

## EXECUTIVE RECOMMENDATION

### Blue Plains WWTP: Biological Nutrient Removal (P973817)

Project Category	WSSC	Date Last Modified	12/28/12
Project SubCategory	Sewerage Bi-County	Required Adequate Public Facility	No
Project Administering Agency	W.S.S.C. (AAGE23)	Relocation Impact	None
Project Planning Area	Bi-County	Status	TBA

#### EXPENDITURE SCHEDULE (\$000s)

	Total	Thru FY12	Est FY13	Total 6 Years	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	Beyond 6 Yrs
Planning, Design and Supervision	19,252	16,673	1,192	1,387	807	258	233	89	0	0	0
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	63,519	51,334	5,179	7,006	3,130	785	2,070	1,017	4	0	0
Other	147	0	64	83	39	10	23	11	0	0	0
<b>Total</b>	<b>82,918</b>	<b>68,007</b>	<b>6,435</b>	<b>8,476</b>	<b>3,976</b>	<b>1,053</b>	<b>2,326</b>	<b>1,117</b>	<b>4</b>	<b>0</b>	<b>0</b>

#### FUNDING SCHEDULE (\$000s)

Municipal (WSSC only)	2,685	1,867	353	465	218	58	128	61	0	0	0
State Aid	34,004	34,004	0	0	0	0	0	0	0	0	0
WSSC Bonds	46,229	32,136	6,082	8,011	3,758	995	2,198	1,056	4	0	0
<b>Total</b>	<b>82,918</b>	<b>68,007</b>	<b>6,435</b>	<b>8,476</b>	<b>3,976</b>	<b>1,053</b>	<b>2,326</b>	<b>1,117</b>	<b>4</b>	<b>0</b>	<b>0</b>

#### COMPARISON (\$000s)

	Total	Thru FY12	Est FY13	6YR Total	FY14	FY15	FY16	FY17	FY18	FY19	Bey 6Yr	Approp.
Current Approved	88,052	69,063	10,559	8,430	5,629	2,490	311	0	0	0	0	0
Agency Request	83,108	68,007	8,425	6,676	4,179	1,059	905	529	4	0	0	4,179
Recommended	82,918	68,007	6,435	8,476	3,976	1,053	2,326	1,117	4	0	0	3,976

<b>Change</b>	<b>TOTAL</b>	<b>%</b>	<b>6-YEAR</b>	<b>%</b>	<b>APPROP.</b>	<b>%</b>
Agency Request vs Approved	(4,944)	(5.6%)	(1,754)	(20.8%)	4,179	0.0%
Recommended vs Approved	(5,134)	(5.8%)	46	0.5%	3,976	0.0%
Recommended vs Request	(190)	(0.2%)	1,800	27.0%	(203)	(4.9%)

#### 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 DC Water (formerly the District of Columbia Water and Sewer Authority or WASA). DC Water subsequently provided updated figures based on its Proposed FY 2012-2021 Capital Improvement Plan. The Executive recommends changes in the project estimates to align them with the amounts proposed by DC Water in its FY 2012-2021 CIP.

The FY14 appropriation request for this project is \$3,976,000.

<b>A. Identification and Coding Information</b>			2. Date: October 1, 2012	7. Pre PDF Pg.No.: 8. Req. Adeq. Pub. Fac.
1. Project Number	Agency Number	Update Code	Revised:	
973817	S-22.08	Change		
3. Project Name: Blue Plains WWTP: Biological Nutrient Removal			5. Agency: <b>WSSC</b>	
4. Program: <b>Sanitation</b>			6. Planning Area: Bi-County	

<b>E. Annual Operating Budget Impact (000's)</b>			FY of Impact
Program Costs	Staff .....	.....	
	Other .....	.....	
Facility Costs	Maintenance .....	.....	
	Debt Service .....	3628	19
Total Costs.....		3628	19
Impact on Water or Sewer Rate.....	8¢	.....	19

<b>B. Expenditure Schedule (000's)</b>											
Cost Elements	(8) Total	(9) Thru FY '12	(10) Estimate FY '13	(11) Total 6 Years	(12) Year 1 FY '14	(13) Year 2 FY '15	(14) Year 3 FY '16	(15) Year 4 FY '17	(16) Year 5 FY '18	(17) Year 6 FY '19	(18) Beyond 6 Years
Planning, Design & Supervision	18,983	16,673	1,185	1,125	814	178	133				
Land											
Site Improvements & Utilities											
Construction	63,977	51,334	7,157	5,486	3,324	871	763	524	4		
Other	148		83	65	41	10	9	5			
<b>Total</b>	<b>83,108</b>	<b>68,007</b>	<b>8,425</b>	<b>6,676</b>	<b>4,179</b>	<b>1,059</b>	<b>905</b>	<b>529</b>	<b>4</b>		

<b>F. Approval and Expenditure Data (000's)</b>	
Date First in Capital Program	FY 96
Date First Approved	FY 96
Initial Cost Estimate	12,189
Cost Estimate Last FY	86,975
Present Cost Estimate	83,108
Approved Request, Last FY	10,559
Total Expenditures & Encumbrances	68,007
Approval Request FY 14	4,179
Supplemental Approval Request Current FY (13)	

<b>C. Funding Schedule (000's)</b>											
WSSC Bonds	39,661	32,455	4,020	3,186	1,994	506	432	252	2		
State Aid	41,143	33,667	4,171	3,305	2,069	524	448	262	2		
City of Rockville	2,304	1,885	234	185	116	29	25	15			

<b>G. Status Information</b>	
Land Status:	Not applicable
% Project Completion:	C-93%
Est. Completion Date:	FY 2018

**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); the Blue Plains Intermunicipal Agreement of 2012; and the DCWASA Approved FY 2013 Capital Improvement Program.

**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 decrease is due to lower estimates 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