

Blue Plains WWTP: Liquid Train Projects, Part 2

A. Identification and Coding Information			PDF Date	October 1, 2021	Pressure Zones	
Agency Number	Project Number	Update Code	Date Revised		Drainage Basins	Bi-County 30
S - 000022.06	954811	Change			Planning Areas	Bi-County

B. Expenditure Schedule (000's)

Cost Elements	Total	Thru FY'21	Estimate FY'22	Total 6 Years	Year 1 FY'23	Year 2 FY'24	Year 3 FY'25	Year 4 FY'26	Year 5 FY'27	Year 6 FY'28	Beyond 6 Years
Planning, Design & Supervision											
Land											
Construction	350,766		18,775	223,007	25,865	20,723	32,761	48,408	47,894	47,356	108,984
Other	3,509		188	2,231	259	207	328	484	479	474	1,090
Total	354,275		18,963	225,238	26,124	20,930	33,089	48,892	48,373	47,830	110,074

C. Funding Schedule (000's)

WSSC Bonds	334,828		17,922	212,874	24,690	19,781	31,273	46,208	45,717	45,205	104,032
City of Rockville	19,447		1,041	12,364	1,434	1,149	1,816	2,684	2,656	2,625	6,042

D. Description & Justification

DESCRIPTION

This project provides funding for WSSC Water's share of Blue Plains liquid train projects for which construction began after June 30, 1993. This project is comprised of 23 projects that have been identified and prioritized by DC Water in their capital program plus 2 projects (E8 & FG) that were formerly budgeted for in S-22.10. Projects with significant spending in FY'23 include: upgrades to the grit, screening, and primary treatment systems (BQ); upgrading effluent filters (IY); replacing/upgrading the primary clarifier mechanical components (J2); and improvements to the headworks influent structures (BC).

BENEFIT

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

JUSTIFICATION

This is a continuation of the DC Water's upgrading of the Blue Plains Wastewater Treatment Plant. Blue Plains Inter-Municipal Agreement of 2012; DCWASA Master Plan (1998); Blue Plains Facilities Master Plan (2016); and DC Water FY'22 Capital Improvements Program.

COST CHANGE

Increased estimates beginning in FY'25 reflect programmed costs for renewal and replacement of major process components expected to have reached the end of their useful life, including mechanical treatment components and some structural rebuilds of tanks and filters. Notable projects include: on-going work on the upgrades to the effluent filters (IY); nitrification reactors/sedimentation basins - 20 year rebuild (LF); rehabilitating liquid processes (RN); and long-term concrete repairs (RW) and upgrades to secondary treatment facilities (FG) to maintain enhanced nitrogen removal under higher flows.

OTHER

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

COORDINATION

Coordinating Agencies: City of Rockville;(responsible for a share of funding); DC Water;(responsible for design and construction)
Coordinating Projects: S - 000022.10 - Blue Plains WWTP: Enhanced Nutrient Removal

E. Annual Operating Budget Impact (000's)		FY of Impact
Staff & Other		
Maintenance		
Debt Service	\$19,363	
Total Cost	\$19,363	
Impact on Water and Sewer Rate	\$0.04	

F. Approval and Expenditure Data (000's)

Date First in Program	FY'95
Date First Approved	FY'95
Initial Cost Estimate	
Cost Estimate Last FY	261,738
Present Cost Estimate	354,275
Approved Request Last FY	18,847
Total Expense & Encumbrances	
Approval Request Year 1	26,124

G. Status Information

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

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

H. Map

