

EXECUTIVE RECOMMENDATION

Blue Plains WWTP: Biological Nutrient Removal - No. 973817

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

Date Last Modified: **December 16, 2011**
 Required Adequate Public Facility: **No**

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru 6 Year						Beyond			
		FY11	Rem. FY12	Total	FY13	FY14	FY15	FY16	FY17	FY18	6 Years
Planning, Design and Supervision	19,045	15,981	1,049	2,015	1,187	554	274	0	0	0	0
Construction	68,772	48,457	3,530	16,785	9,267	5,019	2,191	308	0	0	0
Other	235	0	46	189	105	56	25	3	0	0	0
Total	88,052	64,438	4,625	18,989	10,559	5,629	2,490	311	0	0	0

FUNDING SCHEDULE (\$000)

Municipal (WSSC only)	2,417	1,769	127	521	290	154	68	9	0	0	0
State Aid	44,028	32,219	2,313	9,496	5,280	2,815	1,245	156	0	0	0
WSSC Bonds	41,607	30,450	2,185	8,972	4,989	2,660	1,177	146	0	0	0

COMPARISON (\$000)

	Total	Thru 6 Year						Beyond		Approp. Request		
		FY11	Rem. FY12	Total	FY13	FY14	FY15	FY16	FY17		FY18	6 Years
Current Approved	84,265	64,478	8,264	11,523	9,440	1,074	650	359	0	0	0	0
Agency Request	87,744	64,438	5,992	17,314	11,894	4,497	717	206	0	0	0	11,894
Recommended	88,052	64,438	4,625	18,989	10,559	5,629	2,490	311	0	0	0	10,559
CHANGE			TOTAL	%	6-YEAR	%				APPROP.		
Agency Request vs Approved			3,479	4.1%	5,791	50.3%				11,894	0.0%	
Recommended vs Approved			3,787	4.5%	7,466	64.8%				10,559	0.0%	
Recommended vs Request			308	0.4%	1,675	9.7%				(1,335)	(11.2%)	

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. The Executive recommends changes in project estimates to align with the amounts proposed by the District of Columbia Water and Sewer Authority (now doing business as DC Water) in its Proposed FY2011-2020 CIP. The changes reflect minor adjustments to the cost estimates for some of the sub-projects included in the Biological Nutrient Removal project.

A. Identification and Coding Information

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

2. Date: October 1, 2011 | 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. _____

E. Annual Operating Budget Impact (000's)

		FY of Impact
Program Costs	Staff
	Other
Facility Costs	Maintenance
	Debt Service	3616 17
Total Costs		3616 17
Impact on Water or Sewer Rate.....	8¢	17

B. Expenditure Schedule (000's)

Cost Elements	(8) Total	(9) Thru FY '11	(10) Estimate FY '12	(11) Total 6 Years	(12) Year 1 FY '13	(13) Year 2 FY '14	(14) Year 3 FY '15	(15) Year 4 FY '16	(16) Year 5 FY '17	(17) Year 6 FY '18	(18) Beyond 6 Years
Planning, Design & Supervision	18,850	15,981	1,151	1,718	1,108	609					
Land											
Site Improvements & Utilities											
Construction	68,663	48,457	4,782	16,424	10,667	3,843	710	204			
Other	231		59	172	118	45	7	2			
Total	87,744	64,438	5,992	17,314	11,894	4,497	717	206			

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	84,265
Present Cost Estimate	87,744
Approved Request, Last FY	8,264
Total Expenditures & Encumbrances	64,438
Approval Request FY 13	11,894
Supplemental Approval Request Current FY (12)	

C. Funding Schedule (000's)

WSSC Bonds	41,464	30,450	2,832	8,182	5,821	2,125	339	97			
State Aid	43,872	32,219	2,996	8,657	5,947	2,249	358	103			
City of Rockville	2,408	1,769	164	475	326	123	20	6			

G. Status Information

Land Status: Not applicable

% Project Completion: C-90%

Est. Completion Date: FY 2016

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 DCWASA Master Plan (1998); and the DCWASA Approved FY 2010 - FY 2019 Capital Improvement Program (February 3, 2011).

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
Cost increase is based upon actual expenditure data as Nitrification/Denitrification facilities progress through construction.

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 for eligible costs.

COORDINATION
City of Rockville (responsible for a share of funding), Maryland Department of the Environment and District of Columbia Water & Sewer Authority (responsible for design and construction).

NOTE This project supports 100% Environmental Regulation.

H. Map Map Reference Code:

MAP NOT AVAILABLE