

T&E COMMITTEE #1
March 9, 2009

Worksession

MEMORANDUM

March 5, 2009

TO: Transportation, Infrastructure, Energy and Environment Committee
FROM:  Keith Levchenko, Senior Legislative Analyst
SUBJECT: **Worksession: FY10-15 Capital Improvements Program: Washington Suburban Sanitary Commission**

Councilmembers were provided a spiral bound copy of WSSC's Proposed FY10-15 CIP. Excerpts from this document are attached to this memorandum.

The following officials and staff are expected to attend this meeting:

WSSC

Commission Vice Chair Gene Counihan
(invited)
Commissioner Adrienne Mandel (invited)
Commissioner Roscoe Moore (invited)
Teresa Daniell, Interim General Manager
Rudy Chow, Interim Deputy General Manager
Gary Gumm, Chief Engineer
Tom Traber, Chief Financial Officer
Sheila Cohen, Budget Group Leader
Mark Brackett, Budget Unit Coordinator
Letitia Carolina-Powell Budget Unit
Coordinator

County Government

Dave Lake, Department of Environmental
Protection
John Greiner, Office of Management and
Budget

Background/Timeline

Under Article 29, Washington Suburban Sanitary District, Title 7, WSSC Capital Improvements Program, Annotated Code of Maryland, WSSC must prepare and submit a six-year CIP proposal to the County Executives and County Councils of Montgomery and Prince George's Counties by October 1 of each year.

Unlike other County agencies that are reviewed biennially, Montgomery County reviews the WSSC CIP every year. Also, unlike other agencies, WSSC's budget is not included within the County's Spending Affordability process. Instead, WSSC is subject to a separate affordability process (described later) that involves both Montgomery and Prince George's County Council approval in the fall of each year.

The FY10-15 WSSC CIP timeline is presented below:

- September 24, 2008: WSSC transmitted its Proposed FY10-15 CIP
- October 28, 2008: Council Approval of WSSC's FY10 Spending Control Limits
- January 15, 2009: County Executive's recommendations transmitted (see ©46)
- January 21, 2009: WSSC transmitted a mid-cycle update to its proposed FY10-15 CIP (see ©13-45)
- February 10, 2009: Council's Public Hearing on the WSSC CIP and amendments to other agency FY09-14 CIPs.
- February 27, 2009: WSSC transmitted its Proposed FY10 Operating and Capital Budget
- **March 9, 2009: T&E Committee review of the WSSC CIP**
- March, 24, 2009: Council review of the WSSC CIP
- May 7, 2009: Bi-County meeting to discuss issues between Montgomery County and Prince George's County on the CIP and Operating Budget for WSSC as well as other bi-County budget issues.

Fiscal Overview

For purposes of review, Council Staff is using WSSC's Proposed FY10-15 CIP **with WSSC's proposed mid-cycle update revisions**¹ for comparison with the Approved CIP and for individual project discussions.

WSSC transmitted this mid-cycle update in January in order to reduce WSSC's debt service needs in FY10 and assist in WSSC's formation of its recently transmitted Proposed FY10 Operating and Capital Budget. Most of the expenditure changes included in the mid-cycle update are technical in nature and do not involve project scope changes. However there are several deferrals and reduced levels of effort included as well. These issues are discussed in more detail later. Overall, the mid-cycle update reduces WSSC's FY10 bond requirements by approximately \$51 million and will reduce debt service requirements in FY10 by several million dollars.

¹ The mid-cycle update is consistent with the assumptions included in WSSC's recently transmitted FY10 Operating and Capital Budget request which was approved by WSSC Commissioners on February 18, 2009.

The following chart presents the latest total proposed WSSC CIP expenditures compared to approved expenditures. This chart includes capital water and sewer expenditures for both Montgomery and Prince George's Counties.

Table 1: Total WSSC Expenditures
Latest Proposed FY10-15 CIP versus Approved FY09-14 CIP
(\$s in 000s)

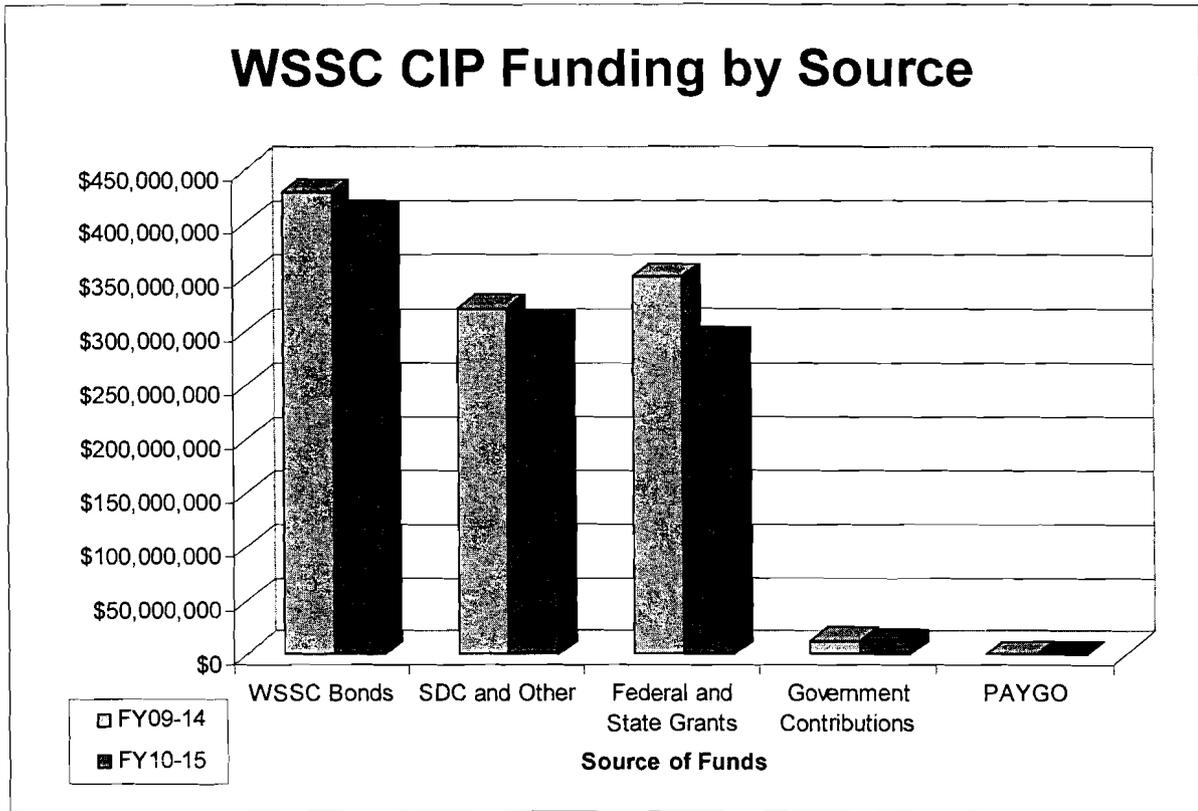
	Approved FY09	Six-Year Total	FY10	FY11	FY12	FY13	FY14	FY15
Total Water Projects								
Approved FY09-14	119,464	385,506	120,226	87,535	51,462	6,531	288	
Proposed FY10-15		352,193	77,652	121,478	94,481	46,689	7,234	4,659
Difference		(33,313)	(42,574)	33,943	43,019	40,158	6,946	
% Change		-8.6%	-35.4%	38.8%	83.6%	614.9%	2411.8%	
Total Sewer Projects								
Approved FY09-14	109,420	729,413	153,120	122,640	113,830	140,486	89,917	
Proposed FY10-15		672,571	111,001	155,107	160,246	87,894	96,547	61,776
Difference		(56,842)	(42,119)	32,467	46,416	(52,592)	6,630	
% Change		-7.8%	-27.5%	26.5%	40.8%	-37.4%	7.4%	
Total								
Approved FY09-14	228,884	1,114,919	273,346	210,175	165,292	147,017	90,205	
Proposed FY10-15		1,024,764	188,653	276,585	254,727	134,583	103,781	66,435
Difference		(90,155)	(84,693)	66,410	89,435	(12,434)	13,576	
% Change		-8.1%	-31.0%	31.6%	54.1%	-8.5%	15.1%	

As shown on the chart, WSSC is recommending an overall decrease in expenditures of approximately \$90.1 million (or -8.1%) in the six-year period compared to the Approved WSSC FY09-14 CIP. Both the water and sewer program are seeing reductions.

Much of the overall decrease is a result of spending in FY09 moving out of the CIP and lower levels of FY15 dollars moving into the CIP. For instance, the Potomac WFP Improvements project has nearly \$34 million in six-year costs declining as the project progresses as scheduled. WSSC's Blue Plains project expenditures are also down substantially (about \$23.5 million). Also, about \$5.9 million in expenditures for Water and Sewer master planning is proposed to move out of the formal CIP and into the "information only" section. There are also some project cost reductions which are discussed later. About \$13.9 million in new projects is proposed in the CIP. Most of these new project costs are related to WSSC's new Septage Discharge Facility Planning and Implementation project (\$10.8 million).

It is important to note that the capital program presented in this fiscal overview reflects "major projects" as defined by State law. WSSC has a number of other infrastructure activities (shown in the "Information Only" section of the CIP) which are not included in the CIP fiscal summary. For example, water and sewer main reconstruction, a major infrastructure issue that has been the subject of much discussion over the past couple of years, is not formally in the CIP. These non-CIP projects are discussed in this packet because they are part of WSSC's overall effort to address infrastructure needs and because the pace of reconstruction is a major policy and fiscal debate.

The following chart compares funding sources between the Approved FY09-014 CIP and the Proposed FY10-15 CIP. The mid-cycle update is not assumed in these numbers but would not change these numbers significantly.



Overall, bonds are down slightly while SDC and Other are up slightly (mainly because of several new developer-funded projects and inflationary increases in the Bi-County Water Tunnel project). Some additional summary charts are attached on ©2-3.

Montgomery County and Bi-County Projects

Each Council generally focuses on the projects within its County as well as the bi-County projects. The following chart summarizes six-year program information for Montgomery County and Bi-County projects only.

**Table 2: Total WSSC Expenditures (Montgomery County and Bi-County Only)
Latest Proposed FY10-15 CIP versus Approved FY09-14 CIP
(\$s in 000s)**

	Approved FY09	Six-Year Total	FY10	FY11	FY12	FY13	FY14	FY15
Total Water Projects								
Approved FY09-14	101,874	328,910	107,670	73,132	40,504	5,730	-	
Proposed FY10-15		294,870	70,437	101,705	72,498	39,470	6,397	4,363
Difference		(34,040)	(37,233)	28,573	31,994	33,740	6,397	
% Change		-10.3%	-34.6%	39.1%	79.0%	588.8%	#DIV/0!	
Total Sewer Projects								
Approved FY09-14	63,072	534,990	71,632	63,195	107,586	140,286	89,219	
Proposed FY10-15		488,064	72,960	67,630	107,636	82,414	96,345	61,079
Difference		(46,926)	1,328	4,435	50	(57,872)	7,126	
% Change		-8.8%	1.9%	7.0%	0.0%	-41.3%	8.0%	
Total								
Approved FY09-14	164,946	863,900	179,302	136,327	148,090	146,016	89,219	
Proposed FY10-15		782,934	143,397	169,335	180,134	121,884	102,742	65,442
Difference		(80,966)	(35,905)	33,008	32,044	(24,132)	13,523	
% Change		-9.4%	-20.0%	24.2%	21.6%	-16.5%	15.2%	

Overall, Montgomery County and Bi-County expenditures are declining in a similar pattern to WSSC's total CIP costs. While inflationary increases in existing projects are occurring and some new projects are entering the program, these increases are offset by large projects (such as the Potomac WFP Improvements project) which have major construction dollars moving through and out of the next CIP period.

The changes by fiscal year are substantial in some cases, but are generally caused by approved expenditures in some projects slipping between fiscal years.

As mentioned earlier, the Blue Plains project costs, which make up about one-third of all spending in the Montgomery County and Bi-County Only projects, are down about \$23.5 million as presented in the WSSC Proposed CIP. However, the County Executive is recommending a substantial increase (nearly \$200 million) in expenditures to reflect the latest project cost estimates assumed in the DCWASA CIP.

County Executive Recommendations (©46-64)

The County Executive is recommending approval of the WSSC CIP with one set of changes that is common to the budget process each year: Changes in the Blue Plains projects. The changes are:

- Revise the Blue Plains Wastewater Treatment facility projects based on the District of Columbia Water and Sewer Authority (DCWASA) CIP approved by its Board of Directors in January. The County Executive's changes add approximately \$197.8 million to the Blue Plains costs proposed by WSSC. The impact on FY10 (\$25.3 million increase) will require about \$1.3 million in additional debt service in the FY10 Operating Budget.

The changes are summarized in the following table and presented by project on ©55-64:

Table 3: CE Recommended Changes to the WSSC FY10-15 CIP

	Six-Year Total	FY10	FY11	FY12	FY13	FY14	FY15
WSSC Proposal (MC and Bi-County Only)	782,934	143,397	169,335	180,134	121,884	102,742	65,442
CE Changes	-						
- Revise Blue Plains Costs	197,831	25,324	69,752	67,292	76,252	(5,300)	(35,489)
Total CE Changes	197,831	25,324	69,752	67,292	76,252	(5,300)	(35,489)
CE Recommended Totals	980,765	168,721	239,087	247,426	198,136	97,442	29,953

As discussed in more detail later, Council Staff recommends approval of the Blue Plains projects with the adjustments recommended by the County Executive.

General Issues

Growth Funding

WSSC estimates that approximately \$307 million (or 30%) of total proposed expenditures in the six-year period are needed to accommodate growth. The major funding sources used to fund growth are:

- A System Development Charge (SDC),
- Direct Developer Contributions, and
- Payments by Applicants.

Many of the projects in the WSSC CIP are funded with the above-mentioned sources. For instance, water and sewer projects needed to accommodate growth in Clarksburg are funded with these sources.

The System Development Charge (SDC) is a major source of funding for much of the new water/sewer infrastructure built in the County. WSSC estimates approximately \$205.7 million in revenue over the six-year period with a net of \$178.2 million in revenue once developer credits, SDC exemptions² and private funded projects are considered.

² For purposes of projecting future SDC balances, WSSC assumes both Counties utilize the full \$1.0 million in exemptions each fiscal year. While historically neither county has ever fully used its \$500,000 annual share, the surplus carries over to the next year and could be utilized in future years. Also, State legislation approved during the 2007 legislative session expanded the potential SDC exemptions. Additional legislation is being considered in the 2009 legislative session.

Overall, WSSC estimates a deficit in growth funding versus expenditures over the six-year period of \$129.5 million as shown on ©1. This deficit is relatively close to last year's estimate of \$118.4 million.

The SDC Fund currently has a balance of approximately \$130.7 million as of January 31, 2009.

WSSC's Proposed Operating Budget for FY10 supports increasing the maximum rate for FY10 as permitted under State law but leaving the actual rate charged unchanged. Since this would be the eighth time in ten years³ where the maximum rate was increased while the charged rate would be unchanged, a rate increase next year or in future years of up to the equivalent of nine years of CPI would be possible. WSSC believes increasing the potential maximum rate is advisable, since the six-year projections show a deficit in growth funding versus growth expenditures.

While the SDC fund balance is sufficient to cover the projected gap over the next six years, the rate may need to be increased in future years if the gap continues to grow. The gap could grow if new SDC eligible projects enter the CIP in future years or if existing SDC eligible projects increase in cost.

Council Staff concurs with WSSC's proposal to maintain current rates but to increase the maximum chargeable rate. Both the maximum rate and the adopted rate will be included in the Council's SDC rate resolution.

Project Discussions

Council Staff has provided some discussion below of some new projects as well as some other important capital projects (and groups of projects). As noted earlier, the water and sewer reconstruction projects, while discussed here will be subject to further debate during the review of the WSSC Operating Budget later this spring.

New Projects

WSSC is requesting five new projects within the FY10-15 CIP totaling \$13.9 million over the six-year period. Three of these projects are "growth" projects, paid entirely by developer contributions. One project, Biogas Production Feasibility Study is an "information only" project funded with WSSC bonds. The other project is the Septage Discharge Facility Planning and Implementation project. Both of these projects are described in more detail below.

³ In 2005 and 2007, this Council recommended increasing the maximum rate but the lack of agreement between the two councils on the budgets for those years kept the SDC maximum rate unchanged in those years.

Biogas Production Feasibility Study (PDF on ©44-45)

This project provides for a study (\$345,000 over two years) that will develop a program for the implementation of systems to produce biogas from biosolids at the Seneca and Piscataway Wastewater Treatment Plants. The study will also look at the potential for grease trap waste disposal for added energy recovery.

Cost savings will be achieved from reduced energy purchase costs and from reduced biosolids transportation and disposal costs. The project is intended to include a payback period of no more than 15 years that would be guaranteed by the contractor.

In addition, the project will generate additional savings in the form of carbon credits within the Regional Greenhouse Gas Initiative (RGGI) auction process.

For fiscal reasons, WSSC transmitted a mid-cycle update which revised a number of expenditure schedules and deferred some projects not yet under construction. For this project, the expenditures originally proposed in FY10 (\$230,000) were moved to FY11. This change has a negligible impact on the FY10 Operating Budget.

Given the negligible impact on the FY10 budget, the fact that the project is envisioned to provide numerous environmental benefits, and provide a payback in the form of reduced energy and other costs, Council Staff recommends that this project be approved as originally transmitted (i.e. without the mid-cycle deferral of FY10 dollars).

Septage Discharge Facility Planning & Implementation (PDF on ©10)

This project provides for the study of and order of magnitude cost estimates for the design and construction of three septage and FOG discharge facilities. The project is the outgrowth of a consultant report completed in February 2008.

Interestingly, both this project and the preceding project involve reviewing how best to deal with trap grease (also known as fats, oils, and greases (FOG) waste). These waste products can cause sewer blockages if not treated and disposed of properly. WSSC is exploring some technologies that would generate biofuel or other marketable products from trap grease.

Council Staff has been working with an interagency group looking at the potential for the generation of Biodiesel fuel from waste vegetable oil from local restaurants. WSSC staff have been involved in this effort and future partnerships with WSSC regarding waste vegetable oil are being explored.

Council Staff is supportive of this project but questions whether construction dollars should be included prior to the conclusion of the planning work. There are no construction dollars in FY10, so both Counties would have a chance to approve

construction dollars during next year's budget review depending on the results of the study.

Ongoing Projects

Laytonsville Elevated Tank and Pumping Station (PDF on ©5-6)

In 2001, the Council first authorized the extension of public water service to the Town of Laytonsville in order to address well water quality concerns.

This project includes the planning, design and construction of a 1.72 mgd finished water pumping station, 0.5 mg elevated storage tank, approximately 6100 feet of 12 inch transmission main and 10,400 feet of 12 inch recirculation main to provide water service to the Town of Laytonsville. Capital costs are estimated to be \$4.4 million. Approximately \$2 million in non CIP-sized infrastructure work is also required.

WSSC and the Town of Laytonsville along with the developer of a residential housing project in the town agreed to a funding split for the project that assumed \$3.0 million in contributions. The balance is to be covered from SDC funds. These assumptions are noted on the Project Description Form. A memorandum of understanding was signed on December 2, 2005.

Designs for both the Laytonsville Elevated Water Storage Facility and Pump Station are 100% complete. The consultants for both projects are in the process of finalizing construction documents for bid. WSSC's current schedule for both the water storage facility and the pump station is:

- Bid Ready Construction Documents submission from Consultants – April 2009
- Request to advertise for construction – Mid-April 2009
- Bid Date: Mid October 2009
- Contract Award – Mid-December 2009
- Construction Complete – Mid-December 2010

The Council has periodically acted on some category change recommendations from the County Executive as the water main alignments have become better defined. For instance, the T&E Committee will discuss a category change request on March 30 regarding a 2.2 acre RDT-zoned property that is seeking approval to hook up to the new main when it is constructed.

Enhanced Nutrient Reduction (ENR) Related Projects

In 2004, the Maryland Legislature approved the Chesapeake Bay Restoration Act which authorized the collection of a surcharge on water and sewer utility bills paid by Maryland residents and businesses. Funds raised by this surcharge (commonly known as the "flush tax") are used to fund the conversion of wastewater treatment plants from biological nutrient removal (BNR) to enhanced nutrient removal (ENR). New permit requirements set

ENR standards of 3 mg/l of effluent nitrogen concentration as a goal, although the standards are not mandatory at this time.

Starting with the FY07-12 CIP, the WSSC CIP has included ENR projects at WSSC's wastewater treatment plants with State funding assumed to cover the costs. Last year, major dollars were added to the equivalent ENR project for the Blue Plains plant.

For the FY10-15 CIP, WSSC has proposed ENR projects (with a mid-cycle expenditure change in one project) totaling \$280 million over the six-year period. This represents about a 6% decrease in six-year costs. This decrease is the result of scope changes in the Western Branch project and cost decreases in the Blue Plains ENR project.

The requirements to achieve the ENR standard vary by facility. The following chart shows how the costs vary by project.

Proposed Enhanced Nutrient Removal Projects										
Facility	Total Cost	Through FY09	Six-Year Total	FY10	FY11	FY12	FY13	FY14	FY15	Beyond Six-Years
Seneca WWTP	13,279	1,530	11,749	5,012	5,579	1,158				
Damascus WWTP	5,805	621	5,184	5,149	35					
Mattawoman WWTP	3,676	3,656	20	20						
Western Branch WWTP*	38,350	3,370	34,980	9,900	15,400	9,680				
Parkway WWTP	25,285	1,342	23,943	6,180	11,711	6,052				
Piscataway WWTP	4,506	802	3,704	2,749	955					
Proposed Total	90,901	11,321	79,580	29,010	33,680	16,890	-	-	-	
Blue Plains ENR Project	260,827	5,408	200,435	10,508	8,737	58,788	34,158	54,543	33,701	54,984
Total with Blue Plains	351,728	16,729	280,015	39,518	42,417	75,678	34,158	54,543	33,701	54,984

*based on revised expenditure schedule from mid-cycle update

WSSC has reached agreement with the Maryland Department of the Environment (MDE) on the Western Branch WWTP and Damascus WWTP projects. All of the other projects are still under negotiation.

The Blue Plains costs are still in a preliminary stage as is the cost sharing requirement for WSSC. However, MDE has conceptually concurred with using flush tax dollars for ENR improvements at Blue Plains.

The County Executive recommends approval of the ENR projects as proposed with the exception of the Blue Plains ENR project. For that project, the Executive is recommending a \$63.3 million increase over the Six-Year period (100% funded with State aid) based on the DCWASA budget approved in January.

A Technical Work Group comprised of staff from Montgomery County, Prince George's County, Fairfax County, District of Columbia, DCWASA and WSSC recently reached agreement on the appropriate split of costs for the Blue Plains ENR Project. The Jurisdictional CAO's (Montgomery County Chief Administrative Officer, Prince George's County Chief Administrative Officer, Fairfax County Executive and the District of Columbia City Administrator) are scheduled to be briefed by the Technical Work Group on March 5th. A meeting with MDE is tentatively scheduled for March 24th.

Council Staff recommends approval of the ENR projects with the change recommended by the County Executive. However, depending on future actions by the

State, these projects may have to be revisited (either prior to final Council action in May or later).

Potomac Water Filtration Plant Projects (PDFs on ©19-21)

A major series of projects were approved for the Potomac Water Filtration Plant as the result of the Potomac WFP Reliability/Water Quality Study project. This study, completed in September 2002, looked at the long-term needs at the Potomac Plant in terms of water quality, reliability, and hydraulic capacity. Much of the work has been completed or is under construction. Costs were reduced slightly in the Potomac WFP Improvements project (©19) to reflect actual bid prices received.

Planning work on the Potomac WFP Submerged Channel Intake project (PDF on ©20-21) is ongoing. As noted in the Initiation Report for the ongoing study, “The purpose of the “Potomac WFP Submerged Channel Intake Feasibility Study” is to determine where to locate an offshore raw water intake and to develop and document the related public health, operational, and environmental considerations.” As noted in the PDF, “Both Councils will review the results of the detailed study and must approve continuing the project before design and construction proceed.”

Potential benefits of the project include improved and more consistent source water quality thereby reducing water collection and treatment costs, as well as increased operational flexibility of having two available intakes.

This study was originally expected to come back to both Councils in the spring 2005. However, work by WSSC and the consultant on an environmental impact statement required by the National Park Service and other work as required by the Maryland Department of the Environment has taken far longer than previously expected. An Environmental Assessment was submitted to the Army Corps of Engineers and the National Park Service (because the improvements would involve disturbing areas within the C&O Canal Park).

Also, subsequent to the completion of the original environmental assessment, WSSC has begun studying an additional potential intake alternative that would be less costly and more environmentally friendly.

Both Councils will be briefed on the project and must concur before design and construction would begin. This Council review date is now expected around Spring 2012.

The project cost estimate has been increased for inflation and the expenditure schedule revised slightly as part of the mid-cycle update.

Patuxent Water Filtration Plant Projects (PDFs on ©22-24)

There are several ongoing projects associated with the Patuxent Water Filtration Plant that are intended to increase the capacity of the Plant from 56 million gallons per day (mgd) up to 72 mgd along with an emergency capacity of 110 mgd.

These projects include: Rocky Gorge Pump Station Upgrade (completion in FY11), Patuxent WFP II Expansion (completion in FY12), and the Patuxent Raw Water Pipeline (completion in FY13).

This work has been delayed in the past for fiscal reasons and the mid-cycle update will push some expenditures in these projects out of FY10. The project completions are still expected within the same fiscal years as noted above.

Bi-County Water Tunnel (PDF on ©7-9)

This project provides for the construction of 28,400 foot 84 inch diameter water main to portions of Montgomery and Prince George’s Counties. This project will help serve existing and new growth in Prince George’s County while also addressing potential future water pressure problems in the Silver Spring/Wheaton areas.

In terms of the project schedule, all permits have been obtained. The construction contract was advertised December 17, 2008. A Pre-Bid Conference and SLMBE Workshop were held February 3, 2009. Bids are due March 24, 2009. Construction is estimated to take 4 years.

As a 100% growth-related project, the project is funded completely with SDC revenues.

Blue Plains Projects (PDFs on ©55-64)

The WSSC PDFs for Blue Plains represent WSSC’s contribution to improvements at the Blue Plains Plant. WSSC’s costs for the Blue Plains projects are summarized in the following table as is the CE Recommendation.

Blue Plains Projects: Expenditures (in \$000s)								
	Approved FY09	Six-Year Total	FY10	FY11	FY12	FY13	FY14	FY15
Total Sewer Projects								
Approved FY09-14	40,494	412,560	40,085	34,065	87,652	124,639	85,625	
Proposed FY10-15		389,063	43,713	34,069	86,361	70,578	93,263	61,079
Difference		(23,497)	3,628	4	(1,291)	(54,061)	7,638	
% Change		-5.7%	9.1%	0.0%	-1.5%	-43.4%	8.9%	
CE Recommended FY10-15		586,894	69,037	103,821	153,653	146,830	87,963	25,590
\$ Change from Proposed		197,831	25,324	69,752	67,292	76,252	(5,300)	(35,489)
% Change from Proposed		50.8%	57.9%	204.7%	77.9%	108.0%	-5.7%	-58.1%

As shown in the table, WSSC’s proposed six-year total is \$389.1 million (a decrease of 5.7% from the Approved FY09-14 CIP). As noted earlier, the County Executive is recommending a substantial increase in the six-year total for these projects based on more recent WASA budget information. These increases are primarily the result of two major projects:

- Increases in the biosolids project at Blue Plains. As mentioned during last year’s CIP, DCWASA had previously scrapped its Egg Shaped Digesters project when bids came in excessively high. DCWASA then considered other alternatives and is now moving forward with a new project.

- An increase in the assumed Blue Plains Enhanced Nutrient Removal project costs. WSSC's portion is increased as well but assumed to be covered by State aid. These increases are consistent with WSSC's assumed cost allocation (which is still a subject of negotiation with DCWASA).

A major uncertainty that is not factored into the Blue Plains cost numbers is WSSC's possible cost share for DCWASA's long-term control plan to address combined sewer overflows. The total project cost is estimated at \$2.2 billion with completion in FY2025. In negotiations, the District of Columbia has suggested using existing cost allocations for Blue Plains (WSSC's share would be about 46%). WSSC believes the allocation should be far lower based on WSSC's estimated contribution to the CSO issue. No project or funding is included in FY10-15 WSSC Proposed CIP.

Regional renegotiation of the 1985 Intermunicipal Agreement (IMA) has also been ongoing for sometime. The current IMA set capacity allocations for the Blue Plains regional partners (including WSSC). The capacity allocation percentages are used to allocate capital costs for Blue Plains projects. Actual flows to the facility are used to determine operating contributions by the regional partners. These and other components are under negotiation.

On November 25, 2008, the Council was briefed by its DCWASA board members on the ENR and CSO issues as well as other IMA issues currently under negotiation.

Council Staff recommends approval of the Blue Plains project totals as recommended by the County Executive. These numbers are based on the latest project cost estimates assumed in the Approved DCWASA CIP. As noted in the County Executive transmittal, the revised numbers will require about \$1.3 million in additional funding in the FY10 WSSC Operating Budget.

“Information Only” Projects

Utility Master Plan (PDF on ©11-12)

For FY10 and beyond WSSC is recommending moving the current Water System Master Plan and Wastewater System Master Plan projects from the Bi-County Water/Sewer sections of the CIP into a new project in the “information-only” section. The new project is funded primarily with bonds but also with some operating dollars with a project cost estimated at \$14.2 million concluding in FY18.

Phase IA of the work was completed and a report released on July 31, 2007. Information from this report was incorporated into the fiscal scenarios reviewed as part of the spending control limits process for FY09 last fall.

Two major findings of the report were:

- The above ground assets are in good condition with a few exceptions.

- Process upgrades that are needed to comply with existing regulations are programmed in the CIP.
- Non-process rehabilitations at plants, pumping stations, and water storage tanks are needed.
- The renewal of buried assets is WSSC's most immediate challenge.
 - By 2025 approximately 50% of the entire distribution system will reach or exceed its useful life.
 - 85% of the cast iron pipe in the distribution system will exceed its useful life by 2025.
 - Renewal of the collection system piping is driven by compliance with the Consent Decree signed in 2005 to reduce sanitary sewer overflows (SSOs).

Additional phases are now moving forward to develop more detailed assessments of WSSC's various types of assets. WSSC will utilize consultant support and in-house staff to do this work and is also coordinating with staff from both Montgomery County and Prince George's County.

Water Reconstruction Program (PDF on ©39-40)

This "information only" project funds selected water main replacement and cleaning and lining efforts throughout the WSSC service area. The project does not include any funding for "major capital projects" as defined in State law.

In its FY09-14 request, WSSC had proposed increasing its replacement miles from 27 to 34 miles per year as part of a major ramp-up of this program to nearly double the number of miles replaced over the next ten years. This initiative was in reaction to the Phase 1A Master Plan Report discussed earlier. However, this ramp-up was predicated on a substantial increase in the Account Maintenance Fee (ready to serve) charge that was ultimately not agreed upon by the WSSC Commission. Therefore, the approved FY09 mileage remained at 27 miles per year.

Within the FY10-15 CIP request, WSSC assumed to ramp up its efforts to 31 miles in FY10 without the assumption of a new dedicated funding source. The 4 mile increase would result in a slightly reduced replacement cycle for WSSC's 5,500 miles of water mains (from 204 to 177 years. While still too long a replacement cycle, this slight ramp up represents some progress. It should also be noted that up until last year (when WSSC came close to achieving its 27 mile replacement goal), WSSC has had some difficulty in achieving the replacement miles budgeted. Therefore, while a 4 mile increase is small compared to the scale of work required, WSSC will need a multi-year ramp up period anyway in order to build capacity to accomplish significantly more replacement miles.

WSSC's mid-cycle update assumes some reductions in this program in FY10 (\$2.0 million). This reduction will result in fewer house connection renewals and the elimination of any cleaning and lining for FY10. However, the 31 miles in replacement pipe remains funded.

The pace of the Water and Sewer reconstruction effort continues to be an area of major concern to Montgomery County and County Staff will continue to work with WSSC and Prince George's County staff on strategies to ramp up this work.

Sewer Reconstruction Program (PDF on ©41-42)

This “information only” project funds comprehensive sewer system evaluations and rehabilitation programs. As with the Water Reconstruction Program above, the sewer reconstruction project does not include any funding for “major capital projects” as defined in State law. Capital-size projects that are identified in this project become stand-alone projects.

WSSC has approximately 5,400 miles of sewer pipe and the project assumes to reline approximately 61 miles of pipe per year. As discussed in past years, this project is a major element of WSSC's SSO Consent Decree compliance efforts. Expenditures have already ramped up in this program as a result.

However, similar to the water construction program discussion above, in last year's budget request, WSSC sought to ramp up this program further as a result of findings in the Phase 1A Master Plan Report.

WSSC's mid-cycle update assumes a substantial reduction in this program in FY10 (\$20 million). This reduction will reduce the planned Sewer Main Lining from 61 miles to 42 miles and planned Lateral Lining from 15 miles to 10 miles.

Summary of Council Staff Recommendations

- **Recommend approval of WSSC's CIP changes noted in its mid-cycle update with the exception of the Biogas Production Feasibility Study project, which is recommended for approval as originally submitted last fall.**
- **Revise the Blue Plains PDFs based on revised PDFs recommended by the County Executive.**
- **Concur with WSSC to maintain SDC fees at current levels but to increase the maximum charge ceiling consistent with State Law.**
- **Recommend removal of construction costs included in the Septage Discharge Facility Planning & Implementation project. Council Staff is supportive of the planning work, but believes inclusion of the construction dollars is premature.**
- **Concur with WSSC on all other projects in the Proposed FY10-15 CIP.**

Notes:

- ***The Council will review the Potomac WFP Submerged Channel Intake Project once the feasibility study is completed.***
- ***The ENR projects may have to be revisited depending on funding decisions by the Maryland Department of the Environment.***

- ***The pace of the Water and Sewer reconstruction effort continues to be an area of major concern to Montgomery County and County Staff will continue to work with WSSC and Prince George's County staff on strategies to ramp up this work.***

Attachments

KML:f:\levchenko\wssc\wssc cip\fy10-15\te 2 9 09.doc

GROWTH FUNDING GAP
(In Millions)

	<u>FY'10</u>	<u>FY'11</u>	<u>FY'12</u>	<u>FY'13</u>	<u>FY'14</u>	<u>FY'15</u>	<u>6 YEAR TOTAL</u>
CIP GROWTH EXPENDITURES	\$85.2	\$107.7	\$75.4	\$36.4	\$1.4	\$0.9	\$307.0
Expenditures Adjusted for Completion	68.2	103.2	81.8	44.2	8.4	1.0	306.8
FUNDING SOURCES							
Privately Funded Projects	8.6	10.2	4.9	1.2	0.8	0.9	26.6
Estimated SDC Revenue	29.2	29.3	29.4	29.5	30.3	30.5	178.2
Less SDC Developer Credits	(8.0)	(6.5)	(5.0)	(1.0)	(1.0)	-	(21.5)
Less SDC Exemptions ¹	<u>(1.0)</u>	<u>(1.0)</u>	<u>(1.0)</u>	<u>(1.0)</u>	<u>(1.0)</u>	<u>(1.0)</u>	<u>(6.0)</u>
TOTAL FUNDING SOURCES	\$28.8	\$32.0	\$28.3	\$28.7	\$29.1	\$30.4	\$177.3
FUNDING GAP							
ADJUSTED FOR COMPLETION	\$39.4	\$71.2	\$53.5	\$15.5	(\$20.7)	(\$29.4)	\$129.5

¹ Each County may grant SDC exemptions for biotechnology, elderly, or revitalization projects totaling up to \$500,000 per fiscal year as provided for in Maryland State Law (Article 29, Section 6-113(c)(iv)). Unused exemption amounts are available for use in future fiscal years. Cumulative unused SDC exemptions totaled approximately \$2.5 million for Montgomery County and \$3.7 million for Prince George's County through June 30, 2008.

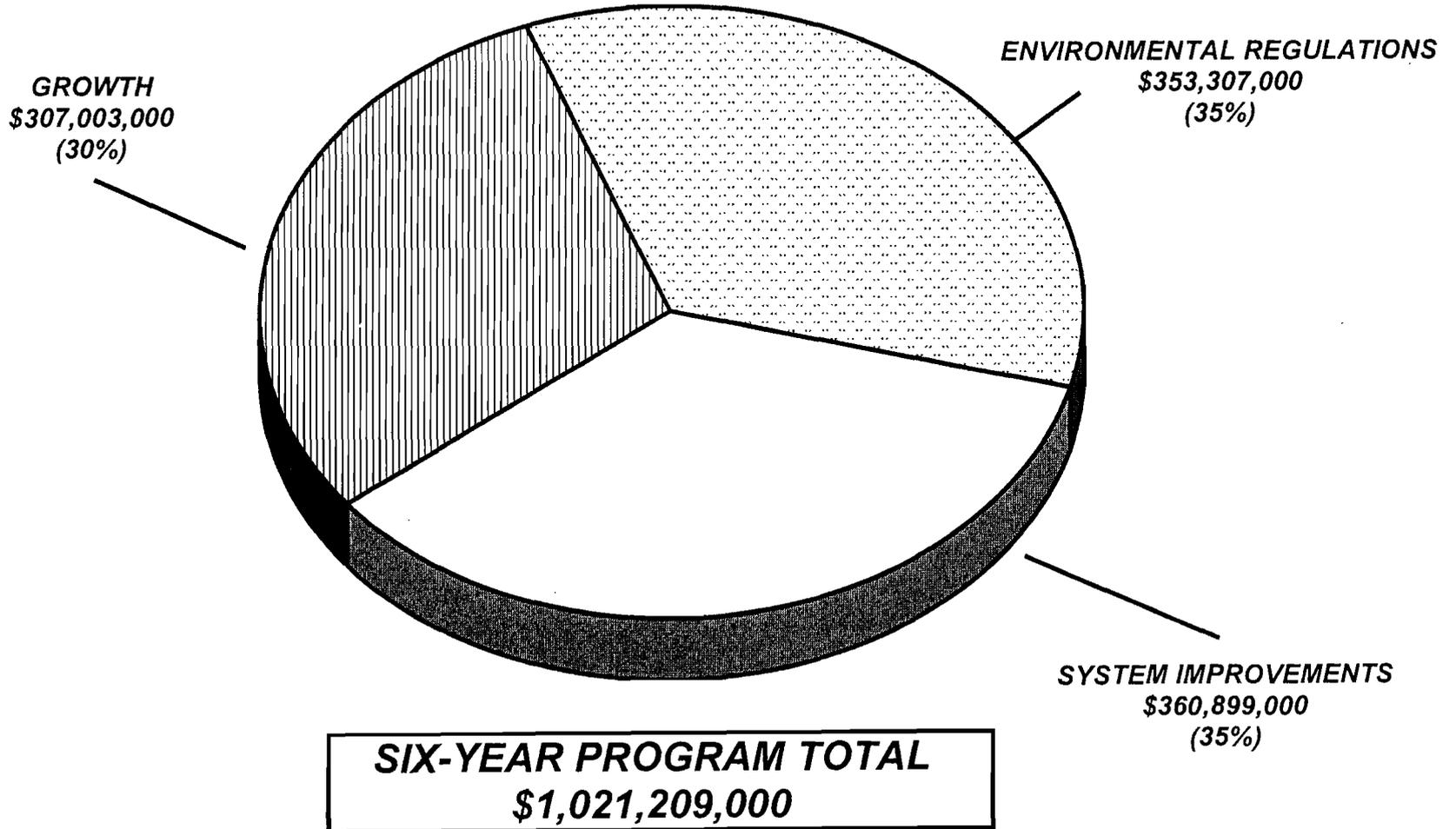
Expenditures

The FYs 2010-2015 Capital Improvements Program includes 90 projects for a grand total of nearly \$1.9 billion dollars. Expenditures for the six-year program period are estimated at \$1.0 billion. FY'10 expenditures are estimated at \$214.3 million, which is \$14.6 million less than the funding level approved for FY'09. Of the \$214.3 million, \$103.4 million is for the Water Program and \$110.9 million is for the Sewerage Program. Nearly half of the projects in this CIP are Development Services Process (DSP) growth projects. The DSP projects' estimated six-year program cost is \$27 million, with approximately \$11 million programmed in FY'10, the same amount approved last year. There are 5 new projects totaling \$13.9 million in the six-year program period. These projects are shown on the New Projects Listing near the end of this section. A table comparing the Proposed FYs 2010-2015 CIP to the Adopted FYs 2009-2014 CIP follows:

FIGURE 3

WSSC PROPOSED FYS 2010-15 CIP

SIX-YEAR PROGRAM EXPENDITURES BY MAJOR CATEGORY*



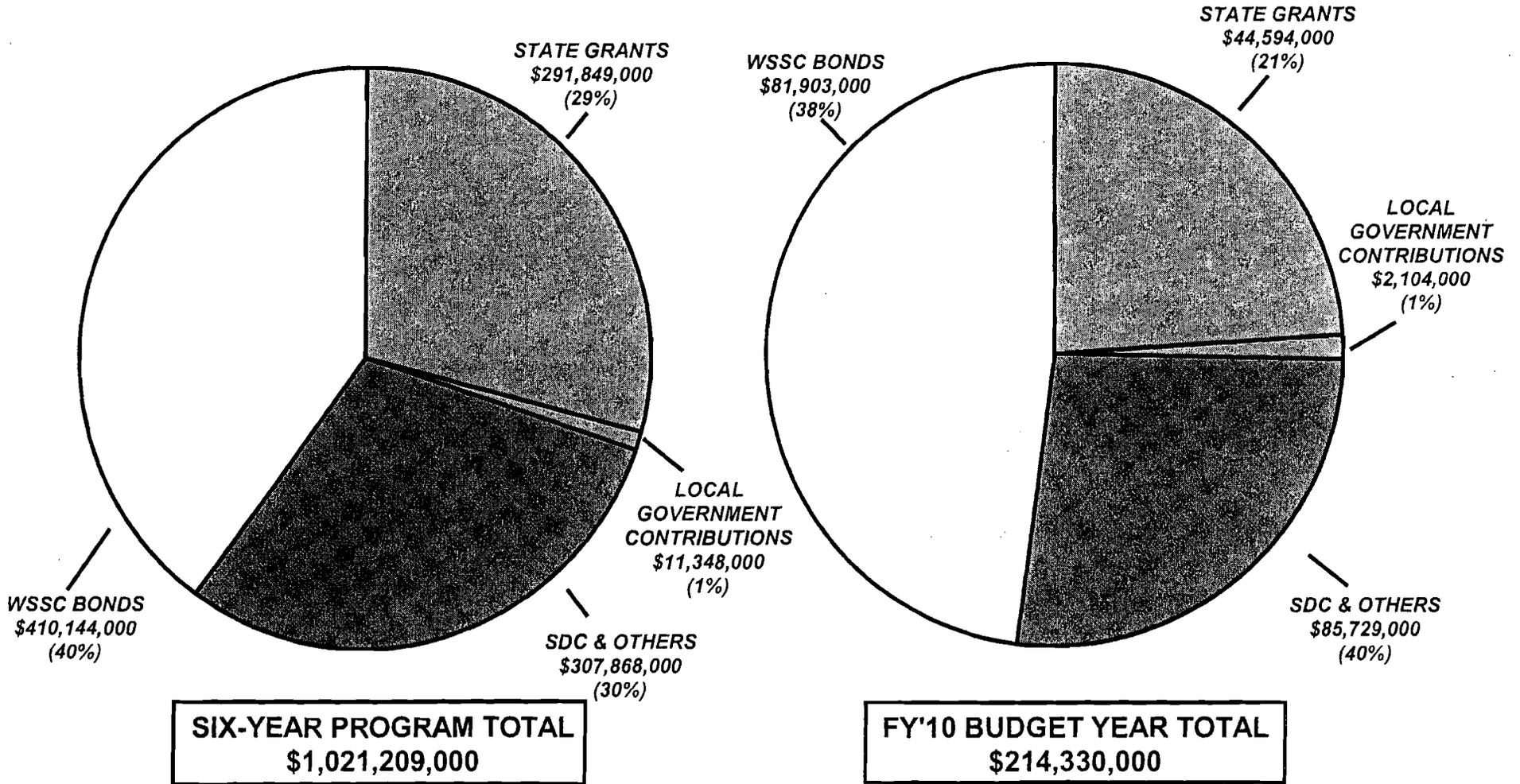
* Totals do not include \$1,063,782,000 in System Improvements project capital expenditures for Information Only projects.

2

FIGURE 4

WSSC PROPOSED FYS 2010-15 CIP

FUNDING BY SOURCE*



* Totals do not include \$1,063,782,000 and \$147,070,000 in capital expenditures for Information Only projects in the six-year program and budget year, respectively.

3

FINANCIAL SUMMARY

DATE: October 1, 2008

(ALL FIGURES IN THOUSANDS)

TOTAL WSSC CIP

AGENCY NUMBER	PROJECT NAME	EST. TOTAL COST	EXPEND THRU 08	EST. EXPEND 09	TOTAL SIX YEARS	EXPENDITURE SCHEDULE						BUDGET REQUEST 10	PDF PAGE NUM
						YR 1 10	YR 2 11	YR 3 12	YR 4 13	YR 5 14	YR 6 15		
	Montgomery County Water Projects	27,815	2,016	4,413	21,386	5,280	9,180	5,852	1,074	0	0	5,280	1-1
	Prince George's County Water Projects	97,671	27,088	12,500	54,228	13,323	14,725	17,624	7,423	837	296	13,323	5-1
	Bi-County Water Projects	429,122	108,547	47,650	272,925	84,767	72,759	66,243	38,396	6,397	4,363	84,767	3-1
	TOTAL WATER PROJECTS	554,608	137,651	64,563	348,539	103,370	96,664	89,719	46,893	7,234	4,659	103,370	
	Montgomery County Sewerage Projects	82,387	8,142	5,650	48,135	25,150	20,316	2,447	121	101	0	25,150	2-1
	Prince George's County Sewerage Projects	228,475	22,402	21,165	184,606	37,815	87,472	52,940	5,480	202	697	37,815	6-1
	Bi-County Sewerage Projects	1,013,689	442,006	39,417	439,929	47,995	47,283	105,035	82,293	96,244	61,079	47,995	4-1
	TOTAL SEWERAGE PROJECTS	1,324,551	472,550	66,232	672,670	110,960	155,071	160,422	87,894	96,547	61,776	110,960	
	TOTAL WSSC PROGRAM	1,879,159	610,201	130,795	1,021,209	214,330	251,735	250,141	134,787	103,781	66,435	214,330	
	Total Information Only Projects	1,240,818	19,368	145,055	1,071,905	148,882	184,745	197,159	180,877	195,239	165,003	148,882	7-1

Notes for costs beyond six years:

Includes 3,855 for Prince George's County Water Projects Total Cost.
Includes 3,855 for Water Projects Total Cost.

Includes 20,460 for Montgomery County Sewerage Projects Total Cost.
Includes 302 for Prince George's County Sewerage Projects Total Cost.
Includes 92,337 for Bi-County Sewerage Projects Total Cost.
Includes 113,099 for Sewerage Projects Total Cost.

Includes 116,954 for WSSC Program Total Cost.

(4)

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
023800	W-153.00	Change

2. Date: October 1, 2008

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

Revised:

3. Project Name: Laytonsville Elevated Tank & Pumping Station

5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Goshen, Woodfield & Vicinity P.A. 14

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	874	674	100	100	100						
Land											
Site Improvements & Utilities											
Construction	3,030		2,525	505	505						
Other	485		394	91	91						
Total	4,389	674	3,019	696	696						

C. Funding Schedule (000's)

SDC	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
SDC	1,389	674	519	196	196						
Contribution/Other	3,000		2,500	500	500						

D. Description & Justification

DESCRIPTION

The project provides for the planning, design, and construction for the creation of a new pressure zone to serve the town of Laytonsville and surrounding communities. Community outreach, site selection, design, and construction of an 0.5 million gallon elevated storage tank and a 1.72 MGD pumping station will be part of this project. The purpose of this project is to provide public water service to existing residences and commercial properties in addition to new homes in the town of Laytonsville and the surrounding communities. To the extent that this project will add new hookups to WSSC's existing customer base, 100% of this project supports future growth. Refer to the definition of growth projects in the Expenditure Section of the Program Overview at the front of this document.

Service Area Montgomery High Pressure Zone HG660

Capacity 0.5 MG

JUSTIFICATION

Plans & Studies

A preliminary Study for the Proposed Water Service Area for Town of Laytonsville (October 1999); Memorandum dated October 18, 2001, from the Manager of the Well and Septic Section, Montgomery County Department of Permitting Services, to Water and Waste Water Management, Montgomery County Department of Environmental Protection, finding that connection to the public water system will help address problems caused by groundwater contamination and lack of available septic replacement areas; Montgomery County Ten-Year Comprehensive Water Supply and Sewerage Systems Plan.

Specific Data

The preliminary Study for Proposed Water Service Area for the Town of Laytonsville indicates that, due to high ground elevations, a new pressure zone which entails a pumping station and an elevated storage tank is required. In May 2001, under CR 14-857, the Montgomery County Council acted to permanently restrict the provision of community water service from any properties in the town currently zoned AG and from any properties adjacent to or near the town within the county zoned RDT. The Town of Laytonsville filed a formal application for water service with the WSSC in November 2001.

Cost Change

Costs were increased for inflation and inspection services.

STATUS Preliminary Design (WSSC Contract No. BM2938A00,).

OTHER

The project scope has remained the same. Expenditures shown in Block B are preliminary design level estimates and may change based on final bid. It is estimated that an additional \$1.85 million of non-CIP sized pipeline work will also be required. The expenditure and construction schedule presented above in Block B reflects that WSSC, the Developer of the Faulk's property, and the Town of Laytonsville have agreed to the funding mechanism for the Contribution/Other funding shown above in Block C.

E. Annual Operating Budget Impact (000's)

FY of Impact

Program Costs	Staff	.....	.....
	Other	.....	.....
Facility Costs	Maintenance	.....	.....
	Debt Service	.....	.....
Total Costs		.....	.....
Impact on Water or Sewer Rate		.....	.....

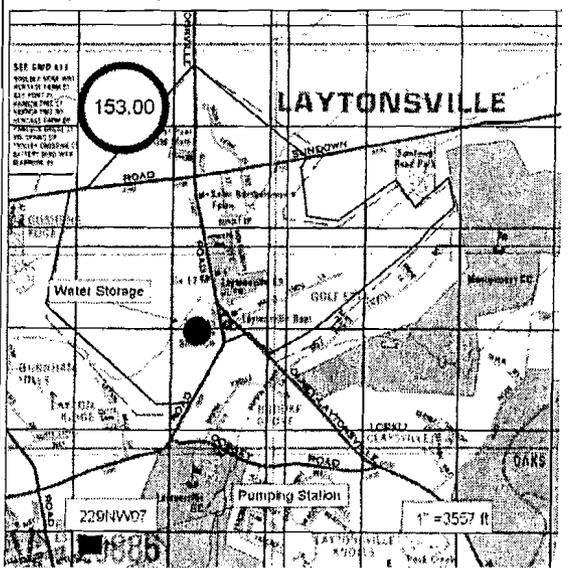
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 02
Date First Approved	FY 02
Initial Cost Estimate	58
Cost Estimate Last FY	4,074
Present Cost Estimate	4,389
Approved Request, Last FY	1,162
Total Expenditures & Encumbrances	674
Approval Request FY 10	696
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: No land or R/W required
 % Project Completion: D-99%
 Est. Completion Date: November 2009

H. Map Map Reference Code:



5

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: W - 153.00

Project Name: Laytonsville Elevated Tank & Pumping Station

COORDINATION

Maryland-National Capital Park & Planning Commission and Montgomery County Department of Environmental Protection.

NOTE This project supports 100% Growth.

9

A. Identification and Coding Information

2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code
934855	W-127.01	Change

Revised: _____

3. Project Name: Bi-County Water Tunnel 5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff .....	.....	.....
	Other .....	.....	.....
Facility Costs	Maintenance	329	15
	Debt Service	61	15
Total Costs		390	15
impact on Water or Sewer Rate .....		.....	.....

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	19,525	12,025	1,000	6,500	1,730	1,730	1,500	1,500	40		
Land											
Site Improvements & Utilities											
Construction	135,000		10,000	125,000	35,000	35,000	33,100	21,850	50		
Other	14,250		1,100	13,150	3,673	3,673	3,460	2,335	9		
Total	168,775	12,025	12,100	144,650	40,403	40,403	38,060	25,685	99		

C. Funding Schedule (000's)

	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
WSSC Bonds	700			700			400	300			
SDC	168,075	12,025	12,100	143,950	40,403	40,403	37,660	25,385	99		

D. Description & Justification

DESCRIPTION

This project provides for the design and construction of approximately 28,400 feet of 84-inch diameter water main between the intersection of Tuckerman Lane and Route I-270 and the western terminus of the Bi-County Water Tunnel near the area where Rock Creek crosses the Capital Beltway (Maryland Route 495). The project will be constructed as a deep tunnel, minimizing community and environmental impacts. The project also includes relining 450 feet of existing 96-inch PCCP with 84-inch steel pipe at the I-270 connection between this pipeline and the new tunnel.

Service Area Montgomery Main Pressure Zone HG495, Prince George's High Pressure Zone HG450

JUSTIFICATION

Plans & Studies
Montgomery and Prince George's Main Zone Facility Plan, Black and Veatch, Inc. (October, 1990); Technical Memoranda #1, 2, & 3 (Draft), Louis Berger & Associates (1997); Updated Water Demand Projections (dated April 6, 2001); and the General Plan. Final Alignment Report, Black and Veatch, Inc. (July, 2005).

Specific Data
This project will significantly increase transmission capacity from the Potomac Water Filtration Plant to the Montgomery County Main Zone and Prince George's County. The alignment study completed in July 2005 recommended that the water main be constructed as a pipeline with a deep rock tunnel from 90 to 250 feet below the ground surface.

Cost Change
The cost has increased due to project delays, inclusion of PCCP repair and stream restoration.

STATUS Final Design (WSSC Contract Nos. BL9972A94 , BL9972C94).

OTHER
The project scope has expanded slightly to include repair of 450 feet of existing 96-inch PCCP. The cost for the repair, estimated at \$700,000, is being tracked under a separate contract number and is not subject to SDC funding. Expenditures shown in Block B above are an order of magnitude estimate with a confidence interval of +/-30%. In late 2005, both Councils reviewed the results of the detailed alignment study and agreed upon the final alignment and construction method. In the FY'10 CIP, estimated construction time for the tunnel has increased by 3 months to 48 months total, based upon more detailed design and site constraints. Substantial completion of the tunnel is expected in January 2013.

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 93
Date First Approved	FY 93
Initial Cost Estimate	63,000
Cost Estimate Last FY	163,311
Present Cost Estimate	168,775
Approved Request, Last FY	40,865
Total Expenditures & Encumbrances	21,215
Approval Request FY 10	40,403
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Site or R/W under negotiation

% Project Completion: D-95%

Est. Completion Date: FY 2014

H. Map Map Reference Code:

SEE ATTACHED MAP

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: W - 127.01

Project Name: BI-County Water Tunnel

As part of the permit for work within Cabin John and Rock Creek Parks, M-NCP&PC will require stream restoration along Old Farm Creek. This work will be handled under a separate contract with costs tracked under a separate contract number. An additional nine months and \$300,000 have been added to the expenditure schedule for this work to be performed upon completion of the tunnel.

COORDINATION

Montgomery County Government, Prince George's County Government, Maryland-National Capital Park & Planning Commission (Mandatory Referral submissions will be required), Maryland Department of Natural Resources and Maryland State Department of Transportation.

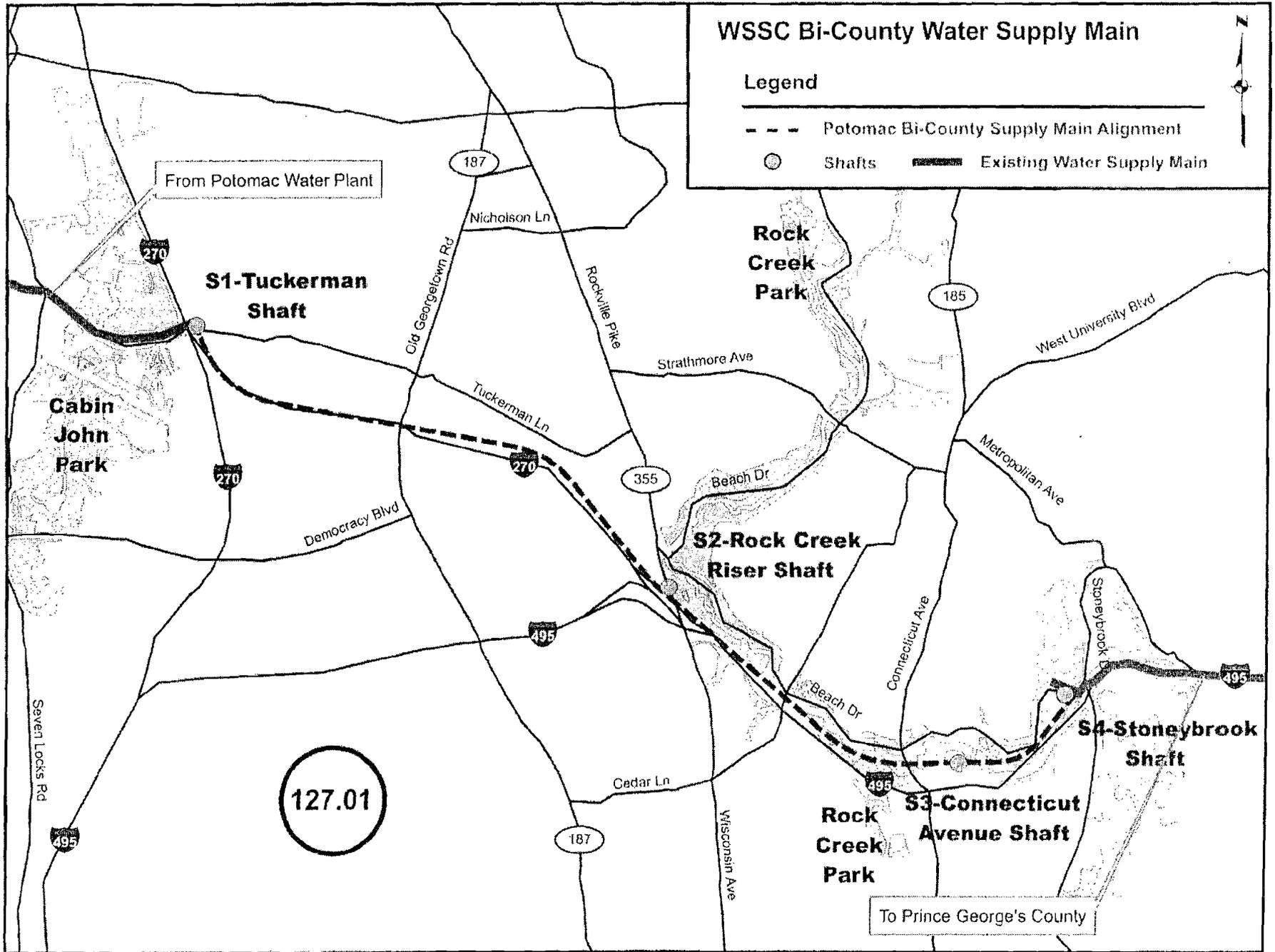
NOTE This project supports 99% Growth and 1% System Improvement.

8

WSSC Bi-County Water Supply Main

Legend

- - - Potomac Bi-County Supply Main Alignment
- Shafts
- Existing Water Supply Main



A. Identification and Coding Information

1. Project Number: _____ Agency Number: S-170.08 Update Code: Add

2. Date: October 1, 2008 Revised: _____

3. Project Name: Septage Discharge Facility Planning & Implementation

4. Program: Sanitation 6. Planning Area: _____

5. Agency: WSSC

7. Pre PDF Pg.No.: _____ 8. Req. Adeq. Pub. Fac. _____

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance .....	....
	Debt Service	945 14
Total Costs.....		945 14
Impact on Water or Sewer Rate.....	2¢	14

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	1,850			1,850	800	400	600	50			
Land											
Site Improvements & Utilities											
Construction	8,000			8,000		1,500	5,500	1,000			
Other	985			985	80	190	610	105			
Total	10,835			10,835	880	2,090	6,710	1,155			

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 10
Date First Approved	FY 10
Initial Cost Estimate	10,835
Cost Estimate Last FY	
Present Cost Estimate	10,835
Approved Request, Last FY	
Total Expenditures & Encumbrances	
Approval Request FY 10	880
Supplemental Approval Request Current FY (09)	

C. Funding Schedule (000's)

WSSC Bonds	10,835		10,835	880	2,090	6,710	1,155				
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D. Description & Justification

DESCRIPTION

This project provides for a facility plan to develop alternatives to address current and future requirements for managing septage and Fats, Oils, Grease discharge facilities in the sanitary district. The plan will address changes and/or revisions to existing facilities or any new facilities that may be recommended. Outsourcing of portions or the entire process to a privately or publicly owned operation will be one of the alternatives considered. The plan will develop separate and distinct reports and recommendations for each county including outreach programs to provide opportunities for active involvement of interested citizens.

JUSTIFICATION

Plans & Studies
 Concept Report Waste Haulers Discharges, AMT and Associates, Inc. Consulting Engineers (August, 2005); Preliminary Report for Septage Discharge Facility Study, JMT & Associates (February 2008)

Specific Data
 Currently septage waste is discharged at four locations: Muddy Branch Road Disposal Site in Montgomery County; and Temple Hill Road Disposal Site, Ritchie Road Disposal site and Bladensburg Disposal Site in Prince George's County. The types of waste to be discharged are as follows: Septic Tank Pump-Out (Sludge), Waste Holding Tank Discharge (Gray Water); Grease Trap Pump Out (FOG), Bus Holding Tank Discharge (Sewage and Chemicals), Small Food Service Providers (Low Volume FOG Waste), and Hazardous Materials. FOG wastes should not be returned to the Commission's waste system without treatment. Therefore, means and methods to affect and promote this treatment of FOG wastes at the disposal sites will be included in the facility plan.

Cost Change
 Not Applicable.

STATUS Facility Planning

OTHER
 The project scope was developed for the FY 2010 CIP and has an estimated cost of \$10,835,000. The project provides for facility planning and an Order of Magnitude estimate for the design and construction of three septage and FOG discharge facilities.

COORDINATION
 Montgomery County Government, Prince George's County Government, Maryland-National Capital Park & Planning Commission, Montgomery County Department of Environmental Protection, Prince George's County Department of Environmental Resources and Prince George's County Health Department.

NOTE This project supports 100% System Improvement.

G. Status Information

Land Status:	Not determined
% Project Completion:	P-70%
Est. Completion Date:	August 2012

H. Map Map Reference Code:

A. Identification and Coding Information

1. Project Number: Agency Number: Update Code:
 2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.
 Revised:
 3. Project Name: Utility Master Plan 5. Agency: **WSSC**
 4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	12,455	729	1,434	7,292	1,992	1,200	1,100	1,000	1,000	1,000	3,000
Land											
Site Improvements & Utilities											
Construction											
Other	1,759		215	1,094	299	180	165	150	150	150	450
Total	14,214	729	1,649	8,386	2,291	1,380	1,265	1,150	1,150	1,150	3,450

C. Funding Schedule (000's)

WSSC Bonds	9,888	243	923	6,170	1,591	1,064	965	850	850	850	2,550
Water Operating Funds	2,164	243	363	1,108	350	158	150	150	150	150	450
Sewer Operating Funds	2,164	243	363	1,108	350	158	150	150	150	150	450

D. Description & Justification

DESCRIPTION

This project provides for establishing an Asset Management Strategy and the development of Asset Management Plans which will identify and examine overall infrastructure needs over the next 30 years. The Plans will encompass the water and wastewater networks (treatment, transmission, distribution, collection, pumping and storage), buildings and grounds, and information technology assets (SCADA system, security services, telephony, land mobile radio system, data network, paging system, microwave network and antenna support structures). The Plans will examine existing and future capacity needs, regulatory needs and rehabilitation/replacement needs. This effort will build on a number of previous and existing efforts that address particular components of the networks. Phase 1, completed in December 2007, identified high level infrastructure needs. Funding in subsequent fiscal years will be used to complete the development of more detailed Asset Management Plans.

EXPENDITURES FOR THE UTILITY MASTER PLAN ARE EXPECTED TO CONTINUE THROUGH FY'18.

JUSTIFICATION

Plans & Studies

WSSC Strategic Sewerage Study (March, 1993); Patuxent WFP Facility Plan (1997); Facility Master Plan Potomac WFP (2000); Facility Master Plan Patuxent WFP (2000); Potomac Facility Plan (2002); WSSC Sanitary Sewer Overflows Consent Decree (December 7, 2005); WSSC Dynamic Sewer System Model (Contract No. CM4269A05); WSSC Strategic Sewerage Study Update (April 2006); WSSC 2007 Annual Action Item No 13; Phase 1 High Level Utility Wide Master Plan Reports (December 2007).

Specific Data

The initial phase of the project includes analysis of the results of the baseline sewer system modeling conducted in FY's 2006 and 2007, review of completed and planned Sewer System Evaluation Surveys (SSES), condition assessments, and trunk sewer inspections.

Cost Change

Preliminary planning level cost estimates have increased based on refined project goals emerging from the initial study work to develop more than 25 specific Asset Management Plans.

STATUS Planning (WSSC Contract Nos. BM4626A07, CM4626A07).

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff .....	.....
	Other .....	.....
Facility Costs	Maintenance .....	.....
	Debt Service	629
Total Costs.....		629
Impact on Water or Sewer Rate.....	1¢	18

F. Approval and Expenditure Data (000's)

Date First in Capital Program	<input type="text"/> FY 10
Date First Approved	<input type="text"/> FY 08
Initial Cost Estimate	<input type="text"/> 6,900
Cost Estimate Last FY	<input type="text"/> 7,176
Present Cost Estimate	<input type="text"/> 14,214
Approved Request, Last FY	<input type="text"/> 1,196
Total Expenditures & Encumbrances	<input type="text"/> 729
Approval Request FY 10	<input type="text"/> 2,291
Supplemental Approval Request Current FY (09)	<input type="text"/>

G. Status Information

Land Status: Not Applicable
 % Project Completion: P-10%
 Est. Completion Date: FY 2018

H. Map Map Reference Code:

MAP NOT APPLICABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: A - 106.00

Project Name: Utility Master Plan

OTHER

The project scope has remained the same. For the FY 2010 CIP, projects W-175.01, Water System Master Plan and S-170.05, Wastewater System Master Plan have been closed out and all expenditures have been consolidated into this project to provide for better project management and more clearly recognize associated operating expenses.

COORDINATION

Maryland-National Capital Park & Planning Commission, Montgomery County Department of Environmental Protection and Prince George's County Department of Environmental Resources.

NOTE This project supports 100% System Improvement.



Washington Suburban Sanitary Commission

14501 Sweitzer Lane • Laurel, Maryland 20707-5902

COMMISSIONERS
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GENERAL MANAGER
Teresa D. Daniell

INTERIM DEPUTY
GENERAL MANAGER
Rudolph S. Chow

January 21, 2009

The Honorable Phil Andrews
President
Montgomery County Council
Stella Werner Office Building
100 Maryland Avenue
Rockville, MD 20850

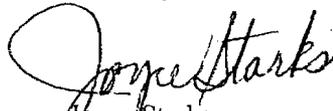
Dear Council President Andrews:

The purpose of this letter is to transmit a mid-cycle update to the WSSC's Proposed Fiscal Years 2010-2015 Capital Improvements Program transmitted on September 24, 2008. We hereby request you incorporate these changes into your annual comments, recommendations and amendments to the program. The mid-cycle update provides for revised expenditure schedules for certain projects in the Proposed CIP to align them with the reduced capital program incorporated into the Fiscal Year 2010 Preliminary Proposed Budget published on January 15, 2009.

Revised expenditure schedules and project deferrals are recommended to reduce the overall capital program and resultant capital debt impact in the budget year. The revised expenditure schedules recommended for the Western Branch WWTP Enhanced Nutrient Removal and Facility Upgrade projects reflect the agreement with the Maryland Department of Environment regarding the grant funding amount.

Enclosed for your information is a summary table of project expenditure impacts and revised project description forms for each of the projects.

Sincerely,


Joyce Starks
Chair

Enclosure

cc: Stephen Farber, Staff Director
Montgomery County Council

Keith Levchenko, Legislative Analyst
Montgomery County Council



EXPENDITURE IMPACTS OF REVISIONS
TO THE
WSSC PROPOSED FY 2010-2015 CIP
(\$ in thousands)

	<u>Planning & Design Costs</u>	<u>Construction Costs</u>	<u>Other Costs</u>	<u>FY'10 Total</u>
<u>Reductions</u>				
W-1.00 Water Reconstruction Program	\$ (308)	\$ (1,563)	\$ (224)	\$ (2,095)
S-1.01 Sewer Reconstruction Program	(4,003)	(13,010)	(2,987)	(20,000)
A-102.00 Engineering Support Program	-	(3,000)	-	(3,000)
	<u>\$ (4,311)</u>	<u>\$ (17,573)</u>	<u>\$ (3,211)</u>	<u>\$ (25,095)</u>
<u>Deferrals</u>				
W-172.07 Patuxent Raw Water Pipeline	\$ (408)	\$ (1,200)	\$ (161)	\$ (1,769)
W-172.08 Rocky Gorge Pump Station Upgrade	(545)	(4,793)	(534)	(5,872)
A-103.01 Biogas Production Feasibility Study	(200)	-	(30)	(230)
	<u>\$ (1,153)</u>	<u>\$ (5,993)</u>	<u>\$ (725)</u>	<u>\$ (7,871)</u>
<u>Revised Schedules</u>				
W-3.02 Olney Standpipe Replacement	\$ (87)	\$ -	\$ (13)	\$ (100)
W-12.01 Prince George's Main Zone Storage Facility	(227)	-	(34)	(261)
W-34.02 Old Branch Avenue Water Main	205	-	21	226
W-65.09 Prince George's County High Zone Storage Study	60	-	9	69
W-69.03 Accokeek Elevated Water Storage Facility	(70)	(806)	(131)	(1,007)
W-73.16 Potomac WFP Improvements	(486)	(5,850)	(688)	(7,024)
W-73.30 Potomac WFP Submerged Channel Intake	(500)	-	(50)	(550)
W-123.20 Oak Grove/Leeland Roads Water Main, Part 2	(16)	(3,813)	(499)	(4,328)
W-138.02 Shady Grove Standpipe Replacement	(115)	(310)	(64)	(489)
W-147.00 Collington Elevated Water Storage Facility	(134)	(247)	(57)	(438)
W-147.01 Marlboro Zone Water Storage Facility	(321)	-	(48)	(369)
W-172.05 Patuxent WFP Phase II Expansion	314	(3,774)	(346)	(3,806)
S-57.92 Western Branch Facility Upgrade	-	1,950	190	2,140
S-57.93 Western Branch WWTP ENR	-	(2,000)	(200)	(2,200)
S-77.19 Parkway WWTP Biosolids Facility Plan	136	-	20	156
S-89.22 Anacostia Storage Facility	128	61	19	208
S-89.23 Anacostia No. 2 Screenings Handling Facilities	(10)	(58)	(10)	(78)
S-94.11 Damascus Centre WWPS Replacement	(47)	(114)	(24)	(185)
	<u>\$ (1,170)</u>	<u>\$ (14,961)</u>	<u>\$ (1,905)</u>	<u>\$ (18,036)</u>
Total Impact on FY'10 Capital Budget	<u>\$ (6,634)</u>	<u>\$ (38,527)</u>	<u>\$ (5,841)</u>	<u>\$ (51,002)</u>

(11)

EXPENDITURE IMPACTS OF REVISIONS
TO THE
WSSC PROPOSED FY 2010-2015 CIP
(\$ in thousands)

	<u>Planning & Design Costs</u>	<u>Construction Costs</u>	<u>Other Costs</u>	<u>FY'10 Total</u>
<u>CIP Project Revisions</u>				
W-3.02 Olney Standpipe Replacement	\$ (87)	\$ -	\$ (13)	\$ (100)
W-138.02 Shady Grove Standpipe Replacement	(115)	(310)	(64)	(489)
S-94.11 Damascus Centre WWPS Replacement	(47)	(114)	(24)	(185)
W-73.16 Potomac WFP Improvements	(486)	(5,850)	(688)	(7,024)
W-73.30 Potomac WFP Submerged Channel Intake	(500)	-	(50)	(550)
W-172.05 Patuxent WFP Phase II Expansion	314	(3,774)	(346)	(3,806)
W-172.07 Patuxent Raw Water Pipeline	(408)	(1,200)	(161)	(1,769)
W-172.08 Rocky Gorge Pump Station Upgrade	(545)	(4,793)	(534)	(5,872)
S-89.22 Anacostia Storage Facility	128	61	19	208
S-89.23 Anacostia No. 2 Screenings Handling Facilities	(10)	(58)	(10)	(78)
W-12.01 Prince George's Main Zone Storage Facility	(227)	-	(34)	(261)
W-34.02 Old Branch Avenue Water Main	205	-	21	226
W-65.09 Prince George's County High Zone Storage Study	60	-	9	69
W-69.03 Accokeek Elevated Water Storage Facility	(70)	(806)	(131)	(1,007)
W-123.20 Oak Grove/Leeland Roads Water Main, Part 2	(16)	(3,813)	(499)	(4,328)
W-147.00 Collington Elevated Water Storage Facility	(134)	(247)	(57)	(438)
W-147.01 Marlboro Zone Water Storage Facility	(321)	-	(48)	(369)
S-57.92 Western Branch Facility Upgrade	-	1,950	190	2,140
S-57.93 Western Branch WWTP ENR	-	(2,000)	(200)	(2,200)
S-77.19 Parkway WWTP Biosolids Facility Plan	136	-	20	156
	<u>\$ (2,123)</u>	<u>\$ (20,954)</u>	<u>\$ (2,600)</u>	<u>\$ (25,677)</u>
<u>Information Only Project Revisions</u>				
W-1.00 Water Reconstruction Program	\$ (308)	\$ (1,563)	\$ (224)	\$ (2,095)
S-1.01 Sewer Reconstruction Program	(4,003)	(13,010)	(2,987)	(20,000)
A-102.00 Engineering Support Program	-	(3,000)	-	(3,000)
A-103.01 Biogas Production Feasibility Study	(200)	-	(30)	(230)
	<u>\$ (4,511)</u>	<u>\$ (17,573)</u>	<u>\$ (3,241)</u>	<u>\$ (25,325)</u>
Total Impact on FY'10 Capital Budget	<u>\$ (6,634)</u>	<u>\$ (38,527)</u>	<u>\$ (5,841)</u>	<u>\$ (51,002)</u>

A. Identification and Coding Information

2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code
063801	W-3.02	Change

Revised: January 21, 2009

3. Project Name: **Olney Standpipe Replacement** 5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: **Olney & Vicinity P.A. 23**

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	1,170	127	310	733	413	261	59				
Land											
Site Improvements & Utilities											
Construction	2,808			2,808		550	1,990	268			
Other	578		47	531	62	122	307	40			
Total	4,556	127	357	4,072	475	933	2,356	308			

C. Funding Schedule (000's)

WSSC Bonds	4,556	127	357	4,072	475	933	2,356	308			
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D. Description & Justification

DESCRIPTION

This project provides for the community outreach, planning, site selection, design, and construction of up to 1.0 million gallons (MG) of elevated storage to serve the Olney area. Demolition of the existing Olney Standpipe is part of this project.

Service Area Montgomery High Pressure Zone HG660 **Capacity** 1.0 MG

JUSTIFICATION

Plans & Studies
Montgomery County High Zone Facility Plan, Boyle Engineering (1991); WSSC Memorandum from Jeff Asner to Karen Wright dated March 22, 2004; Water Storage Volume Criteria Report (November 2005).

Specific Data
The efforts of the Systems Control Group have improved the minimum chlorine residual concentrations and appear to have lowered the THM concentrations in the distribution system. However, these efforts still leave the Olney area with troublesome chlorine residuals and result in low-pressure complaints during the drawdown efforts. The existing Olney Standpipe with 1.8 MG of non-usable storage requires constant attention to maintain acceptable water quality.

Cost Change
Costs were increased for inflation.

STATUS Facility Planning (WSSC Contract No. BE4473A06,).

OTHER
The project scope has remained the same. Expenditures shown are planning level estimates only and may change depending on site-specific conditions and design constraints.

COORDINATION
Montgomery County Government and Maryland-National Capital Park & Planning Commission (anticipates receiving Mandatory Referral submissions from WSSC as the project reaches the preliminary design stage).

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff .....	.....
	Other .....	.....
Facility Costs	Maintenance .....	.....
	Debt Service	397	14
Total Costs		397	14
Impact on Water or Sewer Rate.....			

F. Approval and Expenditure Data (000's)

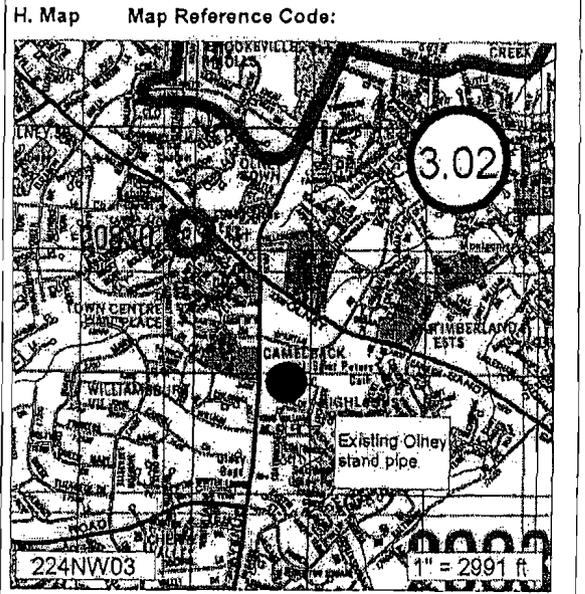
Date First in Capital Program	FY 06
Date First Approved	FY 06
Initial Cost Estimate	3,911
Cost Estimate Last FY	4,435
Present Cost Estimate	4,556
Approved Request, Last FY	383
Total Expenditures & Encumbrances	127
Approval Request FY 10	475
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Not determined

% Project Completion: P-5%

Est. Completion Date: FY 2013



6

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
093801	W-138.02	Change

2. Date: October 1, 2008

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

Revised: January 21, 2009

5. Agency: **WSSC**

3. Project Name: Shady Grove Standpipe Replacement

4. Program: **Sanitation** 6. Planning Area: Gaithersburg & Vicinity P.A. 20

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	515		124	391	70	178	143				
Land											
Site Improvements & Utilities											
Construction	6,180			6,180	190	4,500	1,490				
Other	1,004		19	985	39	701	245				
Total	7,699		143	7,556	299	5,379	1,878				

C. Funding Schedule (000's)

WSSC Bonds	7,699		143	7,556	299	5,379	1,878				
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D. Description & Justification

DESCRIPTION

This project provides for planning, design, and construction of up to 3 million gallons (MG) of elevated storage to replace the existing Shady Grove Standpipe. This is in lieu of extensive and costly maintenance for the existing facility which, because of the large volume of unusable storage inherent in a standpipe as opposed to an elevated facility, contributes to water quality problems such as loss of disinfectant residual and increases in undesirable disinfectant by-products.

Service Area Montgomery High Pressure Zone HG660

Capacity 3.0 MG

JUSTIFICATION

Plans & Studies

Water Storage Volume Criteria Report (November 2005); 2006 Water Production Projections; WSSC Memorandum dated May 7, 2007, from Karen Wright, Systems Control Group Leader; WSSC Memorandum dated May 24, 2007, from Tim Hirrel, Planning Group.

Specific Data

The existing 5 million gallon standpipe is in need of extensive repairs estimated to cost approximately \$2 million. Replacing the standpipe with a smaller elevated storage facility will provide the same level of service while helping to meet new USEPA regulations for disinfectant by-products and improving water quality.

Cost Change

Costs were increased for inflation.

STATUS Planning

OTHER

The project scope has remained the same. Expenditures shown in Block B are an Order of Magnitude estimate and may increase as the project proceeds.

COORDINATION

Maryland State Highway Administration, Montgomery County Government and Maryland-National Capital Park & Planning Commission.

NOTE This project supports 100% System Improvement.



E. Annual Operating Budget Impact (000's)

FY of Impact

Program Costs	Staff	.....	.....
	Other	.....	.....
Facility Costs	Maintenance	.....	.....
	Debt Service	.....	671	13
Total Costs			671	13
Impact on Water or Sewer Rate			1¢	13

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 09
Date First Approved	FY 09
Initial Cost Estimate	7,475
Cost Estimate Last FY	7,475
Present Cost Estimate	7,699
Approved Request, Last FY	138
Total Expenditures & Encumbrances	
Approval Request FY 10	299
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Not Applicable
 % Project Completion: P-0%
 Est. Completion Date: FY 2012

H. Map Map Reference Code:



A. Identification and Coding Information

2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code
063802	S-94.11	Change

Revised: January 21, 2009

3. Project Name: Damascus Centre WWPS Replacement 5. Agency: **WSSC**

4. Program: Sanitation 6. Planning Area: Damascus & Vicinity P.A. 11

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	64		17	47		27	20				
Land											
Site Improvements & Utilities											
Construction	409			409	295	114					
Other	71		3	68	48	20					
Total	544		20	524	370	154					

C. Funding Schedule (000's)

WSSC Bonds	544		20	524		370	154				
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D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of a new 0.29 MGD wastewater pumping station to replace the existing Damascus Centre WWPS.

Service Area Patuxent North Drainage Basin **Capacity** 0.29 MGD **Population** Damascus Centre Shopping Center and nearby commercial and residential areas.

JUSTIFICATION

Plans & Studies
Memorandum dated April 6, 2004, from Brian Mosby thru Tom Heikkinen to Steve Gerwin; Design Guideline DG-08.

Specific Data
This project is needed to replace the existing Damascus Centre WWPS, a privately-built package plant that was taken over by WSSC in the 1970's. The existing station is plagued with numerous problems and design deficiencies.

Cost Change
Not Applicable

STATUS Planning (WSSC Contract No. CP4508A06,).

OTHER
The project scope has remained the same. Costs shown are preliminary planning level estimates only and may change based upon site specific conditions and design constraints. The cost estimate is based on replacement of the existing station with a new station constructed to the new DG-08 Design Guideline for small wastewater pumping stations. If possible, WSSC will coordinate the location and design of the project with development interests in the Damascus Town Center area regarding options to also serve master plan-recommended projects from the replacement WWPS. Land costs are included in WSSC Project S-201.00.

COORDINATION
Montgomery County Government, Maryland-National Capital Park & Planning Commission and Montgomery County Department of Environmental Protection (Draft Damascus Master Plan).

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance .....	....
	Debt Service	47	13
Total Costs		47	13
Impact on Water or Sewer Rate.....		....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 06
Date First Approved	FY 06
Initial Cost Estimate	460
Cost Estimate Last FY	528
Present Cost Estimate	544
Approved Request, Last FY	181
Total Expenditures & Encumbrances	
Approval Request FY 10	
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Site not selected

% Project Completion: P-0%

Est. Completion Date: FY 2011

H. Map **Map Reference Code:**

MAP NOT AVAILABLE



A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
033811	W-73.16	Change

2. Date: October 1, 2008
 Revised: January 21, 2009

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Potomac WFP Improvements

5. Agency: WSSC

4. Program: Sanitation 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	22,182	17,780	2,402	-2,000	1,514	486					
Land											
Site Improvements & Utilities											
Construction	105,146	56,548	24,500	24,098	18,248	5,850					
Other	5,300		2,690	2,610	1,976	634					
Total	132,628	74,328	29,592	28,708	21,738	6,970					

C. Funding Schedule (000's)

WSSC Bonds	91,513	51,286	20,418	19,809	14,999	4,810					
SDC	41,115	23,042	9,174	8,899	6,739	2,160					

D. Description & Justification

DESCRIPTION

This project provides for improvements to the Potomac WFP in accordance with the program management plan. Design and construction of rapid mix/flow splitting modifications, pumping station and ultraviolet disinfection facilities, replacement of MCC No. 1, a new backwash pumping station, and new lime feed facilities were packaged as one contract using the CM-at-Risk project delivery method. Outdoor Substation Nos. 1 and 4 were completed under a separate contract in order to expedite replacement of the 5 kV switchgear in the Finished Water Pumping Station.

Service Area Bi-County Area

JUSTIFICATION

Plans & Studies

WSSC Memorandum by Timothy D. Hirrel, April 25, 2001; "Technical Memorandum No. 2," O'Brien & Gere Engineers, Inc. (November, 2001); "Potomac WFP Facility Plan," O'Brien & Gere Engineers, Inc. (September, 2002); Potomac WFP Improvements Design Development Report (August, 2003); "Potomac WFP Improvements Design Criteria Report," Post, Buckley, Schuh & Jernigan, Inc. (January, 2004); 5 kV Switchgear Improvements Design Development Report (January, 2004).

Specific Data

These projects are part of the program of improvements needed to reliably produce 273 MGD in the summer and 218 MGD in the winter in order to meet the April 25, 2001, Water Production Projections for the year 2030. Improvements to the flocculation and sedimentation processes may be needed in the future to increase the total plant capacity to meet projected demands.

Cost Change

Not Applicable

STATUS Under Construction (WSSC Contract Nos. BF2028D97 , BF2028H97).

OTHER

The project scope has remained the same. Expenditures and schedule are based upon actual bid. (\$89.5 million was the Guaranteed Maximum Price agreed to by Clark/Ulliman Schutte on the CM-at-Risk contract.)

COORDINATION

Montgomery County Government, Prince George's County Government, Montgomery County Department of Environmental Protection, Maryland Department of the Environment, Maryland Department of Natural Resources, Prince George's County Department of Environmental Resources and WSSC Project W-172.05, Patuxent WFP Phase II Expansion(coordination of UV criteria).

NOTE This project supports 31% Growth, 49% System Improvement and 20% Environmental Regulation.

E. Annual Operating Budget Impact (000's)

FY of Impact

Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance .....	....
	Debt Service	7980	12
Total Costs		7980	12
Impact on Water or Sewer Rate		16¢	12

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 04
Date First Approved	FY 03
Initial Cost Estimate	70,247
Cost Estimate Last FY	134,150
Present Cost Estimate	132,628
Approved Request, Last FY	32,230
Total Expenditures & Encumbrances	74,328
Approval Request FY 10	21,738
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Not applicable
 % Project Completion: C-45%
 Est. Completion Date: May 2010

H. Map Map Reference Code:

MAP NOT AVAILABLE

A. Identification and Coding Information 2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code	
033812	W-73.30	Change	

Revised: January 21, 2009

3. Project Name: Potomac WFP Submerged Channel Intake 5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: **Bi-County**

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff .....	.....
	Other .....	.....
Facility Costs	Maintenance .....	.....
	Debt Service	2140	16
Total Costs.....		2140	16
Impact on Water or Sewer Rate.....		4¢	16

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	5,105	1,687	400	3,018		1,470	1,000	299	175	74	
Land											
Site Improvements & Utilities											
Construction	17,353			17,353			220	7,691	5,550	3,892	
Other	2,078		40	2,038		147	122	799	573	397	
Total	24,536	1,687	440	22,409		1,617	1,342	8,789	6,298	4,363	

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 04
Date First Approved	FY 03
Initial Cost Estimate	936
Cost Estimate Last FY	23,887
Present Cost Estimate	24,536
Approved Request, Last FY	999
Total Expenditures & Encumbrances	1,687
Approval Request FY 10	
Supplemental Approval Request Current FY (09)	

C. Funding Schedule (000's)

WSSC Bonds	24,536	1,687	440	22,409		1,617	1,342	8,789	6,298	4,363
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D. Description & Justification

DESCRIPTION

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.

Service Area Bi-County Area

JUSTIFICATION

Plans & Studies

"Technical Memorandum No. 2 Water Quality Needs Assessment," O'Brien & Gere Engineers, Inc. (November, 2001); "Draft Source Water Assessment Study," Maryland Department of the Environment (April, 2002); "Potomac WFP Facility Plan," O'Brien & Gere Engineers, Inc. (September, 2002).

Specific Data

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.

Cost Change

Costs were increased for inflation.

STATUS Planning (WSSC Contract No. BF2028F97,).

OTHER

The project scope has remained the same. As part of the planning phase of this project, significant outreach activities will occur. 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. Once the project is underway, elected officials, county government staffs, environmental community members, and the general public will be engaged in an on-going information, outreach and project participation program. Expenditures shown in Block B are planning level estimates only and may increase or decrease. Upon completion of preliminary design, a more reliable estimate can be made. Both Councils will review the results of the detailed study and must approve continuing with the project before design and construction may proceed.

G. Status Information

Land Status: Right-of-Way may be required

% Project Completion: P-75%

Est. Completion Date: FY 2015

H. Map Map Reference Code:

MAP NOT AVAILABLE

20

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: W - 73.30

Project Name: Potomac WFP Submerged Channel Intake

COORDINATION

Montgomery County Government, Prince George's County Government, National Park Service, Montgomery County Department of Environmental Protection, Maryland Department of the Environment, Prince George's County Department of Environmental Resources and U.S. Army Corps of Engineers.

NOTE This project supports 100% System Improvement.

(12)

A. Identification and Coding Information

2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code
033807	WV-172.05	Change

Revised: January 21, 2009

3. Project Name: Patuxent WFP Phase II Expansion 5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	4,590	2,186	500	1,904	700	745	459				
Land											
Site Improvements & Utilities											
Construction	24,530			24,530	15,096	9,434					
Other	2,693		50	2,643	70	1,584	989				
Total	31,813	2,186	550	29,077	770	17,425	10,882				

C. Funding Schedule (000's)

WSSC Bonds	31,813	2,186	550	29,077	770	17,425	10,882				
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D. Description & Justification

DESCRIPTION

This project provides for the addition of a sixth treatment train, a new electrical substation, upgrades to existing yard piping, upgrades to chemical facilities and new UV disinfection facilities to the Patuxent WFP, along with an upgrade to the existing potassium permanganate feed system at the Patuxent Pretreatment Facility and upgrades to the existing sewer system at Sweitzer Lane to handle residuals from the plant.

Service Area Bi-County Area **Capacity** 72 MGD nominal/110 MGD emergency

JUSTIFICATION

Plans & Studies
Patuxent WFP Facility Plan (April, 1997); In-House Study (April, 2002); Patuxent Expansion Design Criteria Report (April 2005)

Specific Data
Phase II will add a sixth treatment train consisting of a three stage flocculation chamber, sedimentation basin with chain and flight solids removal and plate settlers, disinfectant contact chamber, and two deep bed granular carbon filters. A fourth raw water pipeline from Rocky Gorge Raw Water Pipeline (W-172.07) and the modification and expansion of the Rocky Gorge Water Pumping Station (W-172.08) will provide a firm raw water pumping/transmission capacity of 110 MGD. These improvements will give the plant a firm nominal capacity of 72 MGD, with emergency capacity of 110 MGD. New UV disinfection facilities are being added to the plant in order to comply with upcoming EPA regulations for Cryptosporidium treatment and Stage 2 Disinfection Byproducts Rule.

Cost Change
Costs were increased as a result of additional design work required and escalation in labor costs due to project delay.

STATUS Preliminary Design (WSSC Contract No. BF1582H91,).

OTHER
The project scope has remained the same. Expenditure estimates shown above are preliminary design estimates and may change as the detailed design progresses. In the event of an outage at the Potomac WFP, additional capacity at the Patuxent WFP will reduce customer impact. However, emergency conservation measures will still be required. WSSC will seek federal funding for this project.

COORDINATION
Montgomery County Government, Prince George's County Government, Maryland-National Capital Park & Planning Commission, Maryland Department of the Environment, Baltimore Gas & Electric and WSSC Projects W-172.07, Patuxent Raw Water Pipeline, W-172.08, Rocky Gorge Pump Station Upgrade and W-73.18, Power Reliability and Arc Flash Studies(Coordination of UV Criteria).

NOTE This project supports 28% System Improvement and 72% Environmental Regulation.

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff .....	.....
	Other .....	.....
Facility Costs	Maintenance .....	.....
	Debt Service	2774	13
Total Costs.....		2774	13
Impact on Water or Sewer Rate.....	5¢		13

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 04
Date First Approved	FY 03
Initial Cost Estimate	33,002
Cost Estimate Last FY	30,121
Present Cost Estimate	31,813
Approved Request, Last FY	13,475
Total Expenditures & Encumbrances	2,186
Approval Request FY 10	770
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: No land or R/W required

% Project Completion: D-60%

Est. Completion Date: FY 2012

H. Map Map Reference Code:

MAP NOT AVAILABLE



A. Identification and Coding Information

2. Date: October 1, 2008
 Revised: January 21, 2009

7. Pre PDF Pg.No.:
 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code
063804	W-172.07	Change

3. Project Name: Patuxent Raw Water Pipeline
 4. Program: Sanitation
 5. Agency: WSSC
 6. Planning Area: BI-County

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance	128 14
	Debt Service	1397 14
Total Costs.....		1525 14
Impact on Water or Sewer Rate.....		3¢ 14

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	3,337	1,671	200	1,466		808	329	329			
Land											
Site Improvements & Utilities											
Construction	11,685	3,433	600	7,652		1,200	3,216	3,236			
Other	993		80	913		201	355	357			
Total	16,015	5,104	880	10,031		2,209	3,900	3,922			

C. Funding Schedule (000's)

WSSC Bonds	16,015	5,104	880	10,031		2,209	3,900	3,922			
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D. Description & Justification

DESCRIPTION

This project provides for community outreach, planning, design and construction of a new 48-inch diameter or larger raw water pipeline from the Rocky Gorge Raw Water Pumping Station to the Patuxent Water Filtration Plant, cleaning of the existing water lines and replacement of valves.

JUSTIFICATION

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

Specific Data

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 Rocky Gorge Pumping Station to the Patuxent 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.

Cost Change

Costs were increased for inflation.

STATUS Under Construction (WSSC Contract Nos. BF1582C91, BF1582E91).

OTHER

The project scope has remained the same. The Rocky Gorge Valve Replacement is at C-96% complete. Design for cleaning the existing raw water pipelines is 100% complete. The new raw water pipeline portion of the project is still under planning review with construction deferred until FY'12. Expenditure estimates for the pipeline portion shown in Block B above are planning level estimates only and may change based upon the alignment chosen and design constraints. Construction will not proceed until both County Councils have approved the raw water pipeline alignment. Land costs are included in Project W-202.00.

COORDINATION

Montgomery County Government, Prince George's County Government, Maryland-National Capital Park & Planning Commission, Maryland Department of the Environment, Interstate Commission on the Potomac River Basin, Local Community Civic Associations (West Laurel Civic Association), Baltimore Gas & Electric and WSSC Projects W-172.05, Patuxent WFP Phase II Expansion and W-172.08, Rocky Gorge Pump Station Upgrade.

NOTE This project supports 100% System Improvement.

F. Approval and Expenditure Data (000's)

Date First In Capital Program	FY 06
Date First Approved	FY 03
Initial Cost Estimate	18,750
Cost Estimate Last FY	15,398
Present Cost Estimate	16,015
Approved Request, Last FY	1,803
Total Expenditures & Encumbrances	5,104
Approval Request FY 10	
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Land & R/W to be acquired
 % Project Completion: C-40%
 Est. Completion Date: See Block D "Other"

H. Map Map Reference Code:

MAP NOT AVAILABLE

A. Identification and Coding Information 2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code
063805	W-172.08	Change

Revised: January 21, 2009

3. Project Name: Rocky Gorge Pump Station Upgrade 5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: BI-County

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff .....	.....
	Other .....	.....
Facility Costs	Maintenance .....	.....
	Debt Service	1299	12
Total Costs.....		1299	12
Impact on Water or Sewer Rate.....		3¢	12

B. Expenditure Schedule (000's)

	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Cost Elements											
Planning, Design & Supervision	3,201	1,695	461	1,045	52	993					
Land											
Site Improvements & Utilities											
Construction	10,500		1,313	9,187	457	8,730					
Other	1,201		177	1,024	51	973					
Total	14,902	1,695	1,951	11,256	560	10,696					

C. Funding Schedule (000's)

WSSC Bonds	14,902	1,695	1,951	11,256	560	10,696					
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D. Description & Justification

DESCRIPTION

This project provides for the modification and/or expansion of the Rocky Gorge Pump Station to allow the station to provide up to 110 MGD of raw water to the Patuxent Water Filtration Plant.

JUSTIFICATION

Plans & Studies
Patuxent WFP Facility Plan (April 1997); In-House Study (April 2002)

Specific Data
The modification and expansion of the Rocky Gorge Raw Water Pumping Station will provide a firm raw water pumping capacity of 110 MGD. The improvements to the pump station, along with a fourth water pipeline (W-172.07) and expansion of the Patuxent Plant (W-172.05) will give the Patuxent Plant a firm nominal capacity of 72 MGD, with emergency capacity of 110 MGD.

Cost Change
Cost estimates were increased for inflation.

STATUS Final Design (WSSC Contract No. BF1582G91,).

OTHER
The project scope has remained the same. Costs shown are preliminary design level estimates only and may change based upon the alignment chosen and design constraints.

COORDINATION
Maryland State Highway Administration, Montgomery County Government, Prince George's County Government, Maryland Department of the Environment, Baltimore Gas & Electric and WSSC Projects W-172.05, Patuxent WFP Phase II Expansion and W-172.07, Patuxent Raw Water Pipeline.

NOTE This project supports 100% System Improvement.

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 06
Date First Approved	FY 03
Initial Cost Estimate	12,930
Cost Estimate Last FY	14,476
Present Cost Estimate	14,902
Approved Request, Last FY	4,506
Total Expenditures & Encumbrances	1,695
Approval Request FY 10	560
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: No land or R/W required
% Project Completion: D-70%
Est. Completion Date: March 2011

H. Map Map Reference Code:

MAP NOT AVAILABLE

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A. Identification and Coding Information

2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code
083807	S-89.22	Change

Revised: January 21, 2009

3. Project Name: Anacostia Storage Facility 5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Cost Elements											
Planning, Design & Supervision	4,939	231	1,150	3,559	968	860	800	800	110		
Land											
Site Improvements & Utilities											
Construction	27,841			27,841	461	6,980	9,000	8,800	2,600		
Other	3,255		115	3,140	143	786	980	960	271		
Total	36,035	231	1,265	34,539	1,572	8,646	10,780	10,560	2,981		

C. Funding Schedule (000's)

WSSC Bonds	32,432	208	1,139	31,085	1,415	7,781	9,702	9,504	2,683		
SDC	3,603	23	126	3,454	157	865	1,078	1,056	298		

D. Description & Justification

DESCRIPTION

This project provides for the customer outreach, planning, design and construction of a new seven million gallon sewer overflow storage facility and needed power reliability upgrades at the existing Anacostia No.2 Wastewater Pumping Station.

Service Area Lower Anacostia Drainage Basin **Capacity** 7 MG

JUSTIFICATION

Plans & Studies

"Anacostia Wastewater Pumping Station No.2 Hydraulic Study", Whitman Requardt and Associates, LLP (October 2005); "Overflow Event June 25 - 26; 2006 Anacostia WWPS", Whitman Requardt and Associates, LLP (November 2006); Preliminary Design Criteria Report, Whitman, Requardt & Associates (March 2008); Anacostia WWPS Power Reliability Study, Whitman Requardt and Associates, Shah & Associates (April 2008).

Specific Data

Currently, Anacostia WWPS No. 2 receives flows from the Hyattsville WWPS and by gravity from several basins within the Tributary Area of the Anacostia River. The WWPS discharge is piped directly to DC WASA's sewer system. By agreement between WSSC and DC WASA, the Anacostia WWPS No. 2 cannot discharge wastewater at a rate in excess of 199 MGD. In the past, during extreme rainfall events, the influent flow to Anacostia WWPS No. 2 exceeded the 199 MGD limit, thus creating sanitary overflows on the station site and/or at Junction Chamber No.1, in the vicinity of the Hyattsville WWPS. The Consent Decree between WSSC, MDE, and the EPA was entered into on December 7, 2005, stipulating that the WSSC develop and formally submit a Facility Plan for the Anacostia No. 2 Pump Station to EPA/MDE. The Facility Plan, which recommends the building of a new storage facility intended to eliminate weather related sanitary sewer overflows at the Anacostia No. 2 Pump Station, was approved by EPA/MDE July 31, 2006.

Cost Change

Cost estimates were increased to include needed power reliability upgrades for the existing Anacostia No. 2 Wastewater Pumping Station.

STATUS Preliminary Design (WSSC Contract No. CS4441A06,).

OTHER

The project scope remains the same. Expenditures shown in Block B are planning level estimates and may change based upon site specific conditions, design constraints and negotiations with the Maryland Department of the Environment (MDE). The new sewer overflow storage facility will be built on the site of the existing Anacostia No.2 Wastewater Pumping Station.

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff	.....	....
	Other	.....	....
Facility Costs	Maintenance	.....	....
	Debt Service	.....	2828 15
Total Costs			2828 15
Impact on Water or Sewer Rate		6¢	.... 15

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 08
Date First Approved	FY 08
Initial Cost Estimate	33,957
Cost Estimate Last FY	35,200
Present Cost Estimate	36,035
Approved Request, Last FY	1,320
Total Expenditures & Encumbrances	231
Approval Request FY 10	1,572
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Public/Agency owned land

% Project Completion: D-10%

Est. Completion Date: December 2013

H. Map Map Reference Code:

MAP NOT AVAILABLE

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D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 89.22

Project Name: Anacostia Storage Facility

COORDINATION

Montgomery County Government, Prince George's County Government, Maryland Department of the Environment, Prince George's County Department of Environmental Resources, U.S. Army Corps of Engineers and U.S. Environmental Protection Agency, Region III.

NOTE This project supports 10% Growth and 90% Environmental Regulation.

A. Identification and Coding Information

2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8, Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code	
093802	S-89.23	Change	

Revised: January 21, 2009

3. Project Name: Anacostia No. 2 Screenings Handling Facilities 5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: **Bi-County**

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	235		100	135	80	55					
Land											
Site Improvements & Utilities											
Construction	1,620		58	1,562	492	1,070					
Other	279		24	255	86	169					
Total	2,134		182	1,952	658	1,294					

C. Funding Schedule (000's)

WSSC Bonds	1,988		170	1,818	611	1,207					
SDC	146		12	134	47	87					

D. Description & Justification

DESCRIPTION

This project provides for the collection and compaction of wastewater screened solids at Anacostia WWPS No. 2, allowing for off-site disposal, prior to conveyance to Blue Plains WWTP.

Service Area Lower Anacostia Drainage Basin **Capacity** 199 MGD

JUSTIFICATION

Plans & Studies
Anacostia Wastewater Pumping Station No. 2, Screenings Upgrade Study, Final Draft, Whitman, Requardt & Associates (March 2007)

Specific Data

This project is needed to replace the present practice of grinding wastewater screened solids and returning them to the flow for conveyance to Blue Plains WWTP, where they clog and damage filters. WSSC contributes a significant share of the cost of repairing and replacing those filters. Essentially all other sewage pumped to Blue Plains has the screenings removed for off-site disposal. The proposed screenings handling project will both increase the efficiency of the filter media and extend the service life of the filter bottoms at Blue Plains.

Cost Change
Not applicable.

STATUS Preliminary Design (WSSC Contract No. CP4733A07,).

OTHER

The project scope has remained the same. Expenditures in Block B are planning level estimates only and may change based upon specific conditions and design constraints.

COORDINATION

District of Columbia Water & Sewer Authority (DC-WASA funding in proportion to its 14 of 199 mgd sewage pumping station transmission limit.).

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance .....	....
	Debt Service	173	12
Total Costs		173	12
Impact on Water or Sewer Rate.....			

F. Approval and Expenditure Data (000's)

Date First In Capital Program	FY 09
Date First Approved	FY 09
Initial Cost Estimate	2,071
Cost Estimate Last FY	2,071
Present Cost Estimate	2,134
Approved Request, Last FY	1,783
Total Expenditures & Encumbrances	
Approval Request FY 10	658
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Not applicable

% Project Completion: D-0%

Est. Completion Date: June 2011

H. Map Map Reference Code:

A. Identification and Coding Information

2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code
	W-12.01	Close

Revised: January 21, 2009

3. Project Name: Prince George's Main Zone Storage Facility 5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Prince George's County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	106		106								
Land											
Site Improvements & Utilities											
Construction											
Other	16		16								
Total	122		122								

C. Funding Schedule (000's)

WSSC Bonds	122		122								
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D. Description & Justification

DESCRIPTION

This project involves the evaluation and possible removal or replacement of existing water storage standpipes in the Prince George's Main Zone (HG 320). Some standpipes have become hydraulically obsolete, tend to unnecessarily increase water age, and are in need of extensive and costly maintenance.

Service Area Prince George's Main Pressure Zone HG320 **Capacity** Not Applicable

JUSTIFICATION

Plans & Studies
2001 Water Production Projections; Water Storage Volume Criteria Report (November 2005).

Specific Data
The existing Glendale and Cheverly Standpipes are hydraulically obsolete and in need of costly maintenance. Maintaining these and other standpipes in the zone will be evaluated against removal and/or replacement.

Cost Change
Not Applicable

STATUS Facility Planning (WSSC Contract No. BE4506A06,).

OTHER
The project scope has remained the same.

COORDINATION
Prince George's County Government and Maryland-National Capital Park & Planning Commission.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance .....	....
	Debt Service	11	10
Total Costs		11	10
Impact on Water or Sewer Rate.....			

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 01
Date First Approved	FY 01
Initial Cost Estimate	6,614
Cost Estimate Last FY	755
Present Cost Estimate	122
Approved Request, Last FY	253
Total Expenditures & Encumbrances	
Approval Request FY 10	
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Site not determined

% Project Completion: P-0%

Est. Completion Date: FY 2013

H. Map Map Reference Code:

SITE NOT SELECTED

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A. Identification and Coding Information

2. Date: October 1, 2008
 Revised: January 21, 2009

7. Pre PDF Pg.No.:
 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code
	W-34.02	Change

3. Project Name: Old Branch Avenue Water Main
 5. Agency: **WSSC**

4. Program: Sanitation
 6. Planning Area: Clinton & Vicinity P.A. 81A

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff .....	.....
	Other .....	.....
Facility Costs	Maintenance	182	14
	Debt Service	463	14
Total Costs.....		645	14
Impact on Water or Sewer Rate.....		1¢	14

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	1,071		23	1,048	455	120	359	114			
Land											
Site Improvements & Utilities											
Construction	8,570			8,570		1,428	4,285	2,857			
Other	964		3	961	46	155	464	296			
Total	10,605		26	10,579	501	1,703	5,108	3,267			

F. Approval and Expenditure Data (000's)

Date First In Capital Program	FY 08
Date First Approved	FY 08
Initial Cost Estimate	10,350
Cost Estimate Last FY	10,764
Present Cost Estimate	10,605
Approved Request, Last FY	120
Total Expenditures & Encumbrances	
Approval Request FY 10	501
Supplemental Approval Request Current FY (09)	

C. Funding Schedule (000's)

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
WSSC Bonds	5,304		13	5,291	251	852	2,554	1,634			
SDC	5,301		13	5,288	250	851	2,554	1,633			

D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of approximately 10,600 feet of 24-inch diameter water main and approximately 4,400 feet of 30-inch diameter water main along Old Branch Avenue, from Allentown Road to Piscataway Road.

Service Area Clinton Pressure Zone HG385

JUSTIFICATION

Plans & Studies
 General Plan; M-NCPPC Round 7.0 growth forecasts; WSSC Memorandum dated May 16, 2006.

Specific Data
 This project will provide redundancy to a large area of Prince George's County, including the 85,000 customers in the 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. The WSSC attempts to provide for average day demands with the loss of any one water system facility and this project will meet that goal for the HG385B and dependent zones.

Cost Change
 Not Applicable

STATUS Planning

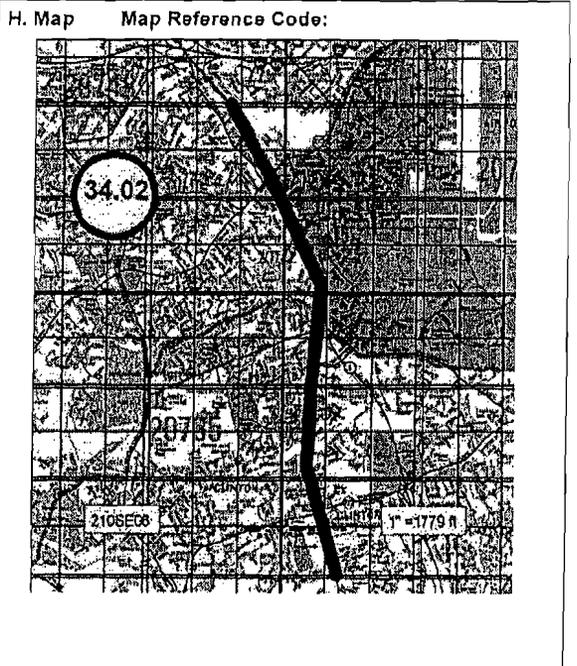
OTHER
 The project scope has remained the same. Expenditures shown above in Block B are Order of Magnitude estimates and may change based upon site selection and design constraints.

COORDINATION
 Prince George's County Government and Prince George's County Department of Public Works & Transportation.

NOTE This project supports 50% Growth and 50% System Improvement.

G. Status Information

Land Status: Right-of-Way may be required
 % Project Completion: P-0%
 Est. Completion Date: FY 2013



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A. Identification and Coding Information

2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

1. Agency Number	DSP Number	New Project
W-197.00	W-65.09	No

Revised: January 21, 2009

3. Project Name: DSP & Conceptual Design Water Projects 5. Agency: **WSSC**

4. DSP Name: Prince George's County High Zone Storage Study (BE3227A02)

E. Annual Operating Budget Impact (000's)

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	831	507	204	120	120						
Land											
Site Improvements & Utilities											
Construction											
Other	49		31	18	18						
Total	880	507	235	138	138						

F. Approval and Expenditure Data (000's)

C. Funding Schedule (000's)

WSSC Bonds	440	254	117	69	69						
SDC	440	253	118	69	69						

D. Description & Justification

DESCRIPTION

CD Project. This project provides for community outreach and facility planning for up to 3 million gallons of finished water storage required for the Prince George's County High Zone. The project includes evaluating two existing tank sites (Camp Springs and St. Barnabas) as well as identifying new tank sites. This project also includes an evaluation of the water storage volume criteria and development of new volume standards. Status: P-47%; Estimated Study Cost: \$811,000. This study will be completed in two phases. The first phase to evaluate the existing water storage criteria and recommend changes in accordance with present day standards has been completed. The second phase for the planning of the water storage required for the Prince George's County High Zone has begun and is estimated to be completed by July 2009. This project is 50% growth and 50% system improvement.

G. Status Information

H. Map Map Reference Code:

MAP NOT APPLICABLE

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A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	WV-69.03	Change

2. Date: October 1, 2008

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

Revised: January 21, 2009

3. Project Name: Accokeek Elevated Water Storage Facility

5. Agency: **WSSC**

4. Program: Sanitation

6. Planning Area: Accokeek P.A. 83, Piscataway & Vicinity P. A. 84

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	1,428	1,236	176	16	16						
Land											
Site Improvements & Utilities											
Construction	3,511	202	3,130	179	179						
Other	526		496	30	30						
Total	5,465	1,438	3,802	225	225						

C. Funding Schedule (000's)

WSSC Bonds	5,465	1,438	3,802	225	225						
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D. Description & Justification

DESCRIPTION

This project provides for community outreach, planning, design, and construction of a 750,000 gallon elevated storage tank to replace the existing Accokeek Standpipe, construction of a new pressure regulating vault, and demolition of the existing 3.6 million gallon (MG) standpipe. This is in lieu of extensive and costly maintenance for the existing facility which, because of the large volume of unusable storage inherent in a standpipe as opposed to an elevated facility, tends to create water quality problems, such as loss of chlorine residual and an increase in trihalomethanes.

Service Area

Capacity 750,000 Gallon

JUSTIFICATION

Plans & Studies

WSSC Memorandum from Jeff Asner, Principal Civil Engineer, to Karen Wright, Systems Control Group Leader, dated March 2001; 2001 Water Production Projections; Water Storage Volume Criteria Report (November 2005); Whitman Requardt, and Associates, LLP (April 2006).

Specific Data

The existing 3.6 MG standpipe in this zone is removed from service during much of the year due to water quality concerns. Since this is a single feed zone at the end of the system, there is a strong hydraulic need for storage. Hydraulic/Quality modeling has indicated that replacing the standpipe with a 750,000 gallon elevated tank will substantially reduce detention time. The replacement tank will be constructed on the existing site.

Cost Change

Costs were increased to reflect additional costs for design services during construction and inflation.

STATUS Under Construction (WSSC Contract No. BE3452A02.).

OTHER

The project scope remained the same.

COORDINATION

Prince George's County Government, Prince George's County Department of Environmental Resources and WSSC Project W-62.04, Clinton Zone Water Storage Facility.

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance .....	....
	Debt Service	477 11
Total Costs.....		477 11
Impact on Water or Sewer Rate.....		....

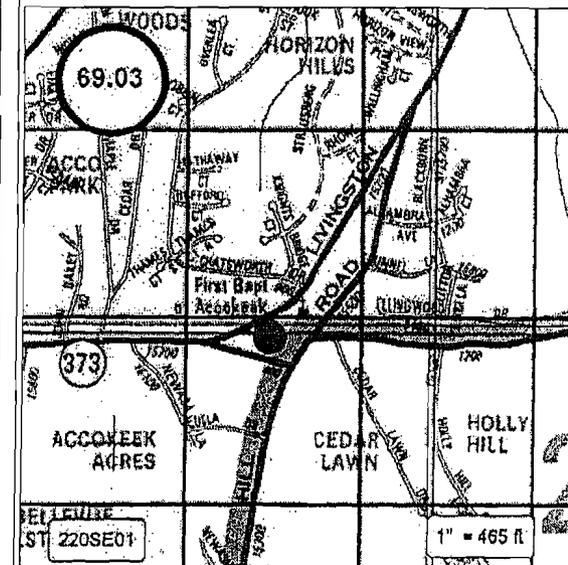
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 03
Date First Approved	FY 03
Initial Cost Estimate	519
Cost Estimate Last FY	4,992
Present Cost Estimate	5,465
Approved Request, Last FY	1,392
Total Expenditures & Encumbrances	1,438
Approval Request FY 10	225
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Public/Agency owned land
 % Project Completion: C-5%
 Est. Completion Date: January 2010

H. Map Map Reference Code:



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A. Identification and Coding Information

2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code
	W-147.00	Change

Revised: January 21, 2009

3. Project Name: Collington Elevated Water Storage Facility 5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Collington & Vicinity P.A. 74B

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	1,257	355	100	450	141	259	50				352
Land	130	130									
Site Improvements & Utilities											
Construction	6,913			3,913	259	2,760	894				3,000
Other	1,173		15	655	60	453	142				503
Total	9,473	485	115	5,018	460	3,472	1,086				3,855

C. Funding Schedule (000's)

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
WSSC Bonds	4,736	242	58	2,509	230	1,736	543				1,927
SDC	4,737	243	57	2,509	230	1,736	543				1,928

D. Description & Justification

DESCRIPTION

This project provides for the site selection, design, and construction of up to 4 million gallons (MG) of elevated storage to serve the Intermediate Zone. The site selection phase included a Community Outreach Program. A portion of the Safeway Distribution Facility property, at Leeland Road and Route 301, has been selected as the site for these storage tanks.

Service Area Prince George's Intermediate Pressure Zone HG317 **Capacity** 4.0 MG

JUSTIFICATION

Plans & Studies
Prince George's County High Zone Facility Plan (April 1996); Water Storage Volume Criteria Report (November 2005).

Specific Data
The Prince George's High Zone Facility Plan indicates there is a need to provide up to 4 MG of additional storage to the Intermediate Zone, to meet demands to the year 2020. During the siting phase, this project determined the site and size of the new facility.

Cost Change
Costs were increased for inflation.

STATUS Preliminary Design (WSSC Contract No. BE1775A96,).

OTHER

The project scope has remained the same. The total project cost is based on planning level estimates only and may change depending upon site-specific conditions and design constraints. To meet existing needs and allow for adjustments in the total storage provided as future needs become better known, this project will proceed with a single 2 MG elevated tank now and defer action on a possible second elevated tank. The estimated completion date in Block G refers to the schedule for the first tank.

COORDINATION

Prince George's County Government, Maryland-National Capital Park & Planning Commission and WSSC Project W-123.20, Oak Grove/Leeland Roads Water Main, Part 2.

NOTE This project supports 50% Growth and 50% System Improvement.

E. Annual Operating Budget Impact (000's) FY of Impact

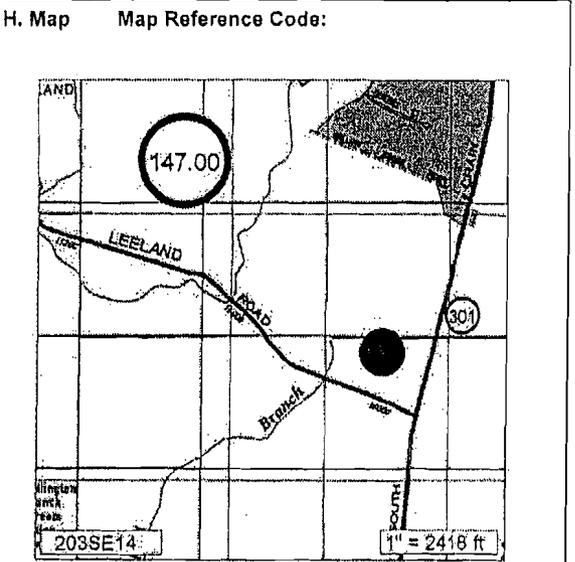
Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance .....	....
	Debt Service	413
Total Costs.....		413
Impact on Water or Sewer Rate.....		....

F. Approval and Expenditure Data (000's)

Date First In Capital Program	FY 98
Date First Approved	FY 98
Initial Cost Estimate	12,536
Cost Estimate Last FY	9,216
Present Cost Estimate	9,473
Approved Request, Last FY	1,380
Total Expenditures & Encumbrances	485
Approval Request FY 10	460
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Site acquired
% Project Completion: D-0%
Est. Completion Date: FY 2012



A. Identification and Coding Information

2. Date: October 1, 2008

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code
	W-147.01	Change

Revised: January 21, 2009

3. Project Name: Marlboro Zone Water Storage Facility

5. Agency: **WSSC**

4. Program: **Sanitation**

6. Planning Area: Upper Marlboro & Vicinity P.A. 79

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	1,047	77	73	897	66	525	168	111	27		
Land											
Site Improvements & Utilities											
Construction	6,126			6,126		530	2,960	2,596	40		
Other	1,064		11	1,053	10	158	469	406	10		
Total	8,237	77	84	8,076	76	1,213	3,597	3,113	77		

C. Funding Schedule (000's)

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
WSSC Bonds	4,119	39	42	4,038	38	606	1,799	1,556	39		
SDC	4,118	38	42	4,038	38	607	1,798	1,557	38		

D. Description & Justification

DESCRIPTION

This project provides for the site selection, planning, design, and construction of up to 2.1 million gallons (MG) of elevated storage to serve the Marlboro Pressure Zone. The tank site selection phase included a Community Outreach Program. The tank site, identified as the Prince George's County Vehicle Impound Lot, requires coordination with the Prince George's County Department of Environmental Resources (DER).

Service Area Marlboro Pressure Zone HG280

Capacity 2.1 MG

JUSTIFICATION

Plans & Studies

Prince George's County High Zone Facility Plan (April 1996); Water Storage Volume Criteria Report (November 2005).

Specific Data

The Prince George's High Zone Facility Plan indicates there is a need to provide up to 2.1 MG of additional storage to the Marlboro Zone to meet demands to the year 2020.

Cost Change

Costs were increased for inflation.

STATUS Preliminary Design (WSSC Contract No. BE1775C96,).

OTHER

The project scope has remained the same. Expenditures shown in Block B are planning level estimates only and may change depending upon the number and type of facilities selected, site conditions, and design constraints. The WSSC will not begin construction of the storage tank until all of the concerns with the use of the proposed site have been resolved. Land costs are included in WSSC Project W-204.00.

COORDINATION

Maryland-National Capital Park & Planning Commission, Maryland Department of the Environment, Prince George's County Department of Environmental Resources (site related) and Prince George's County Department of Public Works & Transportation.

NOTE This project supports 50% Growth and 50% System Improvement.

E. Annual Operating Budget Impact (000's)

FY of Impact

Program Costs	Staff	.....	.....
	Other	.....	.....
Facility Costs	Maintenance	.....	.....
	Debt Service	.....	359
Total Costs			359
Impact on Water or Sewer Rate.....			15

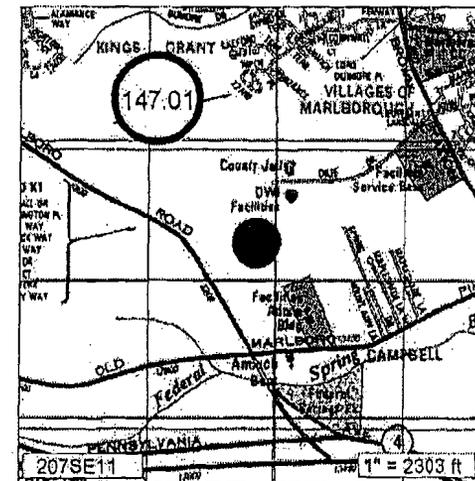
F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 98
Date First Approved	FY 98
Initial Cost Estimate	5,427
Cost Estimate Last FY	7,998
Present Cost Estimate	8,237
Approved Request, Last FY	1,012
Total Expenditures & Encumbrances	77
Approval Request FY 10	76
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Site or R/W under negotiation
 % Project Completion: D-15%
 Est. Completion Date: FY 2014

H. Map Map Reference Code:



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A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-57.92	Change

2. Date: October 1, 2008

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

Revised: January 21, 2009

3. Project Name: Western Branch Facility Upgrade

5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	6,000	750	2,500	2,750	1,000	1,000	750				
Land											
Site Improvements & Utilities											
Construction	32,450		500	31,950	6,450	13,500	12,000				
Other	3,770		300	3,470	740	1,455	1,275				
Total	42,220	750	3,300	38,170	8,190	15,955	14,025				

C. Funding Schedule (000's)

WSSC Bonds	42,220	750	3,300	38,170	8,190	15,955	14,025				
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D. Description & Justification

DESCRIPTION

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

Service Area Western Branch Drainage Basin

Capacity 30.6 MGD.

JUSTIFICATION

Plans & Studies

Western Branch Facility Plan, Johnson, Mirmiran, & Thompson, (May, 2005); ESP Project Number S-647.38, Western Branch WWTP Facility Plan; Western Branch Enhanced Nutrient Removal and Facility Upgrade project - Evaluation Phase, Metcalf and Eddy (August 2007)

Specific Data

The plant was originally designed in the seventies. It is the only WSSC WWTP that does not utilize Biological Nitrogen Removal (BNR), relying on the addition of methanol for nitrogen removal.

Cost Change

Costs were increased to reflect additional biosolids improvements identified in the Western Branch Enhanced Nutrient Removal and Facility Upgrade Project evaluation and to reflect the final cost sharing agreement with the Maryland Department of the Environment for Enhanced Nutrient Removal upgrades.

STATUS Preliminary Design (WSSC Contract No. CD4173A05,).

OTHER

The project scope has remained the same. Expenditures shown in Block B are planning level estimates and may change based upon specific conditions and design constraints. Upon completion of preliminary design, a more accurate estimate can be made.

COORDINATION

Prince George's County Government, Maryland Department of the Environment, Prince George's County Department of Environmental Resources and WSSC Projects S-57.90, Western Branch Ultraviolet Disinfection Facilities, S-57.91, Western Branch Filter Upgrade and S-57.93, Western Branch WWTP Enhanced Nutrient Removal.

NOTE This project supports 100% System Improvement.

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E. Annual Operating Budget Impact (000's)

Program Costs	Staff	Other	FY of Impact
Facility Costs	Maintenance	Debt Service	
Total Costs			3682 13
Impact on Water or Sewer Rate			3¢ 13

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 06
Date First Approved	FY 06
Initial Cost Estimate	6,325
Cost Estimate Last FY	17,653
Present Cost Estimate	42,220
Approved Request, Last FY	4,543
Total Expenditures & Encumbrances	750
Approval Request FY 10	8,190
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: No land or R/W required
 % Project Completion: D-10%
 Est. Completion Date: FY 2012

H. Map Map Reference Code:

MAP NOT AVAILABLE

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-57.93	Change

2. Date: October 1, 2008

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

Revised: January 21, 2009

3. Project Name: Western Branch WWTP Enhanced Nutrient Removal

5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area:

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	6,000	1,500	1,700	2,800	1,000	1,000	800				
Land											
Site Improvements & Utilities											
Construction	29,000			29,000	8,000	13,000	8,000				
Other	3,350		170	3,180	900	1,400	880				
Total	38,350	1,500	1,870	34,980	9,900	15,400	9,680				

C. Funding Schedule (000's)

State Aid	38,350	1,500	1,870	34,980	9,900	15,400	9,680				
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D. Description & Justification

DESCRIPTION

This project provides for the planning, design, and construction of improvements at the Western Branch WWTP necessary to meet the requirements of MDE's Enhanced Nutrient Removal (ENR) Program. The 2005 Western Branch Enhanced Nutrient Evaluation report identified a Single-Sludge System with Separate Primary Clarifiers as the best solution. After further study, the 2007 Western Branch Enhanced Nutrient Removal and Facility Upgrade Evaluation identified the existing Three-Sludge System with upgrades as a better solution. The newer design and construction activities will include the addition of a Return Activated Sludge pumping station and various improvements to the existing Three-Sludge process.

Service Area Western Branch Drainage Basin

Capacity 30.6 MGD

JUSTIFICATION

Plans & Studies

Western Branch Enhanced Nutrient Removal Evaluation, Johnson, Mirmiran, & Thompson, (May 2005). Western Branch Enhanced Nutrient Removal and Facility Upgrade Project- Evaluation Phase, Metcalf and Eddy (August 2007)

Specific Data

As the result of an Executive Order issued by the Governor of Maryland in November, 2002 calling for Maryland wastewater plants to be upgraded to the "limits of technology" for nutrient removal, the Maryland Department of the Environment introduced the ENR Strategy in May, 2003. The ENR Strategy calls for assigning "load goals" to municipal wastewater treatment plants based on annual average effluent concentrations of total nitrogen (4 mg/l) and total phosphorous (0.3 mg/l), and permitted design capacity. These load goals have been incorporated into the Chesapeake Bay Program tributary strategies Maryland adopted in 2004.

The ENR Strategy also calls for wastewater treatment plants to continue optimizing nutrient removal performance and attempt to achieve an annual average effluent nitrogen concentration of 3 mg/l as a goal, not a permit limit. Maryland has proposed new water quality standards for the Chesapeake Bay. Once these standards have been adopted, the load goals of the ENR Strategy will be incorporated into NPDES permits as enforceable effluent limits. The more stringent concentration goals will remain as goals.

The ENR Strategy also calls for the creation of an ENR grant program to provide funding for the necessary wastewater treatment plant upgrades. The Chesapeake Bay Restoration Act was passed in 2004 and authorized the collection of a surcharge on water and sewer utility bills paid by Maryland residents and businesses. The funds are to be used largely to fund up to 100% of eligible planning, design, and construction costs for ENR upgrades, which are defined generally as the cost of converting a Biological Nutrient Removal (BNR) facility to an ENR facility. The definition of "eligible", while not specifically defined in the legislation, is interpreted as the necessary liquid treatment processes to meet the ENR program limits for total nitrogen and phosphorous.

Cost Change

Costs were decreased to reflect an ENR design solution that utilizes the existing treatment process and the final cost sharing

E. Annual Operating Budget Impact (000's)

FY of Impact

Program Costs	Staff	.....	.....
	Other	.....	.....
Facility Costs	Maintenance	.....	.....
	Debt Service	.....	.....
Total Costs.....			
Impact on Water or Sewer Rate.....			

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 07
Date First Approved	FY 07
Initial Cost Estimate	70,950
Cost Estimate Last FY	77,504
Present Cost Estimate	38,350
Approved Request, Last FY	28,765
Total Expenditures & Encumbrances	1,500
Approval Request FY 10	9,900
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Not Applicable
 % Project Completion: D-10%
 Est. Completion Date: April 2012

H. Map Map Reference Code:

MAP NOT AVAILABLE

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D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 57.93

Project Name: Western Branch WWTP Enhanced Nutrient Removal

agreement with the Maryland Department of the Environment.

STATUS Preliminary Design (WSSC Contract No. CD4257A05,).

OTHER

The project scope has remained the same. Expenditures shown in Block B are planning level estimates only and may change based upon site specific conditions and design constraints. The expenditure estimates reflect the final cost sharing agreement with the Maryland Department of the Environment as detailed in their July 24, 2008 letter.

COORDINATION

Maryland Department of the Environment, Prince George's County Department of Environmental Resources, Local, State & Congressional Officials, Patuxent River Commission and WSSC Projects S-57.90, Western Branch Ultraviolet Disinfection Facilities, S-57.91, Western Branch Filter Upgrade and S-57.92, Western Branch Facility Upgrade.

NOTE This project supports 100% Environmental Regulation.

A. Identification and Coding Information

2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code
	S-77.19	Change

Revised: January 21, 2009

3. Project Name: Parkway WWTP Biosolids Facility Plan 5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: South Laurel - Montpelier P.A. 62

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance .....	....
	Debt Service	48	11
Total Costs.....		48	11
Impact on Water or Sewer Rate.....			

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	488	75	217	196	196						
Land											
Site Improvements & Utilities											
Construction											
Other	62		33	29	29						
Total	550	75	250	225	225						

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 09
Date First Approved	FY 09
Initial Cost Estimate	288
Cost Estimate Last FY	288
Present Cost Estimate	550
Approved Request, Last FY	288
Total Expenditures & Encumbrances	75
Approval Request FY 10	225
Supplemental Approval Request Current FY (09)	

C. Funding Schedule (000's)

WSSC Bonds	550	75	250	225	225						
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D. Description & Justification

DESCRIPTION

This project provides for an evaluation of the solids handling capabilities of the Parkway WWTP and will address the replacement of aging equipment, improvements to the gravity thickening system, and improvements to the dewatering system.

Service Area Parkway Drainage Basin **Capacity** 7.5 MGD

JUSTIFICATION

Plans & Studies
Memorandum from the Production Team dated April 27, 2007

Specific Data
Currently, the facility utilizes centrifuges to dewater approximately 1,500 wet tons of solids/month. The centrifuges are installed in two parallel configurations, which cannot be operated simultaneously. One side consists of three 35 year old centrifuges and supporting equipment such as plow blenders and belt conveyors. The other side consists of one centrifuge, lime screw conveyors, a pugmill, lime stabilized conveyors and a lime stabilized sludge storage silo.

Cost Change
The cost of this project has increased as this project has moved from the conceptual stage to the planning stage.

STATUS Facility Planning (WSSC Contract No. CP4643B07,).

OTHER
The project scope has remained the same. Expenditures shown in Block B are for the evaluation. An order of magnitude construction cost estimate of \$2.1 million may change depending on site specific conditions and design constraints.

COORDINATION
Prince George's County Government, Prince George's County Department of Environmental Resources and WSSC Project S-77.18, Parkway WWTP Enhanced Nutrient Removal.

NOTE This project supports 100% System Improvement.

G. Status Information

Land Status: Not Applicable

% Project Completion: P-0%

Est. Completion Date: FY 2011

H. Map Map Reference Code:

MAP NOT APPLICABLE

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A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	W-1.00	Change

2. Date: October 1, 2008
 Revised: January 21, 2009

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

3. Project Name: Water Reconstruction Program

5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

E. Annual Operating Budget Impact (000's)

			FY of Impact
Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance .....	....
	Debt Service	45579	16
Total Costs		45579	16
Impact on Water or Sewer Rate.....		90¢	16

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	105,907		9,802	96,105	10,615	12,856	14,880	16,999	19,217	21,538	
Land											
Site Improvements & Utilities											
Construction	314,302		26,822	287,480	29,009	37,188	44,112	51,358	58,940	66,873	
Other	102,490		10,295	92,195	11,093	12,848	14,455	16,139	17,905	19,755	
Total	522,699		46,919	475,780	50,717	62,892	73,447	84,496	96,062	108,166	

C. Funding Schedule (000's)

WSSC Bonds	522,699		46,919	475,780	50,717	62,892	73,447	84,496	96,062	108,166	
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D. Description & Justification

DESCRIPTION

The purpose of this program is to renew and extend the useful life of water mains. 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 fire fighting. 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 of these mains provides added value to the customer. Galvanized, copper and cast iron water services, as well as all other water main appurtenances, are replaced on an as needed basis when they have exceeded their useful life.

* EXPENDITURES FOR WATER RECONSTRUCTION ARE EXPECTED TO CONTINUE INDEFINITELY.

Service Area Bi-County Area

JUSTIFICATION

Plans & Studies

Flow studies, water system modeling, and field surveys are routinely conducted. A staff level report: Water Main Condition Assessment, 1915-1998; Analysis and Recommendations by the Water Main Reconstruction Work Group (June, 1999) examined the historical main break data for performance measures to define, characterize, and prioritize the future replacement needs of the distribution system. An early outcome of this project identified the need to increase the frequency of water main replacement.

Specific Data

The program's projected work units and expenditure levels for FY'10 (including overhead) are as follows: main replacement, 31 miles - \$43.3 M; water house connection renewals, 1,540 services - \$3.1 M; large meter replacement program - \$4.3 M. 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, however, work is limited to the fiscal allocation for the program. Program level may change in future years subject to results of the 30 Year Infrastructure Plan.

Cost Change

The program costs increased to reflect an increase in replacement miles and greater emphasis on the large meter replacement program.

STATUS Under Construction

OTHER

The project scope has remained the same. The water reconstruction program has been ongoing since 1979. Funding in the six-year

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY --
Date First Approved	FY --
Initial Cost Estimate	
Cost Estimate Last FY	410,188
Present Cost Estimate	522,699
Approved Request, Last FY	45,340
Total Expenditures & Encumbrances	
Approval Request FY 10	50,717
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Not applicable
 % Project Completion: Not Applicable
 Est. Completion Date: On-Going

H. Map Map Reference Code:

MAP NOT APPLICABLE

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D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: W - 1.00

Project Name: Water Reconstruction Program

program period is subject to Spending Affordability Guideline limits. The following work accomplishments through FY'08 summarize the magnitude of the reconstruction effort: water main cleaning and lining, 1,137 miles completed; water main replacement, 175 miles completed. It is anticipated water reconstruction activity will be a perpetual element of future work programs.

COORDINATION

Maryland State Highway Administration, Montgomery County Department of Public Works and Transportation, Montgomery County Government (including local municipalities where work is to be performed), Prince George's County Government (including local municipalities where work is to be performed), Prince George's County Department of Public Works & Transportation and Local Community Civic Associations.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	S-1.01	Change

2. Date: October 1, 2008

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

Revised: January 21, 2009

3. Project Name: Sewer Reconstruction Program

5. Agency: **WSSC**

4. Program: **Sanitation**

6. Planning Area: **Bi-County**

B. Expenditure Schedule (000's)

	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Cost Elements											
Planning, Design & Supervision	106,574		14,736	91,838	10,122	20,535	20,993	15,877	16,353	7,958	
Land	4,000		3,300	700	700						
Site Improvements & Utilities											
Construction	356,827		49,256	307,571	34,304	68,188	69,719	53,136	54,729	27,495	
Other	80,497		11,124	69,373	7,681	15,478	15,823	11,988	12,348	6,055	
Total	547,898		78,416	469,482	52,807	104,201	106,535	81,001	83,430	41,508	

C. Funding Schedule (000's)

WSSC Bonds	547,898		78,416	469,482	52,807	104,201	106,535	81,001	83,430	41,508	
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D. Description & Justification

DESCRIPTION

This program funds a comprehensive sewer system rehabilitation program. The main component of this program is the rehabilitation and/or repair of sewer mains and house connections. The program addresses infiltration and inflow control, exposed pipe problems, and future capacity needs for the basin. The rehabilitation and repair funded by this program includes the rehabilitation and repair recommended by comprehensive basin studies as well as that resulting from sewer systems evaluations, line blockage assessments, field surveys, and closed circuit tv inspections. This program does not include funding for any major capital projects (e.g. CIP size relief or replacement sewers) that may result from a comprehensive basin study. These are funded separately in the CIP.

* EXPENDITURES FOR SEWER RECONSTRUCTION ARE EXPECTED TO CONTINUE INDEFINITELY.

Service Area **Bi-County**Area

JUSTIFICATION

Plans & Studies

Comprehensive Basin Studies, Sewer System Evaluation Surveys, Line Blockage Assessments, field surveys, closed circuit TV inspections, trunk sewer walking, and/or other activities investigating specific portions of the collection system.

Specific Data

The program's projected work units and expenditure levels for FY'10 (including overhead) are as follows: Sewer reconstruction, 42 miles main lining - \$31.4 M; 10 miles lateral lining - \$13.2 M; sewer house connection renewals, 800 services - \$4.5 M; emergency repairs - \$3.0 M; purchase of Patuxent Reservoir buffer properties and easements for water supply protection - \$0.7M. Note: The specific mix and type of sewer reconstruction may vary in any given year depending on identified system defects. However, work is limited to the fiscal allocation for the program. Program level may change in future years subject to results of the 30 Year Infrastructure Plan.

Cost Change

The program cost increased to reflect increased costs for lateral lining miles.

STATUS Under Construction

OTHER

The project scope has remained the same. The program schedule and expenditures shown above reflect the terms of the Sanitary Sewer Overflow Consent Decree. The Consent Decree between WSSC, Maryland Department of the Environment (MDE), and the

E. Annual Operating Budget Impact (000's)

FY of Impact

Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance .....	....
	Debt Service	47777	16
Total Costs		47777	16
Impact on Water or Sewer Rate.....		94¢	16

F. Approval and Expenditure Data (000's)

Date First In Capital Program	<input type="text"/>	FY --
Date First Approved	<input type="text"/>	FY --
Initial Cost Estimate	<input type="text"/>	
Cost Estimate Last FY	<input type="text"/>	247,571
Present Cost Estimate	<input type="text"/>	547,898
Approved Request, Last FY	<input type="text"/>	32,363
Total Expenditures & Encumbrances	<input type="text"/>	
Approval Request FY 10	<input type="text"/>	52,807
Supplemental Approval Request Current FY (09)	<input type="text"/>	

G. Status Information

Land Status: Not applicable
 % Project Completion: Not Applicable
 Est. Completion Date: On-Going

H. Map Map Reference Code:

MAP NOT APPLICABLE

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: S - 1.01

Project Name: Sewer Reconstruction Program

EPA was entered into on December 7, 2005. The sewer reconstruction program was established in 1979.

The following work accomplishments through FY'08 summarize the magnitude of this reconstruction effort: sewer main reconstruction, 230 miles; and sewer house connection renewals, 14,022. It is anticipated that sewer reconstruction activity will be a perpetual element of future work programs.

COORDINATION

Maryland State Highway Administration, Montgomery County Department of Public Works and Transportation, Montgomery County Government (including local municipalities where work is to be performed), Prince George's County Government (including local municipalities where work is to be performed), Maryland Department of the Environment (SSO Consent Decree Compliance), Prince George's County Department of Public Works & Transportation, U.S. Environmental Protection Agency, Region III (SSO Consent Decree Compliance) and Local Community Civic Associations.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
	A-102.00	Change

2. Date: October 1, 2008

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

Revised: January 21, 2009

3. Project Name: Engineering Support Program

5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: **Bi-County**

E. Annual Operating Budget Impact (000's)

FY of Impact

Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance .....	....
	Debt Service	5738	16
Total Costs.....		5738	16
Impact on Water or Sewer Rate.....		11¢	16

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision											
Land											
Site Improvements & Utilities											
Construction	70,000		10,000	60,000	10,000	10,000	10,000	10,000	10,000	10,000	
Other											
Total	70,000		10,000	60,000	10,000	10,000	10,000	10,000	10,000	10,000	

C. Funding Schedule (000's)

WSSC Bonds	65,800		9,400	56,400	9,400	9,400	9,400	9,400	9,400	9,400	
Water Operating Funds	2,100		300	1,800	300	300	300	300	300	300	
Sewer Operating Funds	2,100		300	1,800	300	300	300	300	300	300	

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 the WSSC.

* EXPENDITURES FOR ENGINEERING SUPPORT ARE EXPECTED TO CONTINUE INDEFINITELY.

Service Area Bi-County Area

JUSTIFICATION

Plans & Studies

In-house Study, (April 2002); Utility-Wide Master Plan Phase 1A, Sterns & Wheeler (July 2007); Utility Master Plan Asset Management Strategy - Track 2 Phase 1 Final Asset Management Implementation Plan, Sterns & Wheeler (April 2008)

Specific Data

ESP projects may be identified in the Utility-Wide Master Plan or result from direct requests from the Customer Care and Production Teams for engineering support. Support services are in the form of 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 the WSSC Six-Year Capital Improvements Program or projects to serve new development.

Cost Change

Not applicable.

STATUS Under Construction

OTHER

The project scope has remained the same. 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.

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 87
Date First Approved	FY 87
Initial Cost Estimate	
Cost Estimate Last FY	
Present Cost Estimate	70,000
Approved Request, Last FY	10,000
Total Expenditures & Encumbrances	
Approval Request FY 10	10,000
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Not applicable
 % Project Completion: On-Going
 Est. Completion Date: On-Going

H. Map Map Reference Code:

MAP NOT APPLICABLE

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A. Identification and Coding Information

2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code
	A-103.01	Add

Revised: January 21, 2009

3. Project Name: Biogas Production Feasibility Study 5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	300			300		300					
Land											
Site Improvements & Utilities											
Construction											
Other	45			45		45					
Total	345			345		345					

C. Funding Schedule (000's)

WSSC Bonds	345		345		345						
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D. Description & Justification

DESCRIPTION

This feasibility study will develop a comprehensive program for the engineering, design, construction, maintenance, and monitoring and verification necessary to add sustainable energy equipment and systems to produce biogas at the Seneca and Piscataway Wastewater Treatment Plants. The program will provide a reduction in energy and energy-related costs (electricity, natural gas, and transportation and disposal of biosolids) which may in part be guaranteed by the contractor. The potential guaranteed reduction component includes annual avoided energy costs as well as operations and maintenance, chemicals, and biosolids transportation and disposal costs. The program will enhance existing operating conditions and reliability while continuing to meet all permit requirements, and ensure a continued commitment to environmental stewardship at WSSC sites. The scope of work may include, but is not limited to, the addition of anaerobic digestion equipment, gas cleaning systems, hydrogen sulfide and siloxane removal, tanks, piping, valves, pumps, sludge dewatering/thickening equipment, grit removal, effluent disinfection systems, instrumentation, flow metering, power measurement, and combined heat and power generation systems.

If the project, or a portion of it, is accomplished as an Energy Performance Project, a baseline will be established to identify energy usage/costs and biosolids hauling and disposal costs before the energy conservation measures (equipment upgrades) are implemented. After all construction is completed and accepted by the WSSC, the combined baseline for all energy conservation measures will be compared annually to the actual energy savings to determine whether the guaranteed savings have been met. The contractor will pay the WSSC for any yearly shortfall if the total guaranteed savings figure is not achieved on a yearly basis. If the actual savings exceed the guaranteed amount based on a yearly verification, the WSSC retains the savings.

JUSTIFICATION

Plans & Studies

Appel Consultants, Urban Waste Grease Resource Assessment-NREL (November 1998); EPA, Opportunities For and Benefits Of Combined Heat and Power at Wastewater Treatment Facilities (December 2006); Brown & Caldwell, Anaerobic Digestion and Electric Generation Options for WSSC, (November 2007); Metcalf & Eddy, WSSC Sludge Digestion Study for Piscataway and Seneca (December 2007); Black & Veatch, WSSC Digester Scope and Analysis, (December 2007); JMT, Western Research Institute (WRI) Biogas Feasibility Study Scope of Work - WSSC (April 2008); JMT, Prince George's County Septage Discharge Facility Study (FOG); JMT, Montgomery County Septage Discharge Facility Study (FOG).

Specific Data

The EPA is urging wastewater utilities to utilize this commercially available technology (anaerobic digestion) to produce power at a cost below retail electricity, displace purchased fuels for thermal needs, produce renewable fuel for green power programs, enhance power reliability for the wastewater treatment plant to prevent sanitary sewer overflows, reduce biosolids production and improve the health of the Chesapeake Bay, and to reduce greenhouse gas (GHG) and other air pollutants.

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff .....	.....
	Other .....	.....
Facility Costs	Maintenance .....	.....
	Debt Service	30	12
Total Costs.....		30	12
Impact on Water or Sewer Rate.....			

F. Approval and Expenditure Data (000's)

Date First In Capital Program	FY 10
Date First Approved	FY 10
Initial Cost Estimate	345
Cost Estimate Last FY	
Present Cost Estimate	345
Approved Request, Last FY	
Total Expenditures & Encumbrances	
Approval Request FY 10	
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: No land or R/W required

% Project Completion: Not Applicable

Est. Completion Date: (See "Specific Data" for details.)

H. Map Map Reference Code:

MAP NOT APPLICABLE

hh

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: A - 103.01

Project Name: Biogas Production Feasibility Study

Based on the EPA's engineering "rules of thumb" for considering combined heat and power generation systems at a wastewater treatment plant, the Production Team believes that a capital investment of \$10,000,000 - \$12,000,000 for each plant (Seneca and Piscataway) will result in an estimated savings of \$1,000,000/year per plant in lower electricity and biosolids production costs based in part upon improved solids thickening (4% prior to digestion), two stage digestion (to improve gas production and digester efficiency), process building, pumps, piping, heat exchangers, and 350-750 kW fuel cell generator, and Class A biosolids output for each plant.

Cost Change

Not Applicable

STATUS Planning

OTHER

The project scope was developed for the FY 2010 CIP and has an estimated total cost for the study of \$345,000. The feasibility study phase of the project will include analysis and recommended anaerobic process (Mesophilic or Thermophilic); analysis of potential enhancements to optimize gas production; viability of grease trap waste disposal for added energy recovery utilizing WSSC FOG Report recommendations; evaluation of digester processes, evaluation of optimum Solids Residence Time (SRT), etc., to produce Class A or Class B biosolids; odor control mitigation; operational impacts (and mitigation methods) to the liquid side to maintain the integrity and reliability of the Enhanced Nutrient Removal (ENR) design of both plants; analysis of potential biosolids problems including fecal regrowth and odor quality; analysis of engine, turbine, and fuel cell power systems and heat recovery options; and development of preliminary capital cost and lifecycle cost estimates.

The study consists of three Tasks: Task I will provide a technology overview to develop preliminary costs and equipment requirements to allow identification of the options that best support the WSSC's long-term goals; Task II will further develop the selected alternatives, to provide detailed cost estimates and equipment requirements and will provide a Basis of Design document to guide subsequent detailed design; and Task III will summarize the recommendations in a technical report to the Commission.

At the completion of the feasibility study, the Commission will have a defined scope, capital cost, and energy and energy-related cost savings estimates (including GHG credit savings) to be able to proceed with the detailed design and construction of the Biogas and/or combined heat and power generation system facility. As part of the feasibility study, the digestion and side stream, odor control, and all primary processes will be determined, as will the bi-product selection and generation technology, size, and capacity of all major process equipment.

It is envisioned that either the entire project, or only the portion of the project that includes the production of bio-methane, methanol, or combined heat and power, include a guarantee by the Contractor that the capital cost will be paid back 100% from energy and energy-related cost savings with the payback period not exceeding 15 years. The energy savings for other completed WSSC Energy Performance projects have surpassed the contracts' guaranteed amount every year of the monitoring and verification period. The annual energy and energy-related savings guarantee of the energy performance portion of the project is estimated to be \$2,000,000.

Additional savings in the form of Carbon Credits are estimated to be captured starting in FY'11, within the Regional Greenhouse Gas Initiative (RGGI) auction process established by the Maryland Department of the Environment or through a new Federal Cap and Trade Program. The value of these credits is expected to add approximately 10-15% to the anticipated annual energy and energy-related (biosolids reduction) savings from the installation of energy efficient equipment in the WSSC's wastewater treatment plants included in this program. We will be able to develop more detailed information on which to base a more accurate estimate of the value of these credits as State and Federal programs regulations are formalized.

COORDINATION

Montgomery County Government, Prince George's County Government, Montgomery County Department of Environmental Protection, Maryland Department of the Environment, Prince George's County Department of Environmental Resources and WSSC Projects S-53.18, Seneca WWTP Expansion, S-53.21, Seneca WWTP Enhanced Nutrient Removal and S-96.12, Piscataway WWTP Enhanced Nutrient Removal.

NOTE This project supports 100% System Improvement.

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OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Isiah Leggett
County Executive

MEMORANDUM

January 15, 2009

TO: Phil Andrews, President, County Council

FROM: Isiah Leggett, County Executive 

SUBJECT: Washington Suburban Sanitary Commission (WSSC)
FY10-15 Capital Improvements Program (CIP) and FY10 CIP Expenditures

I am pleased to transmit to you, in accordance with State law, my recommended FY10-15 Capital Improvements Program (CIP) and FY10 Capital Expenditures for Washington Suburban Sanitary Commission (WSSC).

WSSC's proposed FY10-15 CIP totals \$1,021 million, of which \$782 million is for Montgomery County and Bi-County Projects. The Commission is requesting \$163.2 million in FY10 capital expenditures for Montgomery County and Bi-County Projects, down \$1.7 million from the FY09 amount of \$164.9 million approved in May 2008. The net decrease is primarily attributable to lower expenditures for Bi-County water and sewer projects as they move through construction; offset in part by increased expenditures for the Damascus, Seneca, and Blue Plains Wastewater Treatment Plant (WWTP) Enhanced Nutrient Removal (ENR) Projects and for the Seneca WWTP Expansion Part 2 Project.

Spending Control Limits

I recommended and the Council has adopted Spending Control Limits for WSSC that include a maximum average rate increase of 9.5 percent for FY10 – a 1.5 percentage point increase over the 8.0 percent average increase approved for FY09. While this is less than the 12.9 percent increase that WSSC indicates is necessary to sustain a “same services” budget, it reflects the importance of striking a balance between meeting WSSC's urgent needs and limiting the impacts on customer bills in this difficult economy.

With the 9.5 percent rate increase under the Spending Control Limits adopted by the Council, WSSC would still have to make \$13.7 million in unspecified permanent reductions to balance its operating budget. Cuts of this magnitude will necessarily affect customer services

and could potentially impact capital spending. I strongly urge the Commission to ensure that the following high-priority programs and services are preserved when deciding on reductions:

- The increase in CIP-funded water and sewer reconstruction included as “Information Only” projects in the Commission’s Proposed FY10-15 CIP (see below).
- Expanded inspection of large pre-stressed concrete cylinder pipe (PCCP) – the type involved in the two devastating water main breaks that the County has experienced in recent months.
- Resources needed to complete current efforts to study and identify a permanent source of funding to meet WSSC’s infrastructure renewal needs.

These initiatives, which are critical to the preservation of WSSC’s aging infrastructure, must proceed and – to the extent possible – be intensified. WSSC should explore the possibility of delaying non-critical capital projects and taking other actions to ensure that these important programs continue. I would welcome the opportunity to work with Prince George’s County to reach a consensus on how to achieve these goals within the context of the Capital Program I am recommending here.

Blue Plains Advanced Wastewater Treatment Plant

The total cost of the five Blue Plains WWTP projects in WSSC’s Proposed FY10-15 CIP increased by \$9.3 million (1.0 percent) vs. the FY09-14 approved CIP. This increase reflected available Water and Sewer Authority (WASA) cost estimates when WSSC prepared its CIP. (WSSC adjusted WASA’s figures to include Commission overhead, to allow for the difference in WASA and WSSC fiscal years, and – in the case of the Blue Plains ENR Project – to eliminate contributions toward the cost of certain ENR facilities needed to handle excess flows from the District of Columbia.) After WSSC issued its proposed CIP, WASA released its own Proposed FY 2008-2017 CIP, which further refined its capital investment needs. WASA’s revised CIP included significant increases in the projected six-year costs for four of the five Blue Plains Projects. Together, the revised FY10 amounts are \$25.3 million over what WSSC estimated in its FY10-15 CIP, and the total revised six-year cost of the five projects is \$197.8 million over WSSC’s earlier estimate. The increases reflect revised cost estimates for the new digestion facilities, among other factors.

Under the 1985 Inter-Municipal Agreement, WSSC must pay for its share of the capital costs associated with the Blue Plains WWTP, as determined by WASA but subject to the adjustments by WSSC noted above. I recommend that WSSC’s Blue Plains WWTP project estimates be modified to align them with the revised amounts proposed by WASA (as adjusted by WSSC). The table on the next page shows the recommended changes.

The revised Blue Plains costs will entail a significant (\$25.3 million) increase in WSSC’s FY10 capital spending (vs. its Proposed FY10-15 CIP). This increase will require an additional \$18.6 million in WSSC bonds, which translates to a \$1.3 million increase in FY10

debt service. In view of the tight budget constraints WSSC is facing in FY10, the Commission needs to plan now how it will absorb the increased capital and operating costs associated with WASA's revised Blue Plains estimates.

Debt Capacity

State law provides for the option of a tax levy by Montgomery and Prince George's counties against all assessable property in the Washington Suburban Sanitary District to pay for the principal and interest on WSSC bonds. This provision, which would be exercised

BLUE PLAINS WWTP PROJECTS - COST COMPARISON							
(S000)							
Projects	6 YEAR TOTAL	FY10	FY11	FY12	FY13	FY14	FY15
<u>WSSC REQUEST</u>							
Liquid Train Projects, Part 2	17,425	8,287	3,626	566	663	1,302	2,981
Biosolids Management, Part 2	135,058	8,173	15,170	20,547	31,325	35,956	23,887
Biological Nutrient Removal	8,306	5,792	2,511	3	0	0	0
Plant Wide Projects	27,839	10,953	4,025	6,457	4,432	1,462	510
Enhanced Nutrient Removal	200,435	10,508	8,737	58,788	34,158	54,543	33,701
WSSC REQUEST TOTAL	389,063	43,713	34,069	86,361	70,578	93,263	61,079
<u>CE RECOMMENDED</u>							
Liquid Train Projects, Part 2	11,843	4,803	1,668	1,130	1,056	898	2,288
Biosolids Management, Part 2	208,897	16,351	46,498	59,836	59,449	24,778	1,985
Biological Nutrient Removal	45,955	21,344	16,434	7,366	798	13	0
Plant Wide Projects	56,437	18,126	18,944	9,917	7,552	1,423	475
Enhanced Nutrient Removal	263,762	8,413	20,277	75,404	77,975	60,851	20,842
CE RECOMMENDED TOTAL	586,894	69,037	103,821	153,653	146,830	87,963	25,590
Increase (Decrease)	197,831	25,324	69,752	67,292	76,252	(5,300)	(35,489)

only if requested by WSSC, does not constitute a pledge of the full faith and credit of the two counties. However, WSSC bonds are part of the County's overlapping debt. As of June 30, 2008, WSSC debt represented 48.0 percent of Montgomery County's gross overlapping debt. The amount of debt issued by WSSC is therefore a factor in rating agency assessments of the credit worthiness of Montgomery County.

WSSC's financial forecast (assuming implementation of its Proposed FY10-15 CIP and the Spending Control Limits adopted by the Montgomery County Council) indicates that debt service will increase by 46.6 percent by FY15 (vs. the FY09 level). (The six-year forecast assumes no PAYGO.) WASA's updated Blue Plains expenditure estimates will add to that debt requirement. As the Commission explores options for funding the reconstruction and rehabilitation of its aging infrastructure, it needs to pay close attention to the impacts of those options on WSSC's debt capacity and debt service requirements to ensure that they are not adversely affected.

Information Only Projects

While "Information Only" projects – which include the two water and sewer reconstruction projects – are subject to review and approval as part of the annual WSSC Operating and Capital Budget, they do not meet the criteria given in Article 29 of the Annotated Code of Maryland for inclusion in WSSC's CIP. WSSC shows such projects separately in its capital budget document to provide additional information on and context for its capital program. Expenditures for these projects are shown separately and are not included in the six-year CIP.

WSSC is proposing enhancements to its water and sewer reconstruction projects, including a 4 mile (14.8 percent) increase in water main replacement and a 10 mile (19.6 percent) increase in sewer reconstruction (see the following table). FY10 funding for water and for sewer reconstruction would increase 16.5 percent and 125.0 percent, respectively. Because of last year's failure to agree on a separate funding source for water and sewer rehabilitation, these two capital projects will constitute WSSC's *only* infrastructure reconstruction/renewal efforts in FY10. I strongly endorse the proposed increases and call on WSSC to try to find the means to further enhance this crucial effort.

WATER AND SEWER RECONSTRUCTION/REHABILITATION: FY10-15 Proposed vs. FY09-14 Approved									
	FY09 - 14 Approved			FY10 - 15 Proposed					
	FY09	6-Year	Total	FY10		6-Year		Total	
				Amount	% Change	Amount	% Change	Amount	% Change
Reconstruction Program									
Water Main Replacement (\$000)	45,340	366,116	410,188	52,812	16.5%	477,875	30.5%	524,794	27.9%
Sewer Reconstruction (\$000)	32,363	232,366	247,571	72,807	125.0%	489,482	110.7%	567,898	129.4%
Water Main Replacement (miles)	27	162	—	31	14.8%	186	14.8%	—	—
Sewer Reconstruction (miles)	51	306	—	61	19.6%	366	19.6%	—	—

As always, Executive Branch staff are available to assist you in your deliberations. I look forward to discussing with you any policy matters or major resource allocation issues that arise this spring.

Phil Andrews, President, County Council
January 15, 2009
Page 5

IL:jmg

Attachments: Executive Recommendation – Blue Plains WWTP: Plant Wide Projects
Executive Recommendation – Blue Plains WWTP: Biological Nutrient Removal
Executive Recommendation – Blue Plains WWTP: Biosolids Mgmt Pt. 2
Executive Recommendation – Blue Plains WWTP: Liquid Train Pt. 2
Executive Recommendation – Blue Plains WWTP: Enhanced Nutrient Removal
FY10-15 Executive Recommended CIP: Category Summary
Agency Request Compared to Executive Recommended

c: Timothy L. Firestine, Chief Administrative Officer
Teresa Daniell, Interim General Manager, Washington Suburban Sanitary Commission
Stephen Farber, Staff Director, County Council
Dave Lake, Department of Environmental Protection

**FY10-15 EXECUTIVE RECOMMENDED CIP
CATEGORY SUMMARY: WSSC**

FY10 New Projects

Project #	Project Name	Total Expenditure (\$000s)
Sewerage Bi-County		
103802	Septage Discharge Facility Planning & Implement.	10,835
Sewerage Montgomery County		
103800	Preserve at Rock Creek Wastewater Pumping Station	1,124
103801	Preserve at Rock Creek WWPS Force Main	339

Capital Budget Appropriation Requirements

Project #	Project Name	(\$000s)	FY10 Approp.
Sewerage Bi-County			
093802	Anacostia.No. 2 Screenings Handling Facilities		736
083807	Anacostia Storage Facility		1,364
973817	Blue Plains WWTP: Biological Nutrient Removal		21,344
954812	Blue Plains WWTP: Biosolids Mgmt PT2		16,351
083800	Blue Plains WWTP: Enhanced Nutrient Removal		8,413
954811	Blue Plains WWTP: Liquid Train PT 2		4,803
023805	Blue Plains WWTP:Plant Wide Projects		18,126
103802	Septage Discharge Facility Planning & Implement.		880
093804	Sewer Basin Planning Program		1,184
093805	Wastewater Pumping Station Capacity Evaluation		118
Sewerage Montgomery County			
023807	Cabin Branch WWPS		531
023808	Cabin Branch WWPS Force Main		265
053800	Casey West Property Sewer Main		206
023806	Clarksburg Triangle Outfall Sewer, Part 1		35
023811	Clarksburg Triangle Outfall Sewer, Part 2		1,208
063802	Damascus Centre WWPS Replacement		185
073801	Damascus WWTP Enhanced Nutrient Removal		5,149
983854	Land & Rights-of-Way Acquisition-Mont County (S)		12
103800	Preserve at Rock Creek Wastewater Pumping Station		572
103801	Preserve at Rock Creek WWPS Force Main		178
073800	Seneca WWTP Enhanced Nutrient Removal		5,012
083802	Seneca WWTP Expansion, Part 2		11,316
083803	Tapestry Wastewater Pumping Station		152
083804	Tapestry WWPS Force Main		45
083801	Twinbrook Commons Sewer		132

**FY10-15 EXECUTIVE RECOMMENDED CIP
CATEGORY SUMMARY: WSSC**

Project #	Project Name	(\$000s)	FY10 Approp.
063803	White Flint East (No. Bethesda Center) Sewer Main		152
Water Bi-County			
934855	Bi-County Water Tunnel		40,403
073802	Duckett and Brighton Dam Upgrades		661
063804	Patuxent Raw Water Pipeline		1,769
033807	Patuxent WFP Phase II Expansion		4,576
033811	Potomac WFP Improvements		28,708
033812	Potomac WFP Submerged Channel Intake		550
033805	Power Reliability and Arc Flash Study		1,668
063805	Rocky Gorge Pump Station Upgrade		6,432
Water Montgomery County			
973818	Clarksburg Area Stage 3 Water Main, PT1		2,231
973819	Clarksburg Elevated Water Storage Facility		322
964860	Clarksburg Town Center Water Main		113
093800	Countryside Drive Water Loop		261
983849	Land & Rights-of-Way Acquisition-Mont County (W)		58
023800	Laytonville Elevated Tank and Pumping Station		696
013802	Newcut Road Water Main, Part 2		236
063801	Olney Standpipe Replacement		575
093801	Shady Grove Standpipe Replacement		788

RECOMMENDED CLOSEOUT PROJECTS

The following capital projects are closed out effective July 1, 2009, and the appropriation for each project is decreased by the amount of that project's unencumbered balance.

Project #	Project Name
Sewerage Bi-County	
083808	Septic Discharge Facility Study
Sewerage Montgomery County	
043802	Fortune Parc Sewer Main
043800	Lower Seneca Basin Sewer
033806	Seneca WWTP Ultraviolet Disinfection Facilities
083805	Upper Rock Relief Sewer
Water Bi-County	
973835	Wheaton Water Main Modifications
Water Montgomery County	
934813	Observation Drive Water Main, PT 3

**FY10-15 EXECUTIVE RECOMMENDED CIP
Agency Request Compared to Executive Recommended
WSSC**

Project	Project Name	Agency Request	Executive Recommended
093802	Anacostia No. 2 Screenings Handling Facilities	2,030	2,030
083807	Anacostia Storage Facility	34,331	34,331
934855	Bi-County Water Tunnel	144,650	144,650
973817	Blue Plains WWTP: Biological Nutrient Removal	8,306	45,955
954812	Blue Plains WWTP: Biosolids Mgmt PT2	135,058	208,897
083800	Blue Plains WWTP: Enhanced Nutrient Removal	200,435	263,762
954811	Blue Plains WWTP: Liquid Train PT 2	17,425	11,843
023805	Blue Plains WWTP: Plant Wide Projects	27,839	56,437
023807	Cabin Branch WWPS	1,952	1,952
023808	Cabin Branch WWPS Force Main	319	319
053800	Casey West Property Sewer Main	237	237
973818	Clarksburg Area Stage 3 Water Main, PT1	4,014	4,014
973819	Clarksburg Elevated Water Storage Facility	3,808	3,808
964860	Clarksburg Town Center Water Main	113	113
023806	Clarksburg Triangle Outfall Sewer, Part 1	35	35
023811	Clarksburg Triangle Outfall Sewer, Part 2	1,850	1,850
093800	Countryside Drive Water Loop	261	261
063802	Damascus Centre WWPS Replacement	524	524
073801	Damascus WWTP Enhanced Nutrient Removal	5,184	5,184
073802	Duckett and Brighton Dam Upgrades	24,641	24,641
983857	Land & Rights-of-Way Acquisition - Bi-County	55	55
983854	Land & Rights-of-Way Acquisition-Mont County (S)	24	24
983849	Land & Rights-of-Way Acquisition-Mont County (W)	231	231
023800	Laytonsville Elevated Tank and Pumping Station	696	696
013802	Newcut Road Water Main, Part 2	635	635
063801	Olney Standpipe Replacement	4,072	4,072
063804	Patuxent Raw Water Pipeline	10,031	10,031
033807	Patuxent WFP Phase II Expansion	28,518	28,518
033811	Potomac WFP Improvements	28,708	28,708
033812	Potomac WFP Submerged Channel Intake	22,409	22,409
033805	Power Reliability and Arc Flash Study	2,657	2,657
103800	Preserve at Rock Creek Wastewater Pumping Station	1,124	1,124
103801	Preserve at Rock Creek WWPS Force Main	339	339
063805	Rocky Gorge Pump Station Upgrade	11,256	11,256

**FY10-15 EXECUTIVE RECOMMENDED CIP
Agency Request Compared to Executive Recommended
WSSC**

Project	Project Name	Agency Request	Executive Recommended
073800	Seneca WWTP Enhanced Nutrient Removal	11,749	11,749
083802	Seneca WWTP Expansion, Part 2	23,667	23,667
103802	Septage Discharge Facility Planning & Implement.	10,835	10,835
093804	Sewer Basin Planning Program	3,552	3,552
093801	Shady Grove Standpipe Replacement	7,556	7,556
083803	Tapestry Wastewater Pumping Station	304	304
083804	Tapestry WWPS Force Main	65	65
083801	Twinbrook Commons Sewer	601	601
093805	Wastewater Pumping Station Capacity Evaluation	118	118
063803	White Flint East (No. Bethesda Center) Sewer Main	161	161

EXECUTIVE RECOMMENDATION

Blue Plains WWTP: Plant Wide Projects - No. 023805

Category: WSSC
 Agency: W.S.S.C.
 Planning Area: Bi-County
 Relocation Impact: None

Date Last Modified: January 5, 2009
 Required Adequate Public Facility: No

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru Est. 6 Year					Beyond				
		FY08	FY09	Total	FY10	FY11	FY12	FY13	FY14	FY15	6 Years
Planning, Design and Supervision	41,173	30,571	2,751	7,794	2,818	2,581	1,356	766	244	29	57
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0	0
Construction	154,710	96,749	9,178	48,084	15,129	16,175	8,463	6,711	1,165	441	699
Other	1,959	1,273	119	559	179	188	98	75	14	5	8
Total	197,842	128,593	12,048	56,437	18,126	18,944	9,917	7,552	1,423	475	764

FUNDING SCHEDULE (\$000)

Municipal (WSSC only)	10,860	7,059	661	3,098	995	1,040	544	415	78	26	42
System Development Charge	0	0	0	0	0	0	0	0	0	0	0
WSSC Bonds	186,982	121,534	11,387	53,339	17,131	17,904	9,373	7,137	1,345	449	722

COMPARISON (\$000)

	Total	Thru Est. 6 Year					Beyond Approp.					
		FY08	FY09	Total	FY10	FY11	FY12	FY13	FY14	FY15	6 Years	Request
Current Approved	157,298	120,728	11,769	24,265	10,279	3,160	5,735	4,478	613	0	536	0
Agency Request	165,143	127,591	8,744	27,839	10,953	4,025	6,457	4,432	1,462	510	969	10,953
Recommended	197,842	128,593	12,048	56,437	18,126	18,944	9,917	7,552	1,423	475	764	18,126
CHANGE			TOTAL	%	6-YEAR	%	APPROP.					
Agency Request vs Approved			7,845	5.0%	3,574	14.7%	10,953	0.0%				
Recommended vs Approved			40,544	25.8%	32,172	132.6%	18,126	0.0%				
Recommended vs Request			32,699	19.8%	28,598	102.7%	7,173	65.5%				

Recommendation

APPROVE WITH MODIFICATIONS.

Comments

This project includes funding for WSSC's share of the Blue Plains Advanced Wastewater Treatment Plant "Plant-Wide Projects" capital project.

WSSC's request was based on cost estimates prepared in the early fall using available information from the District of Columbia Water and Sewer Authority (WASA). In December, WASA provided updated cost figures based on its Proposed FY2008 - 2017 Capital Improvement Plan. The Executive recommends changes in the project estimates to align with the amounts proposed by WASA in its FY2008 - 2017 CIP.

The FY10 appropriation request for this project is \$18,126,000.

A. Identification and Coding Information

2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

1. Project Number	Agency Number	Update Code	Revised:
023805	S-22.09	Change	

3. Project Name: Blue Plains WWTP: Plant-wide Projects 5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: **Bi-County**

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	35,811	30,571	1,222	3,731	1,752	749	580	456	114	80	287
Land											
Site Improvements & Utilities											
Construction	128,689	96,749	7,435	23,833	9,093	3,236	5,813	3,932	1,334	425	672
Other	643	271	87	275	108	40	64	44	14	5	10
Total	165,143	127,591	8,744	27,839	10,953	4,025	6,457	4,432	1,462	510	969

C. Funding Schedule (000's)

WSSC Bonds	166,079	120,587	8,264	26,312	10,352	3,804	6,103	4,189	1,382	482	916
City of Rockville	9,064	7,004	480	1,527	601	221	354	243	80	28	53

D. Description & Justification

DESCRIPTION

This project provides funding for WSSC's share of Blue Plains plant-wide projects for which construction began after June 30, 1993. Major projects include: Process Control Computer Systems; Electrical Power Systems Additions, Phases I & II; High Priority Rehabilitation Program; Potomac Interceptor Rehabilitation; Upper Potomac Interceptor; and Plant-wide Fine Bubble Aeration Conversion.

Service Area Bi-County Area **Capacity** 370 MGD

JUSTIFICATION

Plans & Studies
The Blue Plains Intermunicipal Agreement of 1985; the WASA Master Plan (1998); and the DC-WASA Approved FY 2007 - FY 2016 Capital Improvement Program information (January 2008).

Specific Data
This is a continuation of the DC-WASA's upgrading of the Blue Plains Wastewater Treatment Plant.

Cost Change
The cost decrease in the six-year period is attributable to construction progress on the Central Operations Facility Upgrades, Process Control Computer System, and Potomac and Rock Creek sewage pumping stations projects.

STATUS Not Applicable

OTHER
The project scope has remained the same. Project costs are derived from the DC-WASA Capital & Operating Budget 10-year forecast of spending and WASA's latest project management data, and fully reflect WASA's current cost estimates and expenditure schedules. Given the open-ended nature of the Blue Plains projects, this PDF may 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. Expenditures shown in Column 9 are post-Intermunicipal Agreement. The funding schedule also indicates the calculated Rockville share of the cost.

COORDINATION
District of Columbia Water & Sewer Authority (responsible for design and construction).

NOTE This project supports 100% System Improvement.

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff	.....	....
	Other	.....	....
Facility Costs	Maintenance	.....	....
	Debt Service	.....	12963
Total Costs			12963
Impact on Water or Sewer Rate			28¢

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 95
Date First Approved	FY 02
Initial Cost Estimate	84,650
Cost Estimate Last FY	157,298
Present Cost Estimate	165,143
Approved Request, Last FY	11,769
Total Expenditures & Encumbrances	127,591
Approval Request FY 10	10,953
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Land & R/W to be acquired

% Project Completion: On-Going

Est. Completion Date: On-Going

H. Map Map Reference Code:

MAP NOT AVAILABLE

EXECUTIVE RECOMMENDATION

Blue Plains WWTP: Biological Nutrient Removal - No. 973817

Category: WSSC
 Agency: W.S.S.C.
 Planning Area: Countywide
 Relocation Impact: None

Date Last Modified: January 5, 2009
 Required Adequate Public Facility: No

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru		Est. 6 Year		Beyond					
		FY08	FY09	Total	FY10	FY11	FY12	FY13	FY14	FY15	6 Years
Planning, Design and Supervision	12,585	5,474	1,603	5,508	2,387	1,922	1,038	161	0	0	0
Construction	75,647	20,800	14,855	39,992	18,746	14,349	6,255	629	13	0	0
Other	883	263	165	455	211	163	73	8	0	0	0
Total	89,115	26,537	16,623	45,955	21,344	16,434	7,366	798	13	0	0

FUNDING SCHEDULE (\$000)

Municipal (WSSC only)	2,445	728	456	1,261	586	451	202	22	0	0	0
State Aid	44,559	13,269	8,312	22,978	10,672	8,217	3,683	399	7	0	0
WSSC Bonds	42,111	12,540	7,855	21,716	10,086	7,766	3,481	377	6	0	0

COMPARISON (\$000)

	Total	Thru		Est. 6 Year		Beyond					Approp. Request	
		FY08	FY09	Total	FY10	FY11	FY12	FY13	FY14	FY15		6 Years
Current Approved	57,785	26,398	14,706	16,160	10,880	4,785	5	33	457	0	521	0
Agency Request	45,793	26,291	11,196	8,306	5,792	2,511	3	0	0	0	0	5,792
Recommended	89,115	26,537	16,623	45,955	21,344	16,434	7,366	798	13	0	0	21,344
CHANGE				TOTAL	%	6-YEAR	%				APPROP.	
Agency Request vs Approved				(11,992)	(20.8%)	(7,854)	(48.6%)			5,792	0.0%	
Recommended vs Approved				31,330	54.2%	29,795	184.4%			21,344	0.0%	
Recommended vs Request				43,322	94.6%	37,649	453.3%			15,552	268.5%	

Recommendation

APPROVE WITH MODIFICATIONS.

Comments

This project includes funding for WSSC's share of the Blue Plains Advanced Wastewater Treatment Plant "Biological Nutrient Removal" capital project.

WSSC's request was based on cost estimates prepared in the early fall using available information from the District of Columbia Water and Sewer Authority (WASA). In December, WASA provided updated cost figures based on its Proposed FY2008 - 2017 Capital Improvements Plan. The Executive recommends changes in the project estimates to align with the amounts proposed by WASA in its FY2008 - 2017 CIP.

The FY10 appropriation request for this project is \$21,344,000.

A. Identification and Coding Information

1. Project Number: 973817 Agency Number: S-22.08 Update Code: Change

2. Date: October 1, 2008 Revised: _____

3. Project Name: Blue Plains WWTP: Biological Nutrient Removal

4. Program: Sanitation 5. Agency: WSSC 6. Planning Area: Bi-County

7. Pre PDF Pg.No.: _____ 8. Req. Adeq. Pub. Fac. _____

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	6,690	5,474	431	785	430	352	3				
Land											
Site Improvements & Utilities											
Construction	38,893	20,800	10,654	7,439	5,305	2,134					
Other	210	17	111	82	57	25					
Total	45,793	26,291	11,196	8,306	5,792	2,511	3				

C. Funding Schedule (000's)

WSSC Bonds	21,638	12,423	5,291	3,924	2,737	1,186	1				
State Aid	22,898	13,146	5,598	4,154	2,896	1,256	2				
City of Rockville	1,257	722	307	228	159	69					

D. Description & Justification

DESCRIPTION

This project provides funding for WSSC's share of the Blue Plains Biological Nutrient Removal Pilot Project and BNR Permanent Facility design and construction. The project includes modifications to the nitrification basins, methanol storage and feed facilities, a control building, addition of fine bubble diffusers, and improvements to the nitrification facilities (Phase II). This project is stipulated in the 1995 Consent Decree signed by the District of Columbia and the United States Department of Justice.

Service Area: Bi-County Area Capacity: 370 MGD

JUSTIFICATION

Plans & Studies
Porter, MacNamee & Seely Study (1992); Civil Action No. 90-163; Civil Action No. 84-2842 JGP; the WASA Master Plan (1998); and the DC-WASA Approved FY 2007 - FY 2016 Capital Improvement Program information (January, 2008).

Specific Data
The initial \$12.1 million Pilot Project was planned as a phased, four year, half-plant trial. For the Pilot, portions of the nitrification basins were converted to anoxic zones with methanol added as the carbon source. After the Pilot Project proved successful in the first two years, the third and fourth years were not required and the design and construction of permanent BNR facilities commenced. The Consent Decree acknowledged that applying this technology was experimental.

Cost Change
Costs decreased due to construction progress and lower construction costs than expected in the Engineer's estimate.

STATUS Under Construction

OTHER
The project scope has remained the same. The expenditure schedule shown above reflects the cost of permanent BNR facilities as required under the Consent Decree. Phase I and portions of Phase II are complete. The Maryland Department of the Environment (MDE) has, by agreement, committed to providing 50% grant funding in the amount shown. However, MDE has not yet agreed that all of the Phase II costs are grant eligible.

COORDINATION
Maryland Department of the Environment and District of Columbia Water & Sewer Authority (responsible for design and construction).

NOTE This project supports 100% Environmental Regulation.

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance .....	....
	Debt Service	2402 13
Total Costs		2402 13
Impact on Water or Sewer Rate.....	5¢	13

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 96
Date First Approved	FY 96
Initial Cost Estimate	12,189
Cost Estimate Last FY	57,785
Present Cost Estimate	45,793
Approved Request, Last FY	14,706
Total Expenditures & Encumbrances	26,291
Approval Request FY 10	5,792
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Not applicable

% Project Completion: C-80%

Est. Completion Date: FY 2012

H. Map Map Reference Code:

MAP NOT AVAILABLE

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EXECUTIVE RECOMMENDATION

Blue Plains WWTP: Biosolids Mgmt PT2 - No. 954812

Category: WSSC
 Agency: W.S.S.C.
 Planning Area: Countywide
 Relocation Impact: None

Date Last Modified: January 5, 2009
 Required Adequate Public Facility: No

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru		Est. 6 Year			Beyond				
		FY08	FY09	Total	FY10	FY11	FY12	FY13	FY14	FY15	6 Years
Planning, Design and Supervision	67,791	33,860	3,429	30,502	8,410	5,441	6,169	5,541	4,941	0	0
Construction	239,336	59,340	3,405	176,327	7,779	40,597	53,075	53,319	19,592	1,965	264
Other	3,071	932	68	2,068	162	460	592	589	245	20	3
Total	310,198	94,132	6,902	208,897	16,351	46,498	59,836	59,449	24,778	1,985	267

FUNDING SCHEDULE (\$000)

Municipal (WSSC only)	17,028	5,167	379	11,467	898	2,552	3,285	3,263	1,360	109	15
System Development Charge	0	0	0	0	0	0	0	0	0	0	0
WSSC Bonds	293,170	88,965	6,523	197,430	15,453	43,946	56,551	56,186	23,418	1,876	252

COMPARISON (\$000)

	Total	Thru		Est. 6 Year			Beyond					Approp. Request
		FY08	FY09	Total	FY10	FY11	FY12	FY13	FY14	FY15	6 Years	
Current Approved	235,904	92,684	5,617	113,867	14,380	13,665	19,060	30,938	35,824	0	23,736	0
Agency Request	252,499	93,498	1,661	135,058	8,173	15,170	20,547	31,325	35,956	23,887	22,282	8,173
Recommended	310,198	94,132	6,902	208,897	16,351	46,498	59,836	59,449	24,778	1,985	267	16,351
CHANGE			TOTAL	%	6-YEAR	%			APPROP.			
Agency Request vs Approved			16,595	7.0%	21,191	18.6%			8,173	0.0%		
Recommended vs Approved			74,294	31.5%	95,030	83.5%			16,351	0.0%		
Recommended vs Request			57,699	22.9%	73,839	54.7%			8,178	100.1%		

Recommendation

APPROVE WITH MODIFICATIONS.

Comments

This project includes funding for WSSC's share of the Blue Plains Advanced Wastewater Treatment Plant "Biosolids Management Part 2" capital project.

WSSC's request was based on cost estimates prepared in the early fall using available information from the District of Columbia Water and Sewer Authority (WASA). In December, WASA provided updated cost figures based on its Proposed FY2008 - 2017 Capital Improvement Plan. The Executive recommends changes in the project estimates to align with the amounts proposed by WASA in its FY2008 - 2017 CIP.

The FY10 appropriation request for this project is \$16,351,000.

A. Identification and Coding Information

1. Project Number: 954812 Agency Number: S-22.07 Update Code: Change

2. Date: October 1, 2008 Revised: _____

3. Project Name: Blue Plains WWTP: Biosolids Management, Part 2

4. Program: Sanitation 6. Planning Area: Bi-County

5. Agency: **WSSC**

7. Pre PDF Pg.No.: _____ 8. Req. Adeq. Pub. Fac. _____

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance .....	....
	Debt Service	19442
Total Costs.....		19442
Impact on Water or Sewer Rate.....		42¢

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	47,050	33,860	592	11,811	1,999	2,328	1,891	1,726	1,963	1,904	787
Land											
Site Improvements & Utilities											
Construction	203,577	59,340	1,053	121,910	6,093	12,692	18,453	29,289	33,637	21,746	21,274
Other	1,872	298	16	1,337	81	150	203	310	356	237	221
Total	252,499	93,498	1,661	135,058	8,173	15,170	20,547	31,325	35,956	23,887	22,282

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 95
Date First Approved	FY 95
Initial Cost Estimate	77,296
Cost Estimate Last FY	235,904
Present Cost Estimate	252,499
Approved Request, Last FY	5,617
Total Expenditures & Encumbrances	93,498
Approval Request FY 10	8,173
Supplemental Approval Request Current FY (09)	

C. Funding Schedule (000's)

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
WSSC Bonds	238,638	88,366	1,570	127,643	7,724	14,337	19,419	29,605	33,982	22,576	21,059
City of Rockville	13,861	5,132	91	7,415	449	833	1,128	1,720	1,974	1,311	1,223

D. Description & Justification

DESCRIPTION

This project includes funding for WSSC's share of the Blue Plains Wastewater Treatment Plant biosolids handling projects for which construction began after June 30, 1993. Major projects include: new digestion facilities; centrifuge thickener facilities; and solids processing building/dewatered sludge loading facility.

Service Area: Bi-County Area Capacity: 370 MGD

JUSTIFICATION

Plans & Studies

The Blue Plains Intermunicipal Agreement of 1985; the WASA Master Plan (1998); EPMC IV Facility Plan (CH2MHILL, 2001); the Biosolids Management at DCWASA Blue Plains Wastewater Treatment Plant Phase II - Design and Cost Considerations for Treatment Alternatives Report (December 2007); and the DC-WASA Approved FY 2007 - FY 2016 Capital Improvement Program information (January, 2008).

Specific Data

This project is needed to implement a set of facilities which will provide a permanent biosolids management program for Blue Plains.

Cost Change

The cost increase in the six-year period is largely attributable to another year of construction of the deferred Digester Facility entering the last year of the period.

STATUS Not Applicable

OTHER

The project scope has remained the same. Project costs are derived from the DC-WASA Capital & Operating Budget 10-year forecast of spending and WASA's latest project management data, and fully reflect WASA's current cost estimates and expenditure schedules. Given the open-ended nature of the Blue Plains projects, this PDF may 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. Expenditures shown in Column 9 are post-Intermunicipal Agreement. The funding schedule also indicates the calculated Rockville share of the cost.

COORDINATION

District of Columbia Water & Sewer Authority (responsible for design and construction).

NOTE This project supports 100% System Improvement.

G. Status Information

Land Status: Not applicable

% Project Completion: On-Going

Est. Completion Date: On-Going

H. Map Map Reference Code:

MAP NOT AVAILABLE



EXECUTIVE RECOMMENDATION

Blue Plains WWTP: Liquid Train PT 2 - No. 954811

Category: WSSC
 Agency: W.S.S.C.
 Planning Area: Countywide
 Relocation Impact: None

Date Last Modified: January 5, 2009
 Required Adequate Public Facility: No

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru		Est. 6 Year			Beyond				
		FY08	FY09	Total	FY10	FY11	FY12	FY13	FY14	FY15	6 Years
Planning, Design and Supervision	32,507	24,324	1,708	4,880	1,164	674	961	1,023	696	362	1,595
Construction	189,393	168,148	8,330	6,845	3,591	977	158	23	193	1,903	6,070
Other	2,220	1,925	100	118	48	17	11	10	9	23	77
Total	224,120	194,397	10,138	11,843	4,803	1,668	1,130	1,056	898	2,288	7,742

FUNDING SCHEDULE (\$000)

Municipal (WSSC only)	12,304	10,671	557	651	264	92	62	58	49	126	425
System Development Charge	0	0	0	0	0	0	0	0	0	0	0
WSSC Bonds	211,816	183,726	9,581	11,192	4,539	1,576	1,068	998	849	2,162	7,317

COMPARISON (\$000)

	Total	Thru		Est. 6 Year			Beyond					Approp. Request
		FY08	FY09	Total	FY10	FY11	FY12	FY13	FY14	FY15	6 Years	
Current Approved	228,429	198,218	15,981	11,798	6,774	2,511	832	839	842	0	2,432	0
Agency Request	234,849	192,989	10,333	17,425	8,287	3,626	566	663	1,302	2,981	14,102	8,287
Recommended	224,120	194,397	10,138	11,843	4,803	1,668	1,130	1,056	898	2,288	7,742	4,803
CHANGE			TOTAL	%	6-YEAR	%				APPROP.		
Agency Request vs Approved			6,420	2.8%	5,627	47.7%				8,287	0.0%	
Recommended vs Approved			(4,309)	(1.9%)	45	0.4%				4,803	0.0%	
Recommended vs Request			(10,729)	(4.6%)	(5,582)	(32.0%)				(3,484)	(42.0%)	

Recommendation

APPROVE WITH MODIFICATIONS.

Comments

This project includes funding for WSSC's share of the Blue Plains Advanced Wastewater Treatment Plant "Liquid Train Part 2" capital project.

WSSC's request was based on cost estimates prepared in the early fall using available information from the District of Columbia Water and Sewer Authority (WASA). In December, WASA provided updated cost figures based on its Proposed FY2008 - 2017 Capital Improvement Plan. The Executive recommends changes in the project estimates to align with the amounts proposed by WASA in its FY2008 - 2017 CIP.

The FY10 appropriation request for this project is \$4,803,000.

A. Identification and Coding Information

1. Project Number: 954811 Agency Number: S-22.06 Update Code: Change

2. Date: October 1, 2008 7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

Revised: _____

3. Project Name: Blue Plains WWTP: Liquid Train Projects, Part 2 5. Agency: **WSSC**

4. Program: Sanitation 6. Planning Area: Bi-County

E. Annual Operating Budget Impact (000's) FY of Impact

Program Costs	Staff .....	.....
	Other .....	.....
Facility Costs	Maintenance .....	.....
	Debt Service	19355
Total Costs		19355
Impact on Water or Sewer Rate.....		42¢

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	33,369	24,324	904	4,883	833	576	551	656	1,144	1,123	3,258
Land											
Site Improvements & Utilities											
Construction	200,547	168,148	9,327	12,368	7,372	3,014	9		145	1,828	10,704
Other	933	517	102	174	82	36	6	7	13	30	140
Total	234,849	192,989	10,333	17,425	8,287	3,626	566	663	1,302	2,981	14,102

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 95
Date First Approved	FY 95
Initial Cost Estimate	69,745
Cost Estimate Last FY	228,429
Present Cost Estimate	234,849
Approved Request, Last FY	15,981
Total Expenditures & Encumbrances	192,989
Approval Request FY 10	8,287
Supplemental Approval Request Current FY (09)	

C. Funding Schedule (000's)

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
WSSC Bonds	221,958	182,395	9,766	16,469	7,832	3,427	535	627	1,231	2,817	13,328
City of Rockville	12,891	10,594	567	956	455	199	31	36	71	164	774

D. Description & Justification

DESCRIPTION

This project provides funding for WSSC's share of Blue Plains liquid train projects for which construction began after June 30, 1993. Major projects include: Improvements to Nitrification/Denitrification Facilities Upgrade; Filtration and Disinfection Rehabilitation; Nitrification Facility Upgrade; and Dual Purpose Sedimentation Basins Rehabilitation.

Service Area: Bi-County Area Capacity: 370 MGD

JUSTIFICATION

Plans & Studies
The Blue Plains Intermunicipal Agreement of 1985; the WASA Master Plan (1998); and the DC-WASA Approved FY 2007 - FY 2016 Capital Improvement Program Information (January, 2008).

Specific Data
This is a continuation of the DC-WASA's upgrading of the Blue Plains Wastewater Treatment Plant.

Cost Change
The cost decrease in the six-year period is attributable to construction progress on the Grit Chamber Buildings, Secondary Treatment Facilities, and Filtration Facilities Pumping Station.

STATUS Not Applicable

OTHER
The project scope has remained the same. Project costs are derived from the DC-WASA Capital & Operating Budget 10-year forecast of spending and WASA's latest project management data, and fully reflect WASA's current cost estimates and expenditure schedules. Given the open-ended nature of the Blue Plains projects, this PDF may 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. Expenditures shown in Column 9 are post-Intermunicipal Agreement. The funding schedule also indicates the calculated Rockville share of the cost.

COORDINATION
District of Columbia Water & Sewer Authority (responsible for design and construction). (Biological Nutrient Removal costs are carried on WSSC Project S-22.08). (Enhanced Nutrient Removal costs are carried on WSSC Project S-22.10).

NOTE This project supports 100% System Improvement.

G. Status Information

Land Status: Not applicable
% Project Completion: On-Going
Est. Completion Date: On-Going

H. Map Map Reference Code:

MAP NOT AVAILABLE



EXECUTIVE RECOMMENDATION

Blue Plains WWTP: Enhanced Nutrient Removal - No. 083800

Category: WSSC
 Agency: W.S.S.C.
 Planning Area: Bi-County
 Relocation Impact: None

Date Last Modified: January 5, 2009
 Required Adequate Public Facility: No

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru		Est. 6 Year			Beyond				
		FY08	FY09	Total	FY10	FY11	FY12	FY13	FY14	FY15	6 Years
Planning, Design and Supervision	44,327	1,041	3,435	37,925	8,330	5,611	6,891	7,399	6,187	3,507	1,926
Construction	243,151	0	0	223,226	0	14,465	67,766	69,804	54,062	17,129	19,925
Other	2,874	10	34	2,611	83	201	747	772	602	206	219
Total	290,352	1,051	3,469	263,762	8,413	20,277	75,404	77,975	60,851	20,842	22,070

FUNDING SCHEDULE (\$000)

State Aid	290,352	1,051	3,469	263,762	8,413	20,277	75,404	77,975	60,851	20,842	22,070
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COMPARISON (\$000)

	Total	Thru		Est. 6 Year			Beyond					Approp. Request
		FY08	FY09	Total	FY10	FY11	FY12	FY13	FY14	FY15	6 Years	
Current Approved	270,361	2,755	4,190	230,241	8,051	13,104	67,755	92,829	48,502	0	33,175	0
Agency Request	260,827	1,041	4,367	200,435	10,508	8,737	58,788	34,158	54,543	33,701	54,984	10,508
Recommended	290,352	1,051	3,469	263,762	8,413	20,277	75,404	77,975	60,851	20,842	22,070	8,413
CHANGE			TOTAL		%	6-YEAR		%		APPROP.		
Agency Request vs Approved			(9,534)		(3.5%)	(29,806)		(12.9%)		10,508		0.0%
Recommended vs Approved			19,991		7.4%	33,521		14.6%		8,413		0.0%
Recommended vs Request			29,525		11.3%	63,327		31.6%		(2,095)		(19.9%)

Recommendation

APPROVE WITH MODIFICATIONS.

Comments

This project provides funding for WSSC's share of the Blue Plains Advanced Wastewater Treatment Plant "Enhanced Nutrient Removal" (ENR) capital project.

WSSC's request was based on cost estimates prepared in the early fall using available information from the District of Columbia Water and Sewer Authority (WASA). In December, WASA provided updated cost figures based on its Proposed FY2008 - 2017 Capital Improvement Plan. The Executive recommends changes in the project estimates to align with the amounts proposed by WASA in its FY2008 - 2017 CIP. The Executive's recommended expenditures for this project incorporate adjustments by WSSC to WASA's original cost allocation to eliminate contributions toward the cost of certain ENR facilities needed to handle excess flows from the District of Columbia.

The FY10 appropriation request for this project is \$8,413,000.

A. Identification and Coding Information

1. Project Number	Agency Number	Update Code
083800	S-22.10	Change

2. Date: October 1, 2008

7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.

Revised:

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3. Project Name: Blue Plains WWTP: Enhanced Nutrient Removal

5. Agency: **WSSC**

4. Program: **Sanitation** 6. Planning Area: Bi-County

E. Annual Operating Budget Impact (000's)

FY of Impact

Program Costs	Staff .....	....
	Other .....	....
Facility Costs	Maintenance .....	....
	Debt Service .....	....
Total Costs.....		....
Impact on Water or Sewer Rate.....		....

F. Approval and Expenditure Data (000's)

Date First in Capital Program	FY 08
Date First Approved	FY 07
Initial Cost Estimate	648
Cost Estimate Last FY	270,361
Present Cost Estimate	260,827
Approved Request, Last FY	4,190
Total Expenditures & Encumbrances	1,041
Approval Request FY 10	10,508
Supplemental Approval Request Current FY (09)	

G. Status Information

Land Status: Not Applicable
 % Project Completion: P-50%
 Est. Completion Date: FY 2019

H. Map Map Reference Code:

MAP NOT AVAILABLE

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '08	(10) Estimate FY '09	(11) Total 6 Years	(12) Year 1 FY '10	(13) Year 2 FY '11	(14) Year 3 FY '12	(15) Year 4 FY '13	(16) Year 5 FY '14	(17) Year 6 FY '15	(18) Beyond 6 Years
Planning, Design & Supervision	47,802	1,041	4,324	38,031	10,404	3,730	5,947	6,979	6,370	4,601	4,406
Land											
Site Improvements & Utilities											
Construction	210,463			160,419		4,920	52,259	26,841	47,633	28,766	50,034
Other	2,672		43	1,985	104	87	582	338	540	334	544
Total	260,827	1,041	4,367	200,435	10,508	8,737	58,788	34,158	54,543	33,701	54,984

C. Funding Schedule (000's)

State Aid	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
	260,827	1,041	4,367	200,435	10,508	8,737	58,788	34,158	54,543	33,701	54,984

D. Description & Justification

DESCRIPTION

This project provides funding for WSSC's share of the Blue Plains Enhanced Nutrient Removal projects required to achieve nutrient removal to levels below BNR levels to meet the Chesapeake Bay water quality targets determined in the 2005 Tributary Strategy process.

Service Area Bi-County Area

Capacity 370 MGD

JUSTIFICATION

Plans & Studies

Chesapeake Bay Program Tributary Strategies Process (2005); Blue Plains Strategic Process Study, Metcalf & Eddy (2005); DCWASA Approved FY 2007 - FY 2016 Capital Improvement Program Information (January, 2008).

Specific Data

The costs for planning, research, piloting, design, and construction are anticipated to be covered by the Bay Restoration Fund.

Cost Change

The overall project cost decreased due to refinements in the planning process configuration. These costs to WSSC are considerably lower than those anticipated by DC-WASA. They are based on calculations using lower joint-use percentages which are considered by WSSC to be more appropriate than those used by DC-WASA. The difference of opinion remains unresolved.

STATUS Planning

OTHER

The project scope has remained the same. The project is currently in the planning phase, with piloting of alternate processes expected to identify the best components. Ultimate process selection and cost will depend on negotiations between DCWASA and US EPA with regard to treatment specifications and permitted effluent limits.

COORDINATION

Maryland Department of the Environment, U.S. Environmental Protection Agency, Region III and District of Columbia Water & Sewer Authority (responsible for design and construction).

NOTE This project supports 100% Environmental Regulation.

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