. The SDC levy is the sum of SDC water charges and SDC sewer charges, prevailing at the time of application for hookup, which are associated with the number of toilets proposed for hookup.
- (e) Except as provided by subsection [\(i\)](#) of this section, a property's calculated SDC fee is payable in full and shall accompany the application for plumbing permit for hookup of a property's fixtures to the WSSC system. Any credit pursuant to the Development Services Code, WSSC Chapter [11.155](#), may be substituted as payment, on a dollar for dollar basis, as therein described. Collected SDC fees shall be deposited in established revenue accounts and reconciled through the Service Applications and Records Section's remittance-processing system.

- (f) When a request is made to add a fixture(s) to a plumbing permit which has been issued under a previous SDC rate structure and which has not received final inspection approval, the additional SDC shall be calculated and collected based upon the fixture unit rate in effect at the time of request, except that the total SDC for a residential unit permit with five or less toilets shall not exceed the current base SDC fee for such a unit.
- (g) When an application is made to add a toilet(s) to an existing dwelling or housing unit within an existing multi-unit dwelling, the resulting permit may be subject to a SDC fee only if the unit was previously assessed a SDC fee or an increase is required in the size of the unit's connection or meter. In either situation, a SDC fee will be actually assessed only if the number of toilets is being increased from one toilet based rate category to the next. For housing units with five or fewer toilets, the SDC fee assessed will be equal to the difference in the SDC base charge currently applicable to the number of existing toilets and that applicable to the total number of existing and proposed toilets. The SDC fee assessed for existing housing units with more than five toilets is the sum of the SDC base fees at the current SDC rate structure for all added fixtures.
- (h) When an application is made to add fixtures to a nonresidential unit, the resulting permit may be subject to a SDC fee only if the unit was previously assessed a SDC fee or an increase is required in the size of the unit's connection or meter. In either situation, the SDC fee assessed is the sum of the SDC base fees at the current SDC rate structure for all added fixtures.
- (i) A residential applicant who elects to delay paying a portion of the system development charge shall pay one-half the charge at the time of filing application for plumbing permit. The remaining one-half of the system development charge for each residential unit shall be paid to the Commission within 12 months after the first payment or prior to the transfer of title to the property, whichever occurs first. A residential applicant must provide security for the remaining one-half of the system development charge at the time of filing the plumbing permit application in one of the following forms:
- (1) An irrevocable letter of credit that is automatically renewed from a bank that is rated "C" or better by Thomson Bankwatch.
  - (2) A financial guaranty bond in a form substantially similar to the form attached here as [Appendix A](#). The bond shall be executed by the applicant and a corporate bonding company licensed to transact such business in the State of Maryland and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of this bond shall be paid by the applicant. If at any time the surety on any such bond is declared bankrupt or loses its right to do business in the State of Maryland or is removed from the list of surety companies accepted on federal bonds, the applicant shall, within 10 days after notice from the Commission to do so, substitute an acceptable bond in such forms and sum and signed by such other surety or sureties as may be satisfactory to the Commission.
  - (3) For the resident applicant who certifies that he or she applies for four or fewer permits for the construction of residential units within the same calendar year, the General Counsel is hereby authorized to accept other forms of security proposed by the applicant and that in the judgment of the General Counsel will protect the Commission's interests in the same manner as the letter of credit and financial guaranty bond described above.

(j) Fixtures verified by WSSC inspection prior to removal may result in credits toward SDC in a replacement structure. Following written application by a registered master plumber, postcard permit inspections to confirm fixtures prior to removal will be the basis for calculating any SDC credit. No credit will be afforded for rough-in piping or fixtures removed prior to inspection. SDC credit under this subsection may only be obtained by submitting the original master plumber's copy of the approved postcard permit document at the time of application for hookup of the replacement or remodeled structure. Credit obtained under this provision may only be used toward the remodeling of the existing structure or the redevelopment of a property from which the original fixtures were removed. (Amended during 2019 codification; CUS 98-01 § 3)

### **5.90.040 Exemptions.**

(a) Additional fixtures installed in a structure or building are exempt from the levy of an SDC fee only if inspection of the initial hookup of the building or structure's plumbing to the WSSC's system(s) was approved under a permit issued as a result of an application filed before July 19, 1993, and the change in fixtures does not require an increase in the property's connection(s) or meter size.

(b) The hookup of a residential unit which is certified by Montgomery or Prince George's County as being a public sponsored or affordable housing unit, as defined by Commission Resolution No. 98-1555, shall be exempted from any SDC fee.

(c) The initial hookup of a residential unit to the Commission's water and/or sewerage system will be exempted from the levy of any SDC fee if the unit existed and was served by a private well and/or septic system on or before July 16, 1993, and the applicable WSSC water or sewer main was in service or its construction was the subject of "formal notice to proceed" (to the WSSC contractor) on or before the same July 16, 1993. (Amended during 2019 codification; CUS 98-01 § 4)

### **5.90.050 Refunds.**

(a) In the event a permit to install plumbing fixtures expires or is canceled pursuant to provisions of Section 206.2 of the Plumbing and Gasfitting Regulations, all SDC fees paid in association with the application for plumbing permit to hook up may be refunded, provided Code Enforcement Section's inspection records confirm that no work covered by the permit has been accomplished. Such refunds will be made to the original SDC payer at the time of application.

(b) SDC payments for fixtures represented on an application, but not installed, may be refunded to the original payer provided a written request for refund is filed with the Service Applications and Records Section prior to a request for final inspection. Upon confirmation by the Code Enforcement Section that the fixtures or related rough-in work referenced in the written request have not been installed, the fixtures will be deleted from the permit database record and SDC refund action will be initiated.



(c) The reimbursement of SDC payments to comply with credit requirements set forth in the Public Utilities Article, § [25-405](#), Annotated Code of Maryland, shall be accomplished as specified by the Development Services Code, WSSC Chapter [11.155](#).

(d) A request for full or partial refund of previously remitted SDC which has been denied may be appealed under provisions of the Public Utilities Article, § [25-106](#), Annotated Code of Maryland. (Amended during 2019 codification; CUS 98-01 § 5)

### 5.90.060 Authority clause.

The General Counsel certifies that the statutory authority for adoption of the standard procedure codified in this chapter is the Public Utilities Article, § [17-403](#) and § [25-401](#) et seq., Annotated Code of Maryland. (Amended during 2019 codification; CUS 98-01)

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APPENDIX "A"

FINANCIAL GUARANTY BOND

Plumbing Permit Number \_\_\_\_\_

Bond Number \_\_\_\_\_

Date Bond Executed \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS:

That \_\_\_\_\_,  
(here insert the legal name of the Applicant)

\_\_\_\_\_  
(here insert the address of the Applicant)

as Principal, hereinafter called "Applicant", and

\_\_\_\_\_  
(here insert the legal name of the Surety)

\_\_\_\_\_  
(here insert the address of the Surety)

as Surety, hereinafter called "Surety", are held and firmly bound  
unto the WASHINGTON SUBURBAN SANITARY COMMISSION, Laurel, Maryland, a  
public and governmental corporate agency of the State of Maryland, as  
Obligee, hereinafter called the "Commission", in  
the amount of

\_\_\_\_\_ dollars (\$ \_\_\_\_\_), being 50  
percent of the System Development Charge of the herein-mentioned  
application, for the payment whereof Applicant and Surety bind  
themselves, their heirs, executors, administrators, successors and  
assigns, jointly and severally.

WHEREAS, the Applicant has applied for a plumbing permit to  
install fixtures or hookup a residential property to the Commission's  
water and/or sewerage system(s) under Plumbing Permit No. \_\_\_\_\_ and  
has promised to pay the full system development charge within 12

months of the date of the application or prior to the transfer of title to the property, whichever occurs first.

NOW, THEREFORE, the condition of this obligation is such that if the Applicant shall promptly and faithfully pay the system development charge in a timely manner, then this obligation shall be null and void; otherwise, it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the Commission.

Whenever Applicant shall be, and declared by Commission to be, in default in payment of the system development charge, the Commission having performed Commission's obligations thereunder, the Surety shall promptly pay the amount owed by the Applicant to the Commission.

Any suit under this bond must be instituted before the expiration of eighteen (18) months from the date payment is due. No right of action shall accrue on this bond to or for the use of any person or corporation other than the Commission or its successors and assigns.

The bond is executed in two (2) counterparts, each of which shall, without proof or accounting for the other counterpart, be deemed an original thereof.

Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_,

ATTEST:

\_\_\_\_\_  
Applicant Name

By: \_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Surety Name)

By: \_\_\_\_\_  
(Title)

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed, or caused to be executed by their duly authorized officials, this performance bond in (\_\_\_\_\_) copies each of which shall be deemed an original on the date first above written. (The following is applicable if applicant is corporation or incorporated joint venture.)

A Corporation \_\_\_\_\_

By: \_\_\_\_\_ Date: \_\_\_\_\_  
(Title)

Attest: \_\_\_\_\_  
Secretary of Corporation

Certificate as to Corporation (Corporate Seal)

I, \_\_\_\_\_, certify that I am Secretary of the Corporation named as Applicant herein, that \_\_\_\_\_ who signed this Performance Bond on behalf of the Applicant was then \_\_\_\_\_ of said Corporation; that I know his signature thereto is genuine; that the Bond was duly signed and sealed in behalf of said Corporation by authority of its governing body, and is within the scope of its corporate powers.

\_\_\_\_\_  
Secretary of Corporation

(The following is applicable if Applicant is individual, partnership or unincorporated joint venture.)

Signed and Sealed in the full names of all partners and all members of Joint Ventures.

\_\_\_\_\_  
(Print)      Name      (Signature)

\_\_\_\_\_  
Address

\_\_\_\_\_  
(Print)      Name      (Signature)

\_\_\_\_\_  
Address

\_\_\_\_\_  
(Seal)

\_\_\_\_\_  
(Print)      Name      (Signature)

\_\_\_\_\_  
Address

\_\_\_\_\_  
(Seal)

\_\_\_\_\_  
(Print)      Name      (Signature)

\_\_\_\_\_  
Address

## Chapter 5.95

### SDC CREDITS AND REIMBURSEMENTS

Sections:

- 5.95.010 Purpose.**
- 5.95.020 Definitions.**
- 5.95.030 General procedures.**
- 5.95.040 Procedures for wet weather projects.**
- 5.95.050 Authority.**

#### **5.95.010 Purpose.**

- (a) Define procedures for the issuance of a system development charge (SDC) credit earned through private design and construction to serve the applicant's property. These procedures pertain only to either an approved capital improvement program (CIP) project or a project that provides only local service, is 2,000 feet or less in length, is either a sewer main 15 inches or greater in diameter, or water main 16 inches or greater in diameter and is built to avoid unnecessary and uneconomical duplication when a major project is constructed.
- (b) Describe how the SDC credit due an applicant will be determined.
- (c) Describe when SDC credit and reimbursement will occur. (Document dated July 1, 2020)

#### **5.95.020 Definitions.**

- (a) "Administrative costs" means costs incurred by the applicant for processing and managing the design and construction of the project. Examples include administrative services, utilities, and supplies.
- (b) "Applicant" means any firm, corporation, partnership, joint venture, municipality, agency, person or persons whom WSSC has authorized to design and construct a qualified project eligible for SDC credit or whom WSSC has required to provide eligible private funding of the Commission's costs to design and construct such a project.
- (c) "Credit voucher" means the document ([Attachment B](#)), executed by the applicant, which serves as the instrument to obtain SDC credit associated with an application for permit to install plumbing fixtures. Each credit voucher may apply only to a single application for plumbing permit and shall:
  - (1) Identify the qualified project from which credit is derived; and
  - (2) Specify the qualified property for which the credit is requested; and
  - (3) Be signed by the applicant or its authorized agent, be duly notarized; and

- (4) Show the amount to be credited in lieu of SDC payment.
- (d) “Eligible private funding” means payment required by and made to WSSC by an applicant to cover WSSC costs to design and construct a CIP project needed to accommodate growth.
- (e) “Memorandum of understanding (MOU)” means a written agreement made between the WSSC and an applicant which covers the applicant’s design and construction of a CIP project and which identifies the estimated total applicant costs eligible for SDC credit and/or reimbursement. A qualified project built without a signed MOU is not eligible for SDC applicant credits or reimbursement.
- (f) “Qualified project” means any CIP facility, CIP line, sewer main 15 inches or greater, or water main 16 inches or greater in diameter necessary to serve the applicant’s property, which is designed and constructed by and at the sole expense of an applicant pursuant to an MOU or SEP or other agreement. Also, any CIP project which is constructed by WSSC that the applicant is required to provide eligible private funding of WSSC design and construction costs.
- (g) “Qualified project scope” means the specific scope of the qualified project. For pipelines built under an SEP, the specific scope will be included with the SDC credit agreement and will include pipeline lengths and diameters, valves, vaults and any other appurtenant structures. For facility projects, the specific scope of work will be included with the MOU.
- (h) “Qualified properties” means the specific properties located within the geographic area which WSSC identifies as served by the qualified project, as defined in WSSC [5.95.030\(c\)](#).
- (i) “SDC credit” means a dollar value which is credited to an applicant against SDC payable in connection with qualified properties and which equals the total eligible costs as defined in WSSC [5.95.030\(f\)](#) incurred by the applicant in the applicant’s design and construction of a qualified project or the amount of eligible private funding made by the applicant to cover WSSC costs to design and construct a qualified project. An applicant who designs a qualified project must also construct that project in order to be eligible to receive SDC credits.
- (j) “SDC credit agreement” means an agreement that summarizes the eligible costs considered for SDC credit (as described in WSSC [5.95.030\(f\)](#)). The SDC credit agreement is appended to an SEP. The credit agreement is included in the MOU as [Attachment A](#).
- (k) “SDC ledger” means the record of SDC credit authorized for an applicant and the amount(s) of SDC credit issued or reimbursed to the applicant for fixtures covered by plumbing permits obtained in the course of developing qualified properties associated with a qualified project.
- (l) “System development charge (SDC)” means a fee paid to the WSSC at the time of application for a plumbing permit intended to cover the cost of building CIP projects needed to accommodate growth.
- (m) “System extension permit (SEP)” means a permit/agreement made between the WSSC and an applicant pursuant to the Development Services Code or any subsequently adopted revisions. A qualified project built under a system extension permit issued without a signed accompanying SDC credit agreement is not eligible for SDC applicant credits or reimbursement.

(n) "Wet weather project" means proposed developments connecting into or upstream of CIP size trunk sewer stretches that have projected sanitary sewer overflows based on existing dry weather flow (including ground water) and rainfall dependent infiltration and inflow from a two-year design storm (specified by WSSC).

All other proposed developments projected to generate flows over 100,000 gallons per day (gpd) connecting into or upstream of CIP size trunk sewer stretches that have projected sanitary sewer overflows based on existing dry weather flow (including ground water) and rainfall dependent infiltration and inflow from a 10-year design storm (specified by WSSC). (Document dated July 1, 2020)

### **5.95.030 General procedures.**

(a) An applicant shall declare a desire to design and construct a qualified project eligible for SDC credit either as an element of its request for a hydraulic planning analysis filed with the Development Services Group or in a written response to the letter of findings prepared by the Development Services Group. For projects that were previously authorized, but have not yet been issued an SEP or MOU, the applicant may request an authorization amendment to allow the applicant to design and construct a qualified project eligible for SDC credit.

(b) The applicant agrees to pay WSSC all review fees normally due WSSC. Letters of credit are not acceptable in lieu of fees.

(c) When an applicant has requested that it be permitted to design and construct a CIP project, the Development Services Group shall prepare a map during its hydraulic planning analysis that identifies the qualified properties to be served by the CIP project which the applicant has requested to design and construct. SDC credit will only be issued to properties within the geographic boundaries identified in the map as qualified properties. A copy of the prepared map will be sent to the applicant.

(d) If WSSC either authorizes the applicant to design and construct a qualified project or requires eligible private funding from the applicant of WSSC's design and construction costs, then the properties identified as served by the project will receive credit and/or be subject to SDC payments which may be reimbursed to the applicant up to the total eligible amount. The Permit Services Unit will establish an applicant's SDC ledger following either (1) execution of a MOU or SEP covering applicant design and construction of the qualified project or (2) WSSC receipt of eligible private funding of the qualified project from the applicant. Prior to establishing the applicant's SDC ledger, the Permit Services Unit requires a map identifying all qualified properties to be served by the qualified project from the Development Services Group. Please note that for pipeline jobs, the applicant will not receive SDC credit or reimbursement unless the SDC credit agreement is signed before the SEP is issued.

(e) The SDC ledger will reflect the total amount of SDC credit/reimbursement that the applicant is eligible to receive. If the applicant is designing and constructing the qualified project, the ledger will initially reflect the applicant's SDC credit based upon the estimated total eligible costs agreed upon in the MOU or SEP. The applicant's initial ledger credit amount will be adjusted to reflect the actual total eligible costs for the qualified project, as determined by the Inspector General (as discussed in subsections [\(f\)](#), [\(g\)](#), [\(h\)](#), [\(i\)](#) and [\(m\)](#) of this section), after the qualified project has been accepted and placed in service by WSSC. If WSSC is designing and constructing a qualified project, the ledger will reflect the total amount of eligible private funding received from the applicant.



(f) SDC credits may not exceed 50 percent of the estimated total eligible project cost (not to include contingency for increase in scope items (see subsection (i) of this section)) until such time as final audit is completed and the actual total eligible project cost is determined. Once the actual total eligible project cost is determined, SDC credits are available up to the eligible project cost and quarterly refunds (based upon SDC collected for qualified properties) will commence. Prior to the final audit, the credit voucher is the only method of reimbursement to the applicant.

Following WSSC receipt of eligible private funding, SDC credits against the ledger amount may be granted. However in the SDC credits toward the private funding may not exceed 50 percent of the total estimated project cost.

(g) When an applicant is designing and constructing a qualified project, SDC credit is the total eligible project cost incurred and paid by the applicant. The SDC credit is subject to the general guidelines that (1) eligible costs will be the types of costs that WSSC would have incurred had WSSC designed and constructed the qualified project, and (2) the SDC credit will not exceed the maximum amount mutually agreed upon in the SDC credit agreement. Eligible costs must be directly allocable to the qualified project. Examples include but are not limited to:

- (1) *Engineering Costs.* Design, reprographics, survey (topo), soil borings, as-built drawing preparation and bonding fees.
- (2) *Permit Costs.* Costs for permits that WSSC would have had to acquire had WSSC built the project.
- (3) *WSSC Fees for Pipelines.* Fees for extra WSSC reviews or retesting will be considered only if noneligible portions of the job do not require extra reviews or retesting. Unless mentioned otherwise, fees will be allocated to the qualified project based on estimated costs and overall water and sewer project cost for the project number.
- (4) *WSSC Fees for Facilities.* All WSSC direct costs and overhead associated with the qualified project as stated in the MOU.
- (5) *Construction Costs.* Contractors bid price, survey (stake out), geotech (compaction testing), off-site restoration and construction management.
- (6) *Interest Costs.* Interest costs for funds used during design and construction, at an average interest rate not to exceed the rate paid by WSSC on short-term construction notes outstanding during the period beginning with the date of WSSC signature on the SEP or MOU agreement and ending when the qualified project is substantially complete.
- (7) *Off-Property Rights-of-Way.* Acquisition costs are eligible up to amount appraised by WSSC for purchase of applicant's off-property right-of-way and construction strips, plus up to 25 percent of the appraised amount for direct costs associated with purchase of off-site rights-of-way and construction strips.

(h) Examples of costs that are not eligible include but are not limited to:

- (1) Areawide planning not directly related to the qualified project;
- (2) Attorney fees;

- (3) The WSSC hydraulic review fee;
  - (4) Costs for negotiation of SDC credit agreement or MOU;
  - (5) Bonus payments or acceleration costs paid to the contractor for completion of construction;
  - (6) Third-party inspection costs for facility projects;
  - (7) Applicant's overhead costs not directly attributable to the qualified project;
  - (8) Costs outside the scope of the qualified project;
  - (9) Permit costs associated with a development rather than the qualified project;
  - (10) Site acquisition costs beyond what WSSC would have paid;
  - (11) Facilities capital cost of money;
  - (12) Fines and penalties;
  - (13) Maintenance costs;
  - (14) Maintenance bond costs that are beyond both two years after substantial completion and beyond one year after release of service or final acceptance;
  - (15) Grading of rights-of-way;
  - (16) Sediment control for grading;
  - (17) Clearing and grubbing for public rights-of-way in which the qualified project will be installed;
  - (18) Federal and state income taxes;
  - (19) Administrative or management fees not directly associated with the qualified project; and
  - (20) Personal injury compensation or damages.
- (i) The maximum SDC reimbursement shall not exceed 110 percent of the contractor bid price plus other eligible costs.
- (j) The SDC credit agreement will not provide payment to the applicant for costs the applicant did not incur or for costs reimbursed to the applicant from other sources. The SDC credit agreement will not provide any premiums for expedited work.
- (k) Prior to SDC credit agreement or MOU approval, the WSSC project manager for the project is responsible to have components of the SDC credit agreement or MOU reviewed by other offices. The Contract Technical Services Unit should review the applicant's construction costs using a copy of the signed plans. The Inspector General is to review any item that the WSSC project manager proposes which is contrary to subsections [\(g\)](#) and [\(h\)](#) of this section. Other appropriate WSSC offices should be consulted such as the Land Acquisition Unit for additional land acquisition costs and the Planning Group for planning costs.

(l) For qualified projects, the SEP or MOU agreements should indicate that the maintenance bond should remain in effect at least two years beyond the date of release for service for SEP projects or at least one year beyond the date of final acceptance for MOU projects. The applicant will submit a written request for audit to WSSC's Inspector General after the qualified project built by the applicant has been released for service (pipelines) or finally accepted (facilities). Along with the request, the applicant must submit an itemized listing of eligible qualified project costs, incurred and paid, supporting the total amount of SDC credit claimed. It should be emphasized that the applicant should retain all the contracts, invoices and payments for the Inspector General to inspect and review to determine the SDC credits. The Inspector General will calculate administrative costs at five percent of the construction, design and other (geotechnical, permits, etc.) qualified project costs. The five percent calculation will not include WSSC costs or interest. If the requested amount exceeds five percent, supporting documentation is required to justify all costs.

(m) In compliance with Public Utilities Article, § [25-405\(d\)](#), Annotated Code of Maryland, WSSC's Inspector General shall review and approve the costs incurred by the applicant. The Inspector General will strive to initiate the audit within 90 days of the applicant's request, if the request includes the required itemized cost listing. The Inspector General's Report will be the formal document that communicates the final results of the audit to WSSC and the applicant. When an audit is complete, prior to the final Inspector General Report, the Inspector General will issue to the applicant an unsigned discussion draft to allow the applicant an opportunity to discuss with the Inspector General any concerns the applicant has with the proposed SDC credit. Subsequently, the Inspector General will issue to the applicant its final report on the SDC credit to be provided the applicant.

(n) SDC credits against an applicant's SDC credit balance will be issued by WSSC upon receipt of a complete and fully executed credit voucher submitted at the time of plumbing permit application. The application must be made in connection with a qualified property served by the qualified project being built by the applicant. Also, the amount specified in the credit voucher shall not exceed the calculated SDC for plumbing fixtures covered by the permit application. Credit vouchers reflecting and specifying an amount in excess of calculated SDC for the requested permit will not be accepted. The plumbing permit will be issued after verification that a sufficient credit balance remains to cover the credit voucher amount. Insofar as possible, credit vouchers will be considered on a "first come – first served" basis. For a plumbing permit application accompanied by a credit voucher for which an applicant's credit balance has been exhausted, the credit voucher and the associated application will be returned to the applicant. WSSC is not responsible for managing or assisting the applicant in managing the issuance of credit vouchers. Managing the issuance of credit vouchers is not an eligible cost of reimbursement.

(o) In the event an issued plumbing permit expires or is canceled by the owner or plumber, no SDC reimbursement to the applicant will be approved for that permit. In such cases, any credit voucher will be voided and the credit amount added to the applicant's outstanding ledger balance.

(p) In conformance with subsection [\(s\)](#) of this section, SDC payments received in association with applications for plumbing permits for qualified properties will be identified as eligible for reimbursement (after the Inspector General's Report has been completed – see subsection [\(m\)](#) of this section) to the applicant who has constructed the qualified projects serving those qualified properties.

(q) For those situations where more than one qualified project serves a qualified property, SDC reimbursement payments shall be made in proportional shares to the applicants who have built or funded the qualified projects. A

proportional share is calculated based upon a qualified project's actual eligible costs or funding expressed as a percentage of the sum of all actual eligible costs and/or funding of qualified projects serving the qualified property.

(r) At the conclusion of each calendar quarter, the Permit Services Unit will determine the total SDC receipts eligible for reimbursement made for each previously identified qualified property. Only those SDC receipts filed in association with plumbing permits under which all covered work has received an approved final inspection are eligible for reimbursement.

(s) Based upon the quarterly reconciliation, the Permit Services Unit will prepare and forward to the Accounting Group a payment request to be made to the appropriate applicant in an amount equal to the sum of qualifying SDC receipts not yet reimbursed, and a memorandum recommending reimbursement of SDC receipts and identifying the maximum amount recoverable. The memorandum shall be accompanied by a statement detailing eligible plumbing permits.

(t) Following review of the recommended reimbursement, the Accounting Group will forward the payment request and supporting documentation to the Disbursements Group which will issue payment to the applicant.

(u) When an applicant has designed and constructed a qualified project, the sum of SDC credits and reimbursements pursuant to this procedure will be made only to the maximum determined by the Inspector General's Report and only to the applicant identified in the MOU or SEP.

(v) The applicant may issue credit vouchers to multiple builders to facilitate construction of residential or nonresidential structures within the qualified property and reimbursement of qualified project costs. If the applicant wishes to transfer its right and title to any remaining SDC credit from a qualified project, the applicant shall notify the Permit Services Unit of the requested transfer. Such notification shall be in writing and shall identify the single entity to receive the entire remaining balance of SDC credit from a qualified project. The Permit Services Unit will acknowledge the credit transfer and forward the written request for inclusion in the qualified project's MOU or SEP as an amendment. Thereafter, all qualified property SDC credits or reimbursements will be issued to the last designated entity in the MOU or SEP as amended.

(w) Notwithstanding any other provision of this chapter, SDC credit or reimbursements for costs identified in subsection [\(d\)](#) of this section are limited to SDC transactions for qualified properties served by the qualified project within a 20-year period, or until the sum of credits and reimbursements equals the total approved SDC credit. The 20-year period will commence for SEP, MOU, or eligible funding projects on the day of release for service. At the conclusion of the 20-year period, the Permit Services Unit will close the SDC reimbursement ledger and will provide written notification of exhaustion or termination of the SDC credit to the last designated recipient.

(Document dated July 1, 2020)

### **5.95.040 Procedures for wet weather projects.**

(a) Notwithstanding any other provision of this chapter, for wet weather projects only, WSSC may issue SDC reimbursements to the applicant from SDC funds collected from the entire county in which the qualified project is located.

- (b) Prior to the final audit, the developer may submit quarterly invoices for reimbursement (less any SDC vouchers for the developer's project) for up to 80 percent of the estimated total eligible costs agreed upon in the MOU or SEP. All invoices submitted shall be subject to review and approval by the Development Services Group Project Manager assigned to the project, or another staff member as designated by the Development Services Group Leader.
- (c) WSSC shall reimburse the developer for quarterly invoices submitted pursuant to subsection (b) of this section by first drawing from the eligible SDC receipts from properties served by the qualified project as set forth in WSSC [5.95.030\(r\)](#) and [\(s\)](#). Should the SDC receipts from the qualified project become insufficient to cover the invoices, WSSC shall reimburse the developer from SDC funds from the entire county.
- (d) Following the final audit conducted pursuant to WSSC [5.95.030\(m\)](#), additional reimbursements and credits will be made by WSSC, up to maximum eligible costs as set forth in WSSC [5.95.030\(i\)](#). (Document dated July 1, 2020)

### 5.95.050 Authority.

The General Counsel certifies that the standard procedure codified in this chapter was adopted pursuant to the authority as set forth in the Public Utilities Article, §§ [17-403](#) and [25-405](#), Annotated Code of Maryland. (Document dated July 1, 2020)

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## Chapter 11.10

### PROCEDURE FOR DETERMINING PERCENT GROWTH FOR CIP PROJECTS

Sections:

**11.10.010 Purpose and applicability.**

**11.10.020 Procedure and methodology.**

#### **11.10.010 Purpose and applicability.**

The purpose of this chapter is to establish a method for determining what proportion of certain WSSC CIP projects is for growth. This chapter applies after June 30, 1993: (A) to projects which are added to the CIP; and (B) to any revisions of projects already programmed which change the amount of system capacity added by the projects. (PD 93-01 § I)

#### **11.10.020 Procedure and methodology.**

(a) The Water Resources Planning Section will determine the percent growth for all applicable CIP projects using the following methodology.

The method involves the following three steps:

(1) *Step 1 – Test for 100 Percent Growth.* If flows/demands remained at June 1993 levels, would a project still be required?

(i) No: Growth = 100 percent.

(ii) Yes: Continue to Step 2.

(2) *Step 2 – Test for Zero Percent Growth.* Does the project improve or replace components of an existing facility without increasing the capacity of any of the components?

(i) Yes: Growth = zero percent.

(ii) No: Continue to Step 3.

(3) *Step 3 – Determine Percent Growth.*

(i) Identify system capacity added by the project.

(ii) Identify and subtract June 30, 1993, capacity deficit, if any.

(iii) Divide result by total project design capacity.

(b) *Notes.*

(1) For most water and wastewater facilities, there is a straightforward relationship between demand, capacity requirements, and facility size. For water transmission mains, however, the relationship is more complicated. There are many factors other than size which must be considered to determine capacity. These factors include length, the size and number of interconnections and the allowable energy differential between the points connected by the transmission system. Capacity analysis of a transmission network normally requires computer modeling. Previous water system analyses will be used to the extent they are applicable; however, where no previous analysis exists, computer modeling will be required.

(2) If an existing facility with available system capacity is being replaced by a new project which increases total system capacity, the available capacity in the existing facility is lost or wasted. In such cases, existing available capacity will be treated as a negative deficit in subsection [\(a\)\(3\)\(ii\)](#) of this section.

(c) *Examples.*

(1) An existing sewer has a safe capacity of 20 mgd. The June 30, 1993, peak flow is 17 mgd. A proposed parallel sewer will add 10 mgd of capacity for growth. Since the existing sewer can handle the June 30, 1993, flows the project is 100 percent for growth (subsection [\(a\)\(1\)](#) of this section).

(2) An existing sewer has a safe capacity of 20 mgd; its maximum capacity before overflow is 27 mgd. The June 30, 1993, peak flow is 21 mgd. A proposed parallel sewer will add 10 mgd of capacity for growth. Since the existing sewer can handle the June 30, 1993, flows, the project is 100 percent for growth (subsection [\(a\)\(1\)](#) of this section).

(3) An existing pumping station has 1 mgd of capacity. The June 30, 1993, flow is 0.8 mgd. A proposed replacement pumping station will have a total capacity of 1.5 mgd. The existing pumping station is old, and a rehab project would be needed if the new pumping station were not built. Therefore, the station is not 100 percent for growth (subsection [\(a\)\(1\)](#) of this section). It adds capacity, so it is not zero percent growth (subsection [\(a\)\(2\)](#) of this section). The percent for growth is calculated as follows: 0.5 mgd (the capacity added by the new pumping station) plus 0.2 mgd (the amount of lost available capacity) divided by 1.5 mgd (the total capacity of the new pumping station) = 47 percent (subsection [\(a\)\(3\)](#) of this section).

(4) An existing pumping station in good condition has 1 mgd of capacity. The June 30, 1993, flow is 0.8 mgd. A proposed replacement pumping station, located downstream to increase the service area, will have a total capacity of 1.5 mgd. The proposed pumping station is 100 percent for growth (subsection [\(a\)\(1\)](#) of this section).

(5) A pressure zone has a 1 mg storage deficit based on June 30, 1993, demands. When we finally get agreement to build a 3 mg tank in the zone, the deficit has risen to 2 mg. The tank is 66.7 percent for growth (3 mg added – 1 mg deficit)/3 mg total capacity = 66.7 percent (subsection [\(a\)\(3\)](#) of this section). (PD 93-01 § II)

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**WSSC WATER**  
**PROPOSED FYs 2024 - 2029 CIP**  
**SDC ELIGIBLE PROJECTS**  
(In Thousands)

PROGRAM NAME	TOTAL COST	THRU FY 2022	ESTIMATE FY 2023	TOTAL 6 YEARS	YEAR 1 FY 2024	YEAR 2 FY 2025	YEAR 3 FY 2026	YEAR 4 FY 2027	YEAR 5 FY 2028	YEAR 6 FY 2029	BEYOND 6 YEARS
<b>MONTGOMERY COUNTY WATER PROJECTS</b>											
Total Project Costs*	\$ 9,734	\$ 67	\$ 23	\$ 9,644	\$ 3,133	\$ 3,142	\$ 2,977	\$ 196	\$ 99	\$ 97	\$ 0
SDC Eligible Costs†	\$ 9,734	\$ 67	\$ 23	\$ 9,644	\$ 3,133	\$ 3,142	\$ 2,977	\$ 196	\$ 99	\$ 97	\$ 0
<b>BI-COUNTY WATER PROJECTS</b>											
Total Project Costs	124,517	1,987	1,960	119,970	5,820	5,820	19,995	35,220	35,220	17,895	600
SDC Eligible Costs	68,299	1,172	220	66,907	2,788	2,788	11,151	20,134	20,134	9,912	0
<b>PRINCE GEORGE'S COUNTY WATER PROJECTS</b>											
Total Project Costs	181,823	32,445	13,168	126,555	31,633	42,882	26,591	24,434	508	507	9,655
SDC Eligible Costs	115,157	28,518	7,586	69,398	25,669	23,231	10,820	8,663	508	507	9,655
<b>TOTAL WATER PROJECT COSTS</b>	<b>316,074</b>	<b>34,499</b>	<b>15,151</b>	<b>256,169</b>	<b>40,586</b>	<b>51,844</b>	<b>49,563</b>	<b>59,850</b>	<b>35,827</b>	<b>18,499</b>	<b>10,255</b>
<b>TOTAL WATER SDC ELIGIBLE COSTS</b>	<b>193,190</b>	<b>29,757</b>	<b>7,829</b>	<b>145,949</b>	<b>31,590</b>	<b>29,161</b>	<b>24,948</b>	<b>28,993</b>	<b>20,741</b>	<b>10,516</b>	<b>9,655</b>
<b>MONTGOMERY COUNTY SEWER PROJECTS</b>											
Total Project Costs	56,004	9,502	4,569	40,713	9,008	11,372	4,513	1,809	6,519	7,492	1,220
SDC Eligible Costs	43,552	8,983	4,049	29,507	6,728	7,147	3,994	1,455	4,688	5,495	1,013
<b>BI-COUNTY SEWER PROJECTS</b>											
Total Project Costs	66,267	2,727	10,387	53,153	24,750	23,849	3,969	195	195	195	0
SDC Eligible Costs	11,450	635	3,532	7,283	4,822	2,295	166	0	0	0	0
<b>PRINCE GEORGE'S COUNTY SEWER PROJECTS</b>											
Total Project Costs	71,508	10,094	6,722	54,690	11,183	18,405	10,141	6,821	4,070	4,070	2
SDC Eligible Costs	66,202	9,786	6,323	50,091	10,713	17,216	9,298	6,150	3,357	3,357	2
<b>TOTAL SEWER PROJECT COSTS</b>	<b>193,780</b>	<b>22,324</b>	<b>21,678</b>	<b>148,556</b>	<b>44,941</b>	<b>53,626</b>	<b>18,623</b>	<b>8,825</b>	<b>10,784</b>	<b>11,757</b>	<b>1,222</b>
<b>TOTAL SEWER SDC ELIGIBLE COSTS</b>	<b>121,204</b>	<b>19,404</b>	<b>13,904</b>	<b>86,881</b>	<b>22,263</b>	<b>26,658</b>	<b>13,458</b>	<b>7,605</b>	<b>8,045</b>	<b>8,852</b>	<b>1,015</b>
<b>INFORMATION ONLY PROJECTS</b>											
Total Project Costs	0	0	0	0	0	0	0	0	0	0	0
SDC Eligible Costs	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL PROJECT COSTS</b>	<b>\$ 509,854</b>	<b>\$ 56,823</b>	<b>\$ 36,829</b>	<b>\$ 404,725</b>	<b>\$ 85,527</b>	<b>\$ 105,470</b>	<b>\$ 68,186</b>	<b>\$ 68,675</b>	<b>\$ 46,611</b>	<b>\$ 30,256</b>	<b>\$ 11,477</b>
<b>TOTAL SDC ELIGIBLE COSTS</b>	<b>\$ 314,394</b>	<b>\$ 49,161</b>	<b>\$ 21,733</b>	<b>\$ 232,830</b>	<b>\$ 53,853</b>	<b>\$ 55,819</b>	<b>\$ 38,406</b>	<b>\$ 36,598</b>	<b>\$ 28,786</b>	<b>\$ 19,368</b>	<b>\$ 10,670</b>

\*Total Project Costs - This is the total cost for all projects needed to support growth.

†SDC Eligible Costs - That portion of the total project costs that is specifically for growth (i.e., if a project supports 50% growth and 50% system improvements, the SDC eligible costs refer only to the 50% growth portion.

**WSSC WATER**  
**PROPOSED FYs 2024 - 2029 CIP**  
**SDC ELIGIBLE PROJECTS**  
(In Thousands)

<b>PROJECT NUMBER</b>	<b>PROJECT NAME</b>	<b>TOTAL COST</b>	<b>THRU FY 2022</b>	<b>ESTIMATE FY 2023</b>	<b>TOTAL 6 YEARS</b>	<b>YEAR 1 FY 2024</b>	<b>YEAR 2 FY 2025</b>	<b>YEAR 3 FY 2026</b>	<b>YEAR 4 FY 2027</b>	<b>YEAR 5 FY 2028</b>	<b>YEAR 6 FY 2029</b>	<b>BEYOND 6 YEARS</b>
<b><u>MONTGOMERY COUNTY WATER PROJECTS</u></b>												
W - 000046.26	Pleasant's Property Water Main Extension	\$ 2,207	\$ 42	\$ 0	\$ 2,165	\$ 1,949	\$ 216	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	TOTAL GROWTH COSTS	\$ 2,207	\$ 42	\$ 0	\$ 2,165	\$ 1,949	\$ 216	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
W - 000113.20	White Oak Water Mains Augmentation	5,567	25	23	5,519	400	2,436	2,683	0	0	0	0
	TOTAL GROWTH COSTS	5,567	25	23	5,519	400	2,436	2,683	0	0	0	0
W - 000113.21	Viva White Oak Water Main	1,960	0	0	1,960	784	490	294	196	99	97	0
	TOTAL GROWTH COSTS	1,960	0	0	1,960	784	490	294	196	99	97	0
<b>SUBTOTAL MONTGOMERY COUNTY WATER PROJECTS</b>		<b>\$ 9,734</b>	<b>\$ 67</b>	<b>\$ 23</b>	<b>\$ 9,644</b>	<b>\$ 3,133</b>	<b>\$ 3,142</b>	<b>\$ 2,977</b>	<b>\$ 196</b>	<b>\$ 99</b>	<b>\$ 97</b>	<b>\$ 0</b>
<b>SUBTOTAL MONTGOMERY COUNTY WATER SDC ELIGIBLE COSTS</b>		<b>\$ 9,734</b>	<b>\$ 67</b>	<b>\$ 23</b>	<b>\$ 9,644</b>	<b>\$ 3,133</b>	<b>\$ 3,142</b>	<b>\$ 2,977</b>	<b>\$ 196</b>	<b>\$ 99</b>	<b>\$ 97</b>	<b>\$ 0</b>

**WSSC WATER**  
**PROPOSED FYs 2024 - 2029 CIP**  
**SDC ELIGIBLE PROJECTS**  
(In Thousands)

<b>PROJECT NUMBER</b>	<b>PROJECT NAME</b>	<b>TOTAL COST</b>	<b>THRU FY 2022</b>	<b>ESTIMATE FY 2023</b>	<b>TOTAL 6 YEARS</b>	<b>YEAR 1 FY 2024</b>	<b>YEAR 2 FY 2025</b>	<b>YEAR 3 FY 2026</b>	<b>YEAR 4 FY 2027</b>	<b>YEAR 5 FY 2028</b>	<b>YEAR 6 FY 2029</b>	<b>BEYOND 6 YEARS</b>
<b>BI-COUNTY WATER PROJECTS</b>												
W - 000073.32	Potomac WFP Main Zone Pipeline	\$ 115,702	\$ 1,987	\$ 315	\$ 113,400	\$ 4,725	\$ 4,725	\$ 18,900	\$ 34,125	\$ 34,125	\$ 16,800	\$ 0
	TOTAL GROWTH COSTS	\$ 68,265	\$ 1,172	\$ 186	\$ 66,907	\$ 2,788	\$ 2,788	\$ 11,151	\$ 20,134	\$ 20,134	\$ 9,912	\$ 0
W - 000202.00	Land & Rights-of-Way Acquisition - Bi-County Water	8,815	0	1,645	6,570	1,095	1,095	1,095	1,095	1,095	1,095	600
	TOTAL GROWTH COSTS	34	0	34	0	0	0	0	0	0	0	0
<b>SUBTOTAL BI-COUNTY WATER PROJECTS</b>		<b>\$ 124,517</b>	<b>\$ 1,987</b>	<b>\$ 1,960</b>	<b>\$ 119,970</b>	<b>\$ 5,820</b>	<b>\$ 5,820</b>	<b>\$ 19,995</b>	<b>\$ 35,220</b>	<b>\$ 35,220</b>	<b>\$ 17,895</b>	<b>\$ 600</b>
<b>SUBTOTAL BI-COUNTY WATER SDC ELIGIBLE COSTS</b>		<b>\$ 68,299</b>	<b>\$ 1,172</b>	<b>\$ 220</b>	<b>\$ 66,907</b>	<b>\$ 2,788</b>	<b>\$ 2,788</b>	<b>\$ 11,151</b>	<b>\$ 20,134</b>	<b>\$ 20,134</b>	<b>\$ 9,912</b>	<b>\$ 0</b>

**WSSC WATER**  
**PROPOSED FYs 2024 - 2029 CIP**  
**SDC ELIGIBLE PROJECTS**  
(In Thousands)

<b>PROJECT NUMBER</b>	<b>PROJECT NAME</b>	<b>TOTAL COST</b>	<b>THRU FY 2022</b>	<b>ESTIMATE FY 2023</b>	<b>TOTAL 6 YEARS</b>	<b>YEAR 1 FY 2024</b>	<b>YEAR 2 FY 2025</b>	<b>YEAR 3 FY 2026</b>	<b>YEAR 4 FY 2027</b>	<b>YEAR 5 FY 2028</b>	<b>YEAR 6 FY 2029</b>	<b>BEYOND 6 YEARS</b>
<b>PRINCE GEORGE'S COUNTY WATER PROJECTS</b>												
W - 000034.02	Old Branch Avenue Water Main	\$ 34,276	\$ 4,246	\$ 11,165	\$ 18,865	\$ 11,110	\$ 7,755	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
	TOTAL GROWTH COSTS	\$ 17,138	\$ 2,123	\$ 5,583	\$ 9,432	\$ 5,555	\$ 3,877	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
W - 000034.04	Branch Avenue Water Transmission Improvements	50,796	22,205	1,265	27,326	17,668	8,814	811	33	0	0	0
	TOTAL GROWTH COSTS	50,796	22,205	1,265	27,326	17,668	8,814	811	33	0	0	0
W - 000062.06	Rosaryville Water Storage Facility	9,655	0	0	0	0	0	0	0	0	0	9,655
	TOTAL GROWTH COSTS	9,655	0	0	0	0	0	0	0	0	0	9,655
W - 000084.03	Smith Home Farms Water Main	4,142	2,052	675	1,415	515	472	428	0	0	0	0
	TOTAL GROWTH COSTS	4,142	2,052	675	1,415	515	472	428	0	0	0	0
W - 000084.04	Westphalia Town Center Water Main	2,158	887	52	1,219	408	480	331	0	0	0	0
	TOTAL GROWTH COSTS	2,158	887	52	1,219	408	480	331	0	0	0	0
W - 000093.01	Konterra Town Center East Water Main	2,713	302	9	2,402	836	952	614	0	0	0	0
	TOTAL GROWTH COSTS	2,713	302	9	2,402	836	952	614	0	0	0	0
W - 000105.01	Marlton Section 18 Water Main, Lake Marlton Avenue	3,039	19	2	3,018	476	511	511	505	508	507	0
	TOTAL GROWTH COSTS	3,039	19	2	3,018	476	511	511	505	508	507	0
W - 000137.03	South Potomac Supply Improvement, Phase 2	75,044	2,734	0	72,310	620	23,898	23,896	23,896	0	0	0
	TOTAL GROWTH COSTS	25,516	930	0	24,586	211	8,125	8,125	8,125	0	0	0
<b>SUBTOTAL PRINCE GEORGE'S COUNTY WATER PROJECTS</b>		<b>\$ 181,823</b>	<b>\$ 32,445</b>	<b>\$ 13,168</b>	<b>\$ 126,555</b>	<b>\$ 31,633</b>	<b>\$ 42,882</b>	<b>\$ 26,591</b>	<b>\$ 24,434</b>	<b>\$ 508</b>	<b>\$ 507</b>	<b>\$ 9,655</b>
<b>SUBTOTAL PRINCE GEORGE'S COUNTY WATER SDC ELIGIBLE COSTS</b>		<b>\$ 115,157</b>	<b>\$ 28,518</b>	<b>\$ 7,586</b>	<b>\$ 69,398</b>	<b>\$ 25,669</b>	<b>\$ 23,231</b>	<b>\$ 10,820</b>	<b>\$ 8,663</b>	<b>\$ 508</b>	<b>\$ 507</b>	<b>\$ 9,655</b>

**WSSC WATER**  
**PROPOSED FYs 2024 - 2029 CIP**  
**SDC ELIGIBLE PROJECTS**  
(In Thousands)

<b>PROJECT NUMBER</b>	<b>PROJECT NAME</b>	<b>TOTAL COST</b>	<b>THRU FY 2022</b>	<b>ESTIMATE FY 2023</b>	<b>TOTAL 6 YEARS</b>	<b>YEAR 1 FY 2024</b>	<b>YEAR 2 FY 2025</b>	<b>YEAR 3 FY 2026</b>	<b>YEAR 4 FY 2027</b>	<b>YEAR 5 FY 2028</b>	<b>YEAR 6 FY 2029</b>	<b>BEYOND 6 YEARS</b>
<b>MONTGOMERY COUNTY SEWER PROJECTS</b>												
S - 000063.08	Sam Rice Manor WWPS & FM	\$ 7,276	\$ 155	\$ 0	\$ 5,901	\$ 305	\$ 122	\$ 230	\$ 610	\$ 1,830	\$ 2,804	\$ 1,220
	TOTAL GROWTH COSTS	\$ 6,039	\$ 129	\$ 0	\$ 4,897	\$ 253	\$ 101	\$ 191	\$ 506	\$ 1,519	\$ 2,327	\$ 1,013
S - 000083.07	Ashford Woods WWPS & FM	3,740	120	299	3,321	1,287	1,197	689	148	0	0	0
	TOTAL GROWTH COSTS	3,740	120	299	3,321	1,287	1,197	689	148	0	0	0
S - 000084.67	Milestone Center Sewer Main	0	0	0	0	0	0	0	0	0	0	0
	TOTAL GROWTH COSTS	0	0	0	0	0	0	0	0	0	0	0
S - 000085.21	Shady Grove Station Sewer Augmentation	7,652	7,627	25	0	0	0	0	0	0	0	0
	TOTAL GROWTH COSTS	7,652	7,627	25	0	0	0	0	0	0	0	0
S - 000085.22	Shady Grove Neighborhood Center	2,131	257	478	1,396	698	698	0	0	0	0	0
	TOTAL GROWTH COSTS	2,131	257	478	1,396	698	698	0	0	0	0	0
S - 000085.23	Johns Hopkins Medical Research Park Sewer Main	6,545	75	2,483	3,987	828	1,337	1,822	0	0	0	0
	TOTAL GROWTH COSTS	6,545	75	2,483	3,987	828	1,337	1,822	0	0	0	0
S - 000094.13	Damascus Town Center WWPS Replacement	10,475	422	743	9,310	3,002	5,980	328	0	0	0	0
	TOTAL GROWTH COSTS	3,143	127	223	2,793	901	1,794	98	0	0	0	0
S - 000094.14	Spring Gardens WWPS Replacement	11,765	597	0	11,168	385	55	758	758	4,606	4,606	0
	TOTAL GROWTH COSTS	7,883	400	0	7,483	258	37	508	508	3,086	3,086	0
S - 000103.17	Rose Village Sewer Main	1,864	73	60	1,731	897	536	171	127	0	0	0
	TOTAL GROWTH COSTS	1,864	73	60	1,731	897	536	171	127	0	0	0
S - 000118.09	Viva White Oak Sewer Main	1,654	0	0	1,654	661	414	248	166	83	82	0
	TOTAL GROWTH COSTS	1,654	0	0	1,654	661	414	248	166	83	82	0
S - 000151.02	Erickson Bethesda Sewer Main	2,902	176	481	2,245	945	1,033	267	0	0	0	0
	TOTAL GROWTH COSTS	2,902	176	481	2,245	945	1,033	267	0	0	0	0
<b>SUBTOTAL MONTGOMERY COUNTY SEWER PROJECTS</b>		<b>\$ 56,004</b>	<b>\$ 9,502</b>	<b>\$ 4,569</b>	<b>\$ 40,713</b>	<b>\$ 9,008</b>	<b>\$ 11,372</b>	<b>\$ 4,513</b>	<b>\$ 1,809</b>	<b>\$ 6,519</b>	<b>\$ 7,492</b>	<b>\$ 1,220</b>
<b>SUBTOTAL MONTGOMERY COUNTY SEWER SDC ELIGIBLE COSTS</b>		<b>\$ 43,552</b>	<b>\$ 8,983</b>	<b>\$ 4,049</b>	<b>\$ 29,507</b>	<b>\$ 6,728</b>	<b>\$ 7,147</b>	<b>\$ 3,994</b>	<b>\$ 1,455</b>	<b>\$ 4,688</b>	<b>\$ 5,495</b>	<b>\$ 1,013</b>

**WSSC WATER**  
**PROPOSED FYs 2024 - 2029 CIP**  
**SDC ELIGIBLE PROJECTS**  
(In Thousands)

<b>PROJECT NUMBER</b>	<b>PROJECT NAME</b>	<b>TOTAL COST</b>	<b>THRU FY 2022</b>	<b>ESTIMATE FY 2023</b>	<b>TOTAL 6 YEARS</b>	<b>YEAR 1 FY 2024</b>	<b>YEAR 2 FY 2025</b>	<b>YEAR 3 FY 2026</b>	<b>YEAR 4 FY 2027</b>	<b>YEAR 5 FY 2028</b>	<b>YEAR 6 FY 2029</b>	<b>BEYOND 6 YEARS</b>
<b>BI-COUNTY SEWER PROJECTS</b>												
S - 000089.24	Anacostia #2 WWPS Upgrades	\$ 64,087	\$ 2,727	\$ 10,177	\$ 51,183	\$ 24,555	\$ 23,254	\$ 3,374	\$ 0	\$ 0	\$ 0	\$ 0
	TOTAL GROWTH COSTS	\$ 10,972	\$ 635	\$ 3,518	\$ 6,819	\$ 4,822	\$ 1,997	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
S - 000203.00	Land & Rights-of-Way Acquisition - Bi-County Sewer	2,180	0	210	1,970	195	595	595	195	195	195	0
	TOTAL GROWTH COSTS	478	0	14	464	0	298	166	0	0	0	0
<b>SUBTOTAL BI-COUNTY SEWER PROJECTS</b>		<b>\$ 66,267</b>	<b>\$ 2,727</b>	<b>\$ 10,387</b>	<b>\$ 53,153</b>	<b>\$ 24,750</b>	<b>\$ 23,849</b>	<b>\$ 3,969</b>	<b>\$ 195</b>	<b>\$ 195</b>	<b>\$ 195</b>	<b>\$ 0</b>
<b>SUBTOTAL BI-COUNTY SEWER SDC ELIGIBLE COSTS</b>		<b>\$ 11,450</b>	<b>\$ 635</b>	<b>\$ 3,532</b>	<b>\$ 7,283</b>	<b>\$ 4,822</b>	<b>\$ 2,295</b>	<b>\$ 166</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>

**WSSC WATER**  
**PROPOSED FYs 2024 - 2029 CIP**  
**SDC ELIGIBLE PROJECTS**  
(In Thousands)

<b>PROJECT NUMBER</b>	<b>PROJECT NAME</b>	<b>TOTAL COST</b>	<b>THRU FY 2022</b>	<b>ESTIMATE FY 2023</b>	<b>TOTAL 6 YEARS</b>	<b>YEAR 1 FY 2024</b>	<b>YEAR 2 FY 2025</b>	<b>YEAR 3 FY 2026</b>	<b>YEAR 4 FY 2027</b>	<b>YEAR 5 FY 2028</b>	<b>YEAR 6 FY 2029</b>	<b>BEYOND 6 YEARS</b>
<b>PRINCE GEORGE'S COUNTY SEWER PROJECTS</b>												
S - 000027.08	Westphalia Town Center Sewer Main	\$ 1,768	\$ 944	\$ 542	\$ 282	\$ 192	\$ 74	\$ 16	\$ 0	\$ 0	\$ 0	\$ 0
	TOTAL GROWTH COSTS	\$ 1,768	\$ 944	\$ 542	\$ 282	\$ 192	\$ 74	\$ 16	\$ 0	\$ 0	\$ 0	\$ 0
S - 000028.18	Konterra Town Center East Sewer	7,742	5,320	93	2,329	0	2,329	0	0	0	0	0
	TOTAL GROWTH COSTS	7,742	5,320	93	2,329	0	2,329	0	0	0	0	0
S - 000068.01	Landover Mall Redevelopment	1,397	0	109	1,286	668	426	48	48	48	48	2
	TOTAL GROWTH COSTS	1,397	0	109	1,286	668	426	48	48	48	48	2
S - 000075.23	Brandywine Woods WWPS & FM	3,718	27	305	3,386	1,312	1,218	703	153	0	0	0
	TOTAL GROWTH COSTS	3,718	27	305	3,386	1,312	1,218	703	153	0	0	0
S - 000086.19	Southlake Subdivision Sewer	775	682	93	0	0	0	0	0	0	0	0
	TOTAL GROWTH COSTS	775	682	93	0	0	0	0	0	0	0	0
S - 000086.20	National Capital Business Park Sewer	1,795	4	60	1,731	897	536	171	127	0	0	0
	TOTAL GROWTH COSTS	1,795	4	60	1,731	897	536	171	127	0	0	0
S - 000087.19	Horsepen WWPS & FM	36,150	2,406	3,991	29,753	4,376	11,781	7,986	5,610	0	0	0
	TOTAL GROWTH COSTS	32,536	2,166	3,592	26,778	3,939	10,603	7,187	5,049	0	0	0
S - 000087.20	Freeway Airport WWPS & FM	3,758	68	305	3,385	1,311	1,219	702	153	0	0	0
	TOTAL GROWTH COSTS	3,758	68	305	3,385	1,311	1,219	702	153	0	0	0
S - 000113.13	Forest Heights WWPS & FM	9,402	380	0	9,022	183	61	244	610	3,962	3,962	0
	TOTAL GROWTH COSTS	7,710	312	0	7,398	150	50	200	500	3,249	3,249	0
S - 000118.10	Viva White Oak Sewer Augmentation	1,193	0	0	1,193	475	299	179	120	60	60	0
	TOTAL GROWTH COSTS	1,193	0	0	1,193	475	299	179	120	60	60	0
S - 000131.05	Pleasant Valley Sewer Main, Part 2	1,009	0	242	767	478	197	92	0	0	0	0
	TOTAL GROWTH COSTS	1,009	0	242	767	478	197	92	0	0	0	0
S - 000131.07	Pleasant Valley Sewer Main, Part 1	2,053	55	562	1,436	1,171	265	0	0	0	0	0
	TOTAL GROWTH COSTS	2,053	55	562	1,436	1,171	265	0	0	0	0	0
S - 000131.11	Calm Retreat Sewer Main	749	209	420	120	120	0	0	0	0	0	0
	TOTAL GROWTH COSTS	749	209	420	120	120	0	0	0	0	0	0
<b>SUBTOTAL PRINCE GEORGE'S COUNTY SEWER PROJECTS</b>		<b>\$ 71,508</b>	<b>\$ 10,094</b>	<b>\$ 6,722</b>	<b>\$ 54,690</b>	<b>\$ 11,183</b>	<b>\$ 18,405</b>	<b>\$ 10,141</b>	<b>\$ 6,821</b>	<b>\$ 4,070</b>	<b>\$ 4,070</b>	<b>\$ 2</b>
<b>SUBTOTAL PRINCE GEORGE'S COUNTY SEWER SDC ELIGIBLE COSTS</b>		<b>\$ 66,202</b>	<b>\$ 9,786</b>	<b>\$ 6,323</b>	<b>\$ 50,091</b>	<b>\$ 10,713</b>	<b>\$ 17,216</b>	<b>\$ 9,298</b>	<b>\$ 6,150</b>	<b>\$ 3,357</b>	<b>\$ 3,357</b>	<b>\$ 2</b>

