

A. Identification and Coding Information			2. Date: October 1, 2013	7. Pre PDF Pg.No.:	8. Req. Adeq. Pub. Fac.
1. Project Number	Agency Number	Update Code	Revised:		
033807	W-172.05	Change			
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 '13	(10) Estimate FY '14	(11) Total 6 Years	(12) Year 1 FY '15	(13) Year 2 FY '16	(14) Year 3 FY '17	(15) Year 4 FY '18	(16) Year 5 FY '19	(17) Year 6 FY '20	(18) Beyond 6 Years
Planning, Design & Supervision	12,901	6,106	500	6,295	1,600	1,650	1,650	1,395			
Land											
Site Improvements & Utilities											
Construction	47,297		1,500	45,797	9,000	13,000	13,000	10,797			
Other	2,706		100	2,606	530	733	733	610			
Total	62,904	6,106	2,100	54,698	11,130	15,383	15,383	12,802			

C. Funding Schedule (000's)											
WSSC Bonds	62,904	6,106	2,100	54,698	11,130	15,383	15,383	12,802			

D. Description & Justification

DESCRIPTION

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

Service Area Bi-County Area

Capacity 72 MGD nominal/110 MGD emergency

JUSTIFICATION

Plans & Studies

"Patuxent WFP Facility Plan", O'Brien & Gere Engineers, Inc., (April, 1997); In-House Study (April, 2002); Patuxent Expansion Design Criteria Report (April 2005), "Parkway WWTP Biosolids Facility Plan", CH2M Hill (October 2009); "Evaluation of Residuals Handling Process Alternatives", AECOM Technical Services, (July 2011)

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 assure compliance with future EPA regulations for Cryptosporidium treatment and Stage 2 Disinfection Byproducts Rule effective 2012. This project also adds a residuals handling facility to remove the solids from impacting the Parkway WWTP and a relief sewer along Sweitzer Lane to assure no sanitary sewer overflows (SSO) occur as a result of Plant wastewater discharge.

Cost Change

Not applicable.

STATUS Final Design Complete (WSSC Contract Nos. BF1582H91 , CT1582A91).

OTHER

The project scope has remained the same. 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. Expenditure and schedule estimates shown above are design level estimates and may change when the construction contracts are bid and awarded. The project has experienced a 9-month delay caused by very long permit application processes and difficulties in obtaining Rights of Way. Land costs are included in WSSC Project W-202.00.

E. Annual Operating Budget Impact (000's)				FY of Impact
Program Costs	Staff		
	Other		
Facility Costs	Maintenance		
	Debt Service	4328	19
Total Costs.....		4328	19
Impact on Water or Sewer Rate.....		9¢	19

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	64,220
Present Cost Estimate	62,904
Approved Request, Last FY	25,969
Total Expenditures & Encumbrances	6,106
Approval Request FY 15	11,130
Supplemental Approval Request Current FY (14)	

G. Status Information	
Land Status:	R/W required
% Project Completion:	D-99%
Est. Completion Date:	FY 2018

H. Map	Map Reference Code:
<p>MAP NOT AVAILABLE</p>	

D. DESCRIPTION & JUSTIFICATION (CONT.)

Agency Number: W - 172.05 **Project Name:** Patuxent WFP Phase II Expansion

COORDINATION

Montgomery County Government, Prince George's County Government, Maryland-National Capital Park & Planning Commission, Maryland Department of the Environment, Maryland State Department of Transportation, Baltimore Gas & Electric and WSSC Projects W-12.02, Prince George's County HG415 Zone Water Main, W-172.07, Patuxent Raw Water Pipeline, W-172.08, Rocky Gorge Pump Station Upgrade and W-73.18, Power Reliability and Arc Flash Implementation(Coordination of UV Criteria).

NOTE This project supports 80% System Improvement and 20% Environmental Regulation.