

**DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY**

Board of Directors

*Meeting of the
Environmental Quality and Sewerage Services and
Water Quality and Water Services Committees*

*5000 Overlook Avenue, SW, Room 407
Thursday, December 15, 2011
11:40 a.m.*

I. Call to Order

Robert Hoyt
Chairperson
Joseph Cotruvo
Chairperson

11:40 a.m. II. Capital Budget

Len Benson

11:45 a.m. III. Action Items – Joint Use

Len Benson

1. Proposed FY 2013 Budget Action Items
 - A. FY 2011 – 2020 Capital Improvement Program (Lifetime & Cash Disbursements Basis)
 - B. FY 2013 Capital Authority Request

11:55 a.m. IV. Adjournment

Robert Hoyt
Chairperson



Capital Improvement Program

Presented to:

***Joint Committee Meeting of the
Environmental Quality and
Sewerage Services and
Water Quality and Water Services
Committees***

December 15, 2011

Overview of CIP Budget Request

□ 10-Year CIP Disbursements

- Proposed FY 2011 – FY 2020 CIP disbursements at \$3.8 billion are basically the same as the Board-approved FY 2010 – FY 2019 CIP disbursements

□ Lifetime Budget

- Proposed lifetime budget of \$8.0 billion - Increase of \$78.9 million over last year's Board-approved plan primarily for the Sanitary Sewer and Water service areas

□ Capital Authority Request

- Proposed FY 2013 authority request totals \$606.1 million - Decrease of \$146.4 million over the FY 2012 authority request

FY 2011 – FY 2020 CIP (Cash Disbursements)

Summary by Service Area

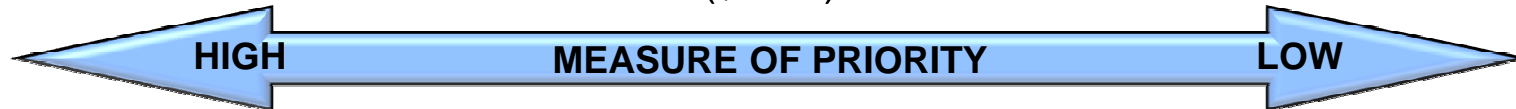
	FY 2011 Actuals	FY 2012 Revised	FY 2013 Proposed	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total FY '11 -'20
Wastewater Treatment	125,880	275,845	378,648	209,313	110,798	104,080	95,922	42,224	16,822	4,350	1,363,881
Sanitary Sewer	24,494	39,922	45,381	56,779	64,335	44,567	41,286	55,928	44,419	40,110	457,223
Combined Sewer Overflow/ Long Term Control Plan	77,872	132,016	152,021	111,758	163,206	157,542	141,934	57,180	78,545	112,621	1,184,694
Stormwater	2,160	2,775	4,276	2,545	801	775	737	810	900	506	16,284
Water	46,899	54,461	59,436	66,820	58,643	58,121	63,572	66,461	56,614	65,255	596,283
Washington Aqueduct	9,490	11,373	10,598	10,744	11,016	11,280	11,588	10,891	10,323	9,842	107,144
Capital Equipment	10,585	15,349	15,341	12,384	9,173	7,278	7,348	7,648	6,778	6,778	98,662
Total FY 2013 DC Water CIP	\$297,378	\$531,742	\$665,700	\$470,343	\$417,971	\$383,644	\$362,386	\$241,142	\$214,401	\$239,462	\$3,824,170

Summary of Disbursements between Retail & Wholesale Customers

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total
EPA/FED	\$ 44,606	\$ 56,787	\$ 64,423	\$ 40,914	\$ 22,500	\$ 16,500	\$ 16,500	\$ 16,500	\$ 16,500	\$ 16,500	\$ 311,730
Retail	172,480	299,713	363,380	288,076	311,373	291,309	280,866	197,451	183,364	214,970	2,602,982
Wholesale	80,292	175,242	237,897	141,354	84,098	75,834	65,020	27,191	14,538	7,992	909,458
Total CIP	297,378	531,742	665,700	470,344	417,971	383,643	362,386	241,142	214,402	239,462	3,824,170

Prioritization of Spending

(\$000's)



Description	Agreements, Regulatory standards, Court orders, Issues and Permits requirements, Stipulated Agreements, Etc.	Required to address Public Safety	Undertaken as a result of the Board's commitment to outside agencies	Related to Facilities in danger of failing, or critical to meeting permit requirements	Address Public concerns	Need to fulfill Mission and upgrade Facilities	Lower priority projects	
FY 2011 Actual	\$118,203	\$4,793	\$12,653	\$53,911	\$7,568	\$90,475	\$9,775	\$297,378
FY 2012	230,758	8,499	13,053	52,680	6,582	206,230	13,941	531,742
FY 2013	264,921	10,730	11,722	62,810	7,043	294,875	13,599	665,700
FY 2014	179,609	24,885	13,358	69,860	8,225	165,553	8,853	470,343
FY 2015	214,822	23,496	11,083	54,011	3,897	104,732	5,931	417,971
FY 2016	226,372	9,866	11,348	39,372	0	84,107	12,580	383,643
FY 2017	205,415	6,685	9,361	31,701	0	84,259	24,967	362,386
FY 2018	66,879	8,510	8,367	24,096	0	88,239	45,051	241,141
FY 2019	68,909	9,296	5,818	18,898	0	102,803	8,679	214,403
FY 2020	99,930	5,975	7,857	12,577	0	101,577	11,545	239,461
Total	\$1,675,816	\$112,735	\$104,619	\$419,915	\$33,315	\$1,322,849	\$154,921	\$3,824,170
% of Total	43.82%	2.95%	2.74%	10.98%	0.87%	34.59%	4.05%	100.00%

Sample Listings of Projects by Prioritization Category

<i>Mandated Projects</i>			
Priority	Project ID	Project Name	Total
1A	CY00	Anacostia LTCP Projects	914,285
1A	E800	Enhance Clarification Facilities	183,328
1A	E900	Nitrogen Removal Facilities	163,870
1A	BA00	WASA Low Impact Development Projects	1,507
1A	H700	Blue Plains Tunnel Site Preparation	608

<i>Potential Failure Projects</i>			
Priority	Project ID	Project Name	Total
2C	BR00	Nitrification/Denitrification Fac	25,360
2C	BV00	RWWPS No. 2 Upgrades	20,362
2C	EJ00	Potomac Pumping Station-Ph III Rehab	14,887
2C	DR00	Low Area Trunk Sewer Rehabilitation	1,106
2C	K400	Poplar Point Pumping Station	603

<i>Health & Safety Projects</i>			
Priority	Project ID	Project Name	Total
2A	G500	Sewer Rehab Near Creek Beds	20,382
2A	CV00	Laboratory Upgrades	2,046
2A	EN00	WWTP - Central Fire Alarm System	923
2A	DP00	Chemical Building Enhancements	402

<i>High Profile / Good Neighbor Projects</i>			
Priority	Project ID	Project Name	Total
2D	MA00	St. Elizabeth Water Tank	13,015
2D	N700	Potomac Sewer System Rehab.	11,318

<i>Board / DCWater Policy Projects</i>			
Priority	Project ID	Project Name	Total
2B	GQ00	Fire Hydrant Replacement Program - Phase II	20,028
2B	BW00	Lead Service Replacement Program	19,065
2B	CJ00	FY2012 - DDOT WATER PROJECTS	3,087
2B	CM00	FY2013 - DDOT Water Projects	2,722

<i>Good Engineering Practices / High Payback Projects</i>			
Priority	Project ID	Project Name	Total
3A	XA00	New Digestion Facilities	356,923
3A	F100	Small Diameter Water Main Rehab 13	23,524

<i>Good Engineering Practices / Low Payback Projects</i>			
Priority	Project ID	Project Name	Total
3B	MR00	5MG 2nd High Reservoir	10,002
3B	HC00	New Warehouse Facility at Blue Plains	9,969
3B	HJ00	COF Renovations and Additions	6,430
3B	JY00	IT - Data Center	2,217

Significant Project Variances

Wastewater Treatment

Project	Start	Proposed	Current	Variance	Needs Addressed
Project XA – New Digestion Facilities	Exist	\$475.5	\$441.3	\$34.2	\$28.5 Million scope increase for Final Dewatering plus Program Management cost allocation
Project E9 – Nitrogen Removal Facilities	Exist	\$291.6	\$345.4	\$(53.8)	Reduction of funds as a result of lower than anticipated bids. Funds used to offset other program increases

Sewer System – Sanitary and Combined

Project	Start	Proposed	Current	Variance	Needs Addressed
Project Q3 – FY2003 DSS Sanitary Sewer Projects	Exist	\$13.8	\$8.7	\$5.1	Additional funding for revised construction estimate of Pope’s Branch Sewer Rehab.
Project HS – Outfall Sewer Rehabilitation	FY13	\$3.0	\$0	\$3.0	NEW project. Assessment of the East & West Outfall Sewer, and the West Outfall Relief Sewer. Approx. 32,000 LF.
Project EJ – Potomac Sewer Pump Sta. Rehab. – Phase III	Exist	\$20.6	\$16.0	\$4.6	Replace gate valves , additional sluice gates, motor starters and screw conveyor.

Potential Projects not Included in 10-Year CIP

□ Examples - Wastewater Treatment

Project	Estimate
H2 Digestion & Related Facilities – Ph II	\$216M
IZ Replace/Upgrade Influent Screens	\$40M
IY Effluent Filter Upgrade	\$39M
BU Spent Wash Water Treatment	\$43M
B5 Primary Sedimentation Tank Covers	\$40M

□ Examples - Sewer System

- 26 projects identified in Sewer System Facilities Plan recommended for inclusion in plan not included – estimated cost \$240 million

Project	Estimate
HS Rehab Influent Sewers	\$129M
FX Rehab Northeast Boundary Sewer	\$46M
FX Tiber Creek Sewer Lining – Ph I	\$40M
JR Large Sewer Rehab 10	\$16M
JS Small Sewer Rehab 10	\$14M

Potential Projects not Included in 10-Year CIP

- In general, additional projects (beyond the 26 known projects from the Sewer System Facilities Plan) have been identified for consideration and may be added in a future 10 –year plan.
- Life cycle replacement for assets at Blue Plains is under evaluation, and will be incorporated in out years during future CIP cycles and will likely impact the FY 2018-2020 time frame.
- Asset management program will help with strategic decision making, life cycle costing and final prioritization of needs.
- In total, approximately \$1 Billion in potential projects not included in current proposed plan



APPENDIX

FY 2011 CIP Implementation

- **Key performance indicators used to monitor performance**
 - Indicators include all milestones mandated by Consent Decree or permit condition
 - Indicators are Design Start, Construction Start and Substantial Completion
- **For FY 2011, indicators were established**
 - All mandated milestones were met
 - 30 of 38 total milestones were met – exceptions described in CIP Quarterly Reports
- **All major projects remain on schedule**

FY 2011 CIP Implementation - Spending

- **Actual capital expenditures for FY 2011 were \$297.4 million, compared with planned expenditures of \$325 million (91%)**
- **Capital projects - actual spending was \$286.8 million, compared with planned expenditures of \$308 million (93%)**
 - Includes capital contributions to the Washington Aqueduct
 - \$11.2M Lag in payment for Owner Controlled Insurance Program premium
 - Timing of contractual payments
- **Capital equipment – actual spending was \$10.6 million, compared with planned expenditures of \$17 million (62%)**

STATUS – Blue Plains Total Nitrogen Program

- **Project E9 Nitrogen Removal Facilities**
 - First construction contract to build slurry wall and tankage
 - Contract to Pizzagalli Construction for \$69M
 - Construction 40% Complete
 - Second construction contract for Pump Station, Channels and Process
 - Contract to Ulliman Schutte Construction for \$97.5M
 - Construction 6% Complete
- **Project H7 Blue Plains Tunnel Site Preparation**
 - Contract to Ulliman Schutte Construction for \$4M
 - Construction Complete
- **Project FS/CY/E9 Dewatering Pump Station / Enhanced Clarification Facility**
 - Project delivery method is under consideration

STATUS – Biosolids Management Program

- **Project XA Biosolids Management Program**
 - Scheduled Construction Completion January 2015
 - New Biosolids Facility comprises 4 jobs total lifetime budget \$433M
- **Job XA08 Biosolids Main Process Train**
 - PC/CDM Joint Venture Selected for DB of MPT.
 - Contract 10% complete
- **Job XA10 Biosolids Combined Heat and Power**
 - Proposals submitted September 2011 by two shortlisted DBO Teams. Proposal evaluation is underway.
- **Job XA11 Biosolids Site Preparation**
 - Contract 95% complete
- **Job XA12 Biosolids Final Dewatering**
 - First Contract – Board Approval with NTP December 2011
 - Second Contract – Currently under design with completion January 2012 with anticipated construction start April 2012

STATUS – Clean Rivers Project

Site Preparation Contract

- Complete

Blue Plains Tunnel

- Contract awarded and underway
- Engineering support contracts in place
- Coordination with DCDOT ongoing and agreement on 11th Street Bridge in place
- Permits – Army Corp. close to ready to issue Permit. Draft sent to National Park Service

Overflows and Diversions

- M Street is advertised with bid opening December 14, 2011
- CSO 019 is currently in construction the NTP was August 2011
- Poplar Point Pump Station design has been negotiated, Board January 2012, NTP end of January 2012
- Main Pump Station Facilities in preliminary design
- Anacostia River Tunnel – start of preliminary design

FY 2011 - FY 2020 CIP Project Lifetime Budgets by Program Area

	(\$000's)	FY 2012 Approved	FY 2012 Revised / FY 2013 Proposed	Variance
<u>Wastewater Treatment</u>				
Liquid Processing Projects		612,749	622,106	9,357
Plantwide Projects		337,671	345,887	8,216
Solids Processing Projects		688,806	719,537	30,731
Enhanced Nitrogen Removal Facilities (formerly BTN - Total Nitrogen Program)		1,024,855	988,778	(36,077)
Sub-total		2,664,081	2,676,308	12,227
<u>Sanitary Sewer</u>				
Sanitary Collection Sewers		133,906	133,906	0
Sanitary On-Going Projects		142,067	159,677	17,610
Sanitary Pumping Facilities		25,898	25,898	-
Sanitary Sewer Projects Program Management		103,150	103,135	(15)
Sanitary Interceptor/Trunk Force Sewers		430,144	432,583	2,439
Sub-total		835,165	855,199	20,034
<u>Combined Sewer Overflow</u>				
CSO Program Management		55,239	55,239	-
Combined Sewer Projects: Nine Minimum Controls		215,387	213,888	(1,499)
Combined Sewer Projects: Others		240,013	244,844	4,831
Clean Rivers Project (aka Long-Term Control Plan)				
Anacostia Tunnel		1,672,282	1,672,282	-
Potomac Tunnel		418,700	418,700	-
Rock Creek Tunnel		70,342	70,342	-
Sub-total		2,671,963	2,675,295	3,332
<u>Stormwater</u>				
Stormwater Extensions/Local Drainage		17,999	17,999	0
Stormwater On-Going Program		9,658	9,658	0
Stormwater Pumping Facilities		0	0	-
DDOT Stormwater Program		5,066	4,720	(346)
Stormwater Projects Program Management		10,630	10,630	-
Stormwater Trunk/Force Sewers		18,605	15,504	(3,101)
Sub-total		61,958	58,511	(3,447)



FY 2011 - FY 2020 CIP Project Lifetime Budgets by Program Area – cont.

	(\$000's)	FY 2012 Revised / FY 2013 Proposed	Variance
	FY 2012 Approved		
<u>Water</u>			
Water Distribution Systems	666,933	695,720	28,787
Water Lead Program	191,000	191,040	40
Water On-Going Projects	112,121	117,541	5,420
Water Pumping Facilities	150,149	161,372	11,223
DDOT Water Projects	95,892	91,538	(4,354)
Water Storage Facilities	71,862	74,311	2,449
Water Projects Program Management	51,107	47,559	(3,548)
Meter Replacement /AMR Installation	61,151	73,534	12,383
Sub-total	1,400,215	1,452,615	52,400
Washington Aqueduct	203,138	203,138	0
Capital Equipment	103,906	98,307	(5,599)
Total DC Water CIP Lifetime (see notes)	7,940,426	8,019,373	78,947

Notes:

1 Lifetime budgets shown here represent total budgets for projects that are active during the current 10-year CIP. Lifetime budgets include historical spending prior to the beginning of the current 10-year plan, spending during the 10-year plan, and projected spending beyond the current 10-year plan. Projects completed in FY 2011 will be dropped from the CIP next year.

2 These budgets do not include inhouse labor costs, estimated to be in the \$8 to \$9 million range, annually, and are applicable to, primarily, the time charged to capital projects by employees in the Departments of Engineering and Technical Services, Sewer Services, and Water Services.



FY 2013 Capital Authority Request

<u>Service Areas</u>	(\$000's)	<u>Amount</u>
Blue Plains Wastewater Treatment ¹		\$277,007
Sanitary Sewer System		88,795
Combined Sewer Overflow ¹		124,734
Stormwater		2,683
Water System		91,894
Washington Aqueduct (DC Water share)		10,848
Capital Equipment		<u>10,129</u>
	Total	<u>\$606,090</u>

* The authority request includes a 24 month look-ahead, i.e., it also takes into account projected commitments for FY 2014 and FY 2015.

¹ Includes Special Risk Allowance of \$20 million, and \$122 million for Enhanced Nitrogen Removal (formerly Total Nitrogen - "BTN"), and Clean Rivers (*aka* Long Term Control Plan - "LTCP") Programs, respectively, although not part of their Lifetime Budgets.



CIP Cost Drivers by Service Areas (Cash Disbursements)

FY 2011 – 2020 CIP disbursements at \$3.8 billion are essentially the same as the FY 2010 -2019 CIP disbursements, with the following changes:

 **Wastewater Treatment:** Net 10-year decrease of \$36.4 million

- Decrease in the ENR project due to favorable construction bids
- Increase in the digester project to reflect the cost associated with the final dewatering portion of the project

 **Combined Sewer Overflow/Clean Rivers (LTCP):** 10-year increase of \$62.0 million


- Increase recognizes continuation of LTCP projects through 2025.




Note: Detailed discussion can be found in the capital budget book and Section V of the operating budget book

water is life

CIP Cost Drivers by Service Areas (Cash Disbursements) – cont.

-  **Water and Sewer Facility Plan:** Combined increase of \$5.4 million through FY 2020
 - Reflects the continued ramp up through FY 2015 of new water projects to ensure 1% annual replacement and new sewer service life restoration projects.
 - Sewer projects identified within the sewer facility plan and not currently funded will be added in future years moving forward
 - In-sourcing of staff began in FY 2010 for the design of water and sewer Infrastructure as well as valve operations. The result of the in-sourcing will achieve long-term savings within the CIP.

-  **Washington Aqueduct:** 10-year decrease of \$3.7 million
 - Reflects a decreased funding need for infrastructure improvements over the next ten years.



Note: Detailed discussion can be found in the capital budget book and Section V of the operating budget book

water is life

Ten-Year CIP Comparison (FY 2012 & FY 2013 Changes)

(\$000's)

	APPROVED FY 2010 - 2019			PROPOSED FY 2011 - 2020			VARIANCE		
	FY 2012	FY 2013	TOTAL	FY 2012	FY 2013	TOTAL	Increase / (Decrease)		
EPA/FED	\$ 71,760	\$ 38,597	\$ 110,357	\$ 56,787	\$ 64,423	\$ 121,210	\$ (14,973)	\$ 25,826	\$ 10,853
Retail	267,409	346,458	613,867	299,713	363,380	663,093	32,304	16,922	49,226
Wholesale	216,651	204,731	421,382	175,242	237,897	413,139	(41,409)	33,166	(8,243)
Total CIP	\$ 555,820	\$ 589,786	\$ 1,145,606	\$ 531,742	\$ 665,700	\$ 1,197,442	\$ (24,078)	\$ 75,914	\$ 51,836

 The proposed combined FY 2012 & 2013 cash disbursements increased by \$51.2 million from the approved plan:

- EPA/FED - increase of \$10.9 million
- Retail - increase of \$49.2 million
- Wholesale - decrease of \$8.2 million

Significant Changes by Service Area

Wastewater Treatment

New Projects & Project Variances- Wastewater

Project	Start	Proposed	Current	Variance	Needs Addressed
Project BR – Nitrification / Denitrification Facility	Exist	\$64.8	\$59.5	\$5.3	Replacement of Return Activated Sludge (RAS) Piping System
Project UC – Filtration / Disinfection Facility	Exist	\$73.6	\$70.6	\$3.0	Repair of the Multi-Media Influent Channels
Project JY – IT Data Center	FY10	\$3.3	0	0	NEW Project – Funding came from existing Project AZ. Expands and Upgrades existing Data Center
Project HU – Blue Plains Logistics	Exist	\$6.0	\$1.7	\$4.3	Additional Security Personnel for planned construction activity.
Project XA – New Digestion Facilities	Exist	\$475.5	\$441.3	\$34.2	Revised Construction Estimate for Final Dewatering.
Project AM – Biosolids Program Management	Exist	\$27.5	\$20.6	\$6.9	Increased funding for Nitrogen and Biosolids program management.
Project E8 – Enhanced Clarification Facilities	Exist	\$247.0	\$237.3	\$9.7	Increased funding for program management related to Enhanced Clarification.

New Projects & Project Variances- Wastewater - Continued

Project	Start	Proposed	Current	Variance	Needs Addressed
Project XZ – Solids Processing Building	Exist	\$23.8	\$34.3	\$(10.5)	Reduction of funds for SPB Odor Control which is being combined with Project XA.
Project E9 – Nitrogen Removal Facilities	Exist	\$291.6	\$345.4	\$(53.8)	Reduction of funds as a result of lower than anticipated bids. Funds used to offset other program increases

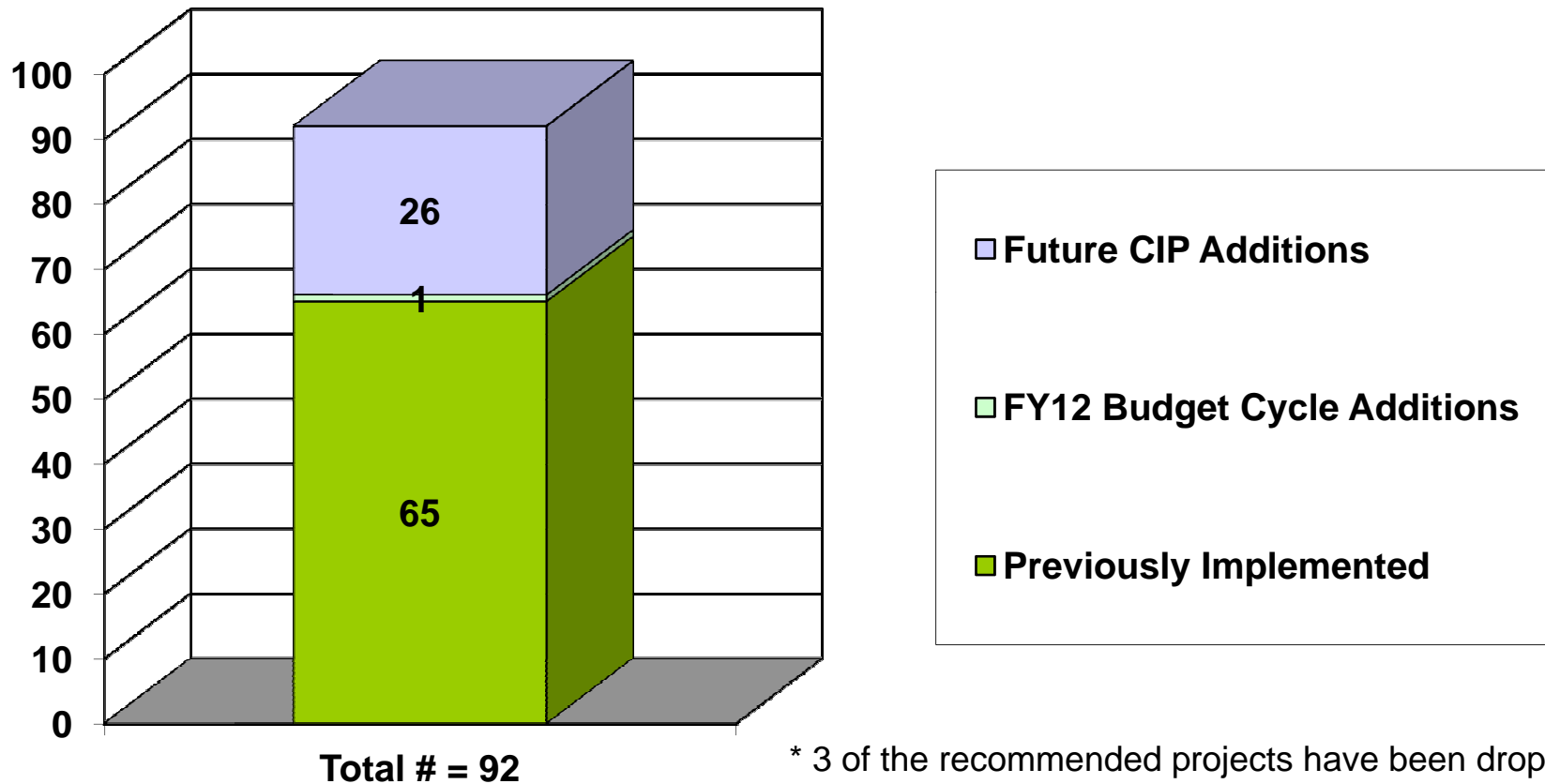
Significant Changes by Service Area

Sanitary, Combined, Storm Sewer

New Projects & Project Variances- Sanitary Sewer

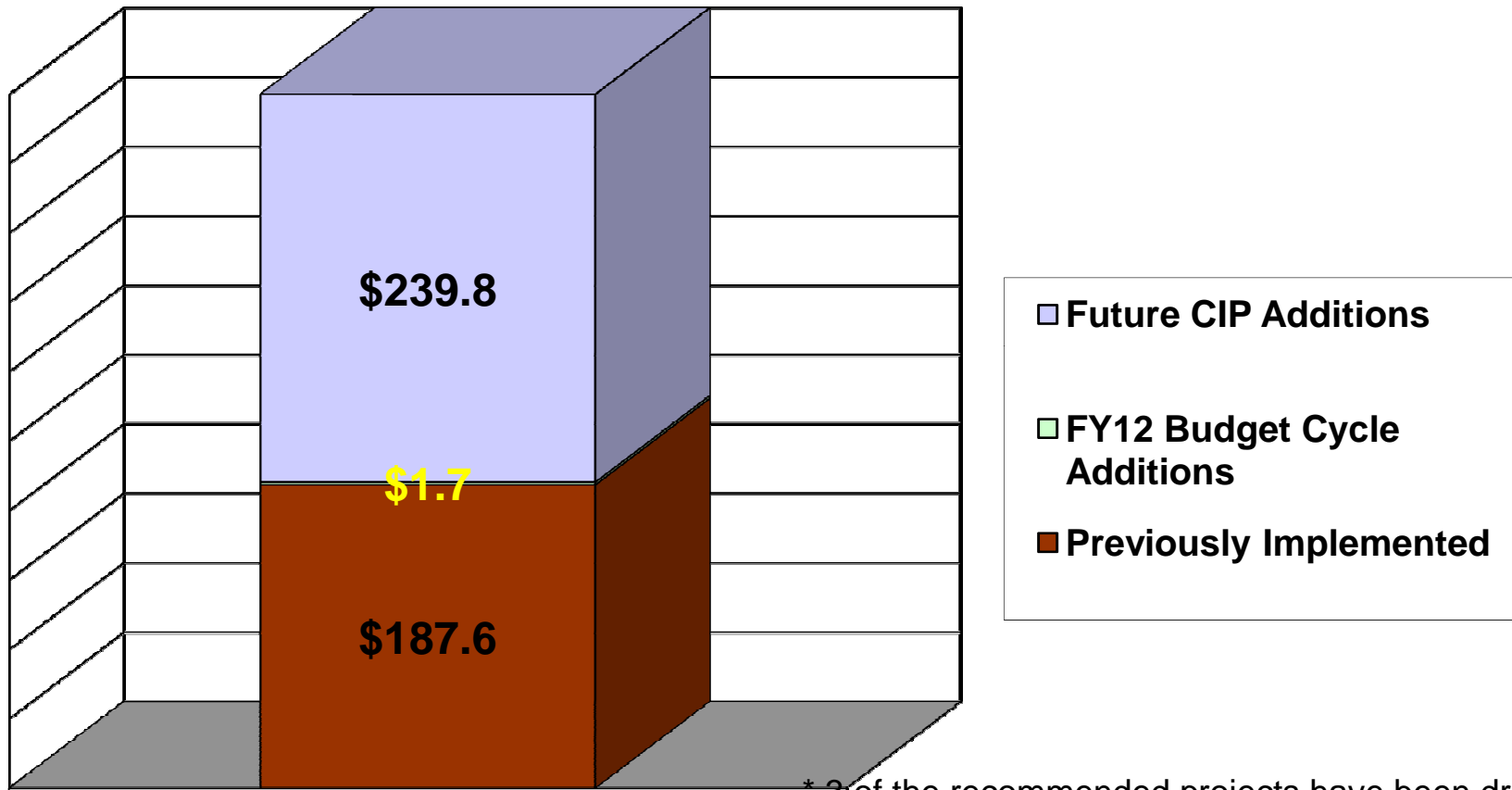
Project	Start	Proposed	Current	Variance	Needs Addressed
Project Q3 – FY2003 DSS Sanitary Sewer Projects	Exist	\$13.8	\$8.7	\$5.1	Additional funding for revised construction estimate of Pope’s Branch Sewer Rehab.
Project HS – Outfall Sewer Rehabilitation	FY13	\$3.0	\$0	\$3.0	NEW project. Assessment of the East & West Outfall Sewer, and the West Outfall Relief Sewer. Approx. 32,000 LF.
Project N7 – Potomac Interceptor Sewer	Exist	\$53.1	\$50.3	\$2.8	Odor Remedy (VA/MD) Sites. Increased construction cost as a result of obtaining permits and environmental conditions.
Project JQ – Hydraulic Protection Project	FY14	\$1.7	\$0	\$1.7	NEW project. Addresses Category V Hydraulic Improvements, such as, rehab or replace sewer manholes to prevent overflows.
Project A4 – Future Sanitary Sewers	Exist	\$43.8	\$48.9	\$(5.1)	Funds reduced to offset increased cost of Project Q3 above. Project A4 was setup for as source of funding for sewer rehab or sewer needs.

How the 92* identified sewer projects from the Facilities Plan will be implemented in the CIP



* 3 of the recommended projects have been dropped from implementation after re-evaluation

CIP funding plan for the 92* identified sewer projects in the Facilities Plan



Total 2008 \$\$ = \$429.1M

* 3 of the recommended projects have been dropped from implementation after re-evaluation

New Projects & Project Variances- Combined Sewer Overflow

Project	Start	Proposed	Current	Variance	Needs Addressed
Project EJ – Potomac Sewer Pump Sta. Rehab. – Phase III	Exist	\$20.6	\$16.0	\$4.6	Replace, Rehab, or Upgrade screens, gate valve actuators, add'l sluice gates, lighting system, fire alarm and suppression.



Significant Changes by Service Area

Water

New Projects & Project Variances- Water Distribution System

Project	Start	Proposed	Current	Variance	Needs Addressed
Project J7 – Small Dia. Watermain Rehabilitation 17	FY20	\$36.2	\$0	\$36.2	New Project. Continuation of the small dia. watermain rehabilitation program.
Project JA – FY2020 DWS Water Projects	FY20	\$9.9	\$0	\$9.9	New Project. Continuation of the DWS watermain rehabilitation program.
Project JJ – Bryant Street Pump Station Improvements, Phase III	FY20	\$6.1	\$0	\$6.1	New Project. Slate roof replacement at Bryant St. PS, roof replacements of warehouse & shop buildings, and parking deck surface conditioning.
Project JB - Bryant Street Pump Station Improvements, Phase II	FY12	\$2.8	\$0	\$2.8	New Project. Remove, Reconstruct, and Structurally reinforce walls and roofs on building at Bryant St. PS site.
Project J8 – FY2020 DDOT Water Projects	FY20	\$10.4	\$0	\$10.4	New Project. Continuation of the annual program for DDOT watermain replacements.

Significant Changes by Service Area

Washington Aqueduct & Capital Equipment

Significant Changes

Washington Aqueduct

- 10 year Disbursements of \$107.1 million and \$3.7 million decrease from last year and reflects the prioritized need for continual funding for infrastructure improvements at the Aqueduct

Capital Equipment

- 10 year Disbursements of \$98.3 million and decrease of \$5.6 from last year and reflects the following:
 - Information Technology projects
 - AMR DCU upgrades
 - SCADA
 - Document and asset management systems
 - Scheduled replacement of vehicles

Capital Projects With Changes to IMA Shares

A preliminary agreement has been reached with IMA partners for the sharing of approximately \$177 million specific project costs that heretofore had been the sole responsibility of the District of Columbia:

Project ID	Description
EJ	Potomac Pump Station Phase III
EK	Long Term Rehab-Main & O Pump Station
EQ	Potomac Pump Station Rehab Phase IV
FQ	Main & O St. PS Intermediate Upgrade
FY	Rehab Upper Rock Creek Interceptor
G2	Sewer Structure Rehabilitation 1
G4	Upper Potomac Intercept Sewer Rehab.
HT	Rehabilitation of Anacostia Force Main
IK	Potomac Force Main Rehabilitation
IL	Creekbed Sewer Rehabilitation 2
IM	Creekbed Sewer Rehabilitation 3
J0	B St/New Jersey Ave Trunk Sewer Rehab
J1	Oxon Run Sewer Leakage Correction
K4	Poplar Point Pumping Station/Nine Minimum Controls
K5	Dry-Weather Overflow Elimination/Nine Minimum Controls



New Projects

Project I.D.	Project Title	Service Area	Budgeted Cost
HS	Rehabilitation of Influent Sewers	Sanitary Sewer	\$3,000,000
J1	FY2020 - DSS Sanitary Sewer Projects	Sanitary Sewer	12,568,000
JQ	Hydraulic Protection Project	Sanitary Sewer	1,723,000
IX	Headworks HVAC Rehab	Wastewater	366,000
JY	IT - Data Center	Wastewater	3,335,175
J7	Small Diameter Water Main Rehabilitation 17	Water	36,250,000
J8	FY2020 - DDOT Water Projects	Water	10,400,000
JA	FY2020 - DWS Water Projects	Water	9,955,000
JB	Bryant Street PS Improvements - Phase II	Water	2,800,000
JJ	Bryant Street PS Improvements - Phase III	Water	6,100,000
			\$86,497,175

Closed and Dropped Projects

Project I.D.	Project Title	Service Area	Cost at Completion
Closed Projects			
P1	FY2000 - DDOT STORMWATER PROJECTS	Stormwater	\$409,709
P2	FY2001 - DDOT STORMWATER PROJECTS	Stormwater	607,789
P3	FY2002 - DDOT STORMWATER PROJECTS	Stormwater	119,639
P4	FY2003 - DDOT STORMWATER PROJECTS	Stormwater	-
H1	MWCOG Budget Items	Wastewater	39,499
AS	FY2009 - DDOT Water Projects	Water	92,152
MT	Small Diameter Watermain Rehab. (1)	Water	11,653,488
MY	Elim. Dead Ends (Contract 3 & 4)	Water	7,693,453
			\$20,615,729
Dropped Projects			
A3	16 inch Tie-in to McMilliam Plant	Water	\$2,745,275
E3	FY 2003 - DWS Water Projects	Water	7,637,639
R1	FY2000 - DDOT Water Projects	Water	1,259,221
R2	FY2001 - DDOT Water Projects	Water	1,078,874
R3	FY2002 - DDOT Water Projects	Water	2,550,092
R4	FY2003 - DDOT Water Projects	Water	4,241,277
R5	FY2004 - DDOT Water Projects	Water	653,266
R6	FY2005 - DDOT Water Projects	Water	452,844
R7	FY2006 - DDOT Water Projects	Water	38,532
R8	FY2007 - DDOT Water Projects	Water	4,214,954
R9	FY2008 - DDOT Water Projects	Water	265,061
DB	Sewer Services Field Facility & Relocation	Sanitary Sewer	446,197
			\$25,583,232

**JOINT MEETING OF THE
ENVIRONMENTAL QUALITY & SEWERAGE SERVICES COMMITTEE
AND WATER QUALITY & WATER SERVICES COMMITTEE
PROPOSED FY 2013 BUDGET ACTION ITEMS**

ACTION ITEM A: FY 2011 – 2020 Capital Improvement Program (Lifetime & Cash Disbursements Basis)

DC Water presents its ten-year capital improvement program on two different bases:

- a. **Project lifetime budgets** – Total project lifetime budgets reflect the total costs of each active project, as well as projects that are projected to begin over the ten-year planning period, and include historical and projected spending as well as project contingencies. As shown in Attachment A-1, the Board of Directors will be asked to approve total project lifetime budgets of \$8.019 billion.
- b. **Disbursements-based CIP** - The disbursements-based capital improvement program is utilized to forecast the timing and amount of capital financings, which are the primary basis for projected retail rate increases. As shown in Attachment A-2, the Board of Directors will be asked to approve a cash disbursements-based CIP of \$3.824 billion.

Attachment A-1

FY 2011 - FY 2020 Capital Improvement Plan

Project Lifetime Budgets by Program Area (\$ 000's)

	FY 2012 Approved	FY 2012 Revised / FY 2013 Proposed	Variance
<u>Wastewater Treatment</u>			
Liquid Processing Projects	612,749	622,106	9,357
Plantwide Projects	337,671	345,887	8,216
Solids Processing Projects	688,806	719,537	30,731
Enhanced Nitrogen Removal Facilities <i>(formerly BTN - Total Nitrogen Program)</i>	1,024,855	988,778	(36,077)
Sub-total	2,664,081	2,676,308	12,227
<u>Sanitary Sewer</u>			
Sanitary Collection Sewers	133,906	133,906	0
Sanitary On-Going Projects	142,067	159,677	17,610
Sanitary Pumping Facilities	25,898	25,898	-
Sanitary Sewer Projects Program Management	103,150	103,135	(15)
Sanitary Interceptor/Trunk Force Sewers	430,144	432,583	2,439
Sub-total	835,165	855,199	20,034
<u>Combined Sewer Overflow</u>			
CSO Program Management	55,239	55,239	-
Combined Sewer Projects: Nine Minimum Controls	215,387	213,888	(1,499)
Combined Sewer Projects: Others	240,013	244,844	4,831
Clean Rivers Project <i>(aka Long-Term Control Plan)</i>			
Anacostia Tunnel	1,672,282	1,672,282	-
Potomac Tunnel	418,700	418,700	-
Rock Creek Tunnel	70,342	70,342	-
Sub-total	2,671,963	2,675,295	3,332
<u>Stormwater</u>			
Stormwater Extensions/Local Drainage	17,999	17,999	0
Stormwater On-Going Program	9,658	9,658	0
Stormwater Pumping Facilities	0	0	-
DDOT Stormwater Program	5,066	4,720	(346)
Stormwater Projects Program Management	10,630	10,630	-
Stormwater Trunk/Force Sewers	18,605	15,504	(3,101)
Sub-total	61,958	58,511	(3,447)
<u>Water</u>			
Water Distribution Systems	666,933	695,720	28,787
Water Lead Program	191,000	191,040	40
Water On-Going Projects	112,121	117,541	5,420
Water Pumping Facilities	150,149	161,372	11,223
DDOT Water Projects	95,892	91,538	(4,354)
Water Storage Facilities	71,862	74,311	2,449
Water Projects Program Management	51,107	47,559	(3,548)
Meter Replacement /AMR Installation	61,151	73,534	12,383
Sub-total	1,400,215	1,452,615	52,400
Washington Aqueduct	203,138	203,138	0
Capital Equipment	103,906	98,307	(5,599)
Total DC Water CIP Lifetime (see notes)	7,940,426	8,019,373	78,947

Notes:

- 1 Lifetime budgets shown here represent total budgets for projects that are active during the current 10-year CIP. Lifetime budgets include historical spending prior to the beginning of the current 10-year plan, spending during the 10-year plan, and projected spending beyond the current 10-year plan. Projects completed in FY 2011 will be dropped from the CIP next year.
- 2 These budgets do not include inhouse labor costs, estimated to be in the \$8 to \$9 million range, annually, and are applicable to, primarily, the time charged to capital projects by employees in the Departments of Engineering and Technical Services, Sewer Services, and Water Services.

Attachment A-2

FY 2011 - FY 2020 PROJECTED CAPITAL IMPROVEMENT PLAN (CIP) - DISBURSEMENTS BASIS (\$ in 000's)

	FY 2011 Actuals	FY 2012 Revised	FY 2013 Proposed	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Total FY '11-'20
Wastewater Treatment											
Liquid Processing Projects	\$11,080	\$23,263	\$35,371	\$18,756	\$7,578	\$5,010	\$12,074	\$8,300	\$7,428	\$992	\$129,851
Plantwide Projects	17,067	18,018	18,645	13,788	5,992	3,204	3,894	12,140	6,741	1,468	100,957
Solids Processing Projects	48,823	119,295	194,972	71,080	15,733	6,467	2,850	355	1	-	459,575
Enhanced Nitrogen Removal Facilities (formerly BTN - Total Nitrogen Program)	48,910	115,269	129,660	105,690	81,495	89,399	77,104	21,430	2,652	1,890	673,498
Sub-total	125,880	275,845	378,648	209,313	110,798	104,080	95,922	42,224	16,822	4,350	1,363,881
Sanitary Sewer											
Sanitary Collection Sewers	1,674	2,140	6,174	11,611	8,873	3,924	5,690	7,268	7,766	7,725	62,844
Sanitary On-Going Projects	7,171	16,081	15,694	6,795	7,075	7,659	7,865	8,138	8,590	9,229	94,298
Sanitary Pumping Facilities	424	659	636	696	37	-	-	-	-	-	2,452
Sanitary Sewer Projects Program Management	3,488	6,880	4,454	6,189	6,821	6,630	6,748	7,790	6,633	5,160	60,794
Sanitary Interceptor/Trunk Force Sewers	11,737	14,162	18,422	31,488	41,529	26,354	20,983	32,732	21,431	17,997	236,834
Sub-total	24,494	39,922	45,381	56,779	64,335	44,567	41,286	55,928	44,419	40,110	457,223
Combined Sewer Overflow / Long Term Control Plan											
CSO Program Management	1,089	1,590	1,533	2,272	1,840	1,555	1,593	2,181	2,645	2,105	18,402
Combined Sewer Projects:Nine Minimum Controls	35,368	6,971	2,021	309	12	4	-	-	-	-	44,685
Combined Sewer Projects:Others	-	7,533	8,611	17,071	16,188	18,109	12,030	9,550	9,644	12,476	111,210
D.C. Clean Rivers Project (aka Long-Term Control Plan)											
Anacostia Tunnel	41,415	114,366	138,668	91,726	143,635	132,510	122,307	36,237	53,200	83,986	958,050
Potomac Tunnel	-	1,270	961	309	1,533	5,132	5,233	8,412	11,639	12,028	46,517
Rock Creek Tunnel	-	286	227	71	-	232	771	800	1,417	2,026	5,830
Sub-total	77,872	132,016	152,021	111,758	163,206	157,542	141,934	57,180	78,545	112,621	1,184,694
Stormwater											
Stormwater Local Drainage	-	17	104	69	65	83	92	95	98	93	715
Stormwater On-Going Program	105	731	452	468	464	512	465	483	522	199	4,400
Stormwater Pumping Facilities	-	-	-	-	-	-	-	-	-	-	-
DDOT Stormwater Program	-	2	8	9	19	18	18	10	10	-	93
Stormwater Research and Program Management	836	499	250	238	193	163	162	222	270	214	3,047
Stormwater Trunk/Force Sewers	1,219	1,527	3,462	1,762	60	-	-	-	-	-	8,029
Sub-total	2,160	2,775	4,276	2,545	801	775	737	810	900	506	16,284
Water											
Water Distribution Systems	21,543	23,024	28,404	31,809	29,435	29,239	33,925	33,318	32,933	42,819	306,449
Water On-Going Projects	8,811	8,239	6,681	5,994	6,188	6,364	7,508	6,548	7,159	6,851	70,343
Water Pumping Facilities	1,778	5,327	6,273	7,921	3,375	1,373	3,168	7,062	-	84	36,361
DDOT Water Projects	3,740	4,002	5,613	6,583	4,616	4,906	5,126	5,730	5,808	7,857	53,982
Water Storage Facilities	1,275	2,083	4,221	7,860	5,748	6,946	4,264	4,122	3,192	1,997	41,710
Water Projects Program Management	4,357	4,109	4,081	3,242	3,870	3,672	3,669	3,726	3,748	2,175	36,649
Water Lead Program	2,611	4,801	2,372	2,077	2,246	2,414	2,528	2,627	-	-	21,676
Meter Replacement /AMR Installation	2,784	2,676	1,790	1,332	3,166	3,205	3,385	3,330	3,774	3,472	29,114
Sub-total	46,899	54,461	59,436	66,820	58,643	58,121	63,572	66,461	56,614	65,255	596,283
Washington Aqueduct	9,490	11,373	10,598	10,744	11,016	11,280	11,588	10,891	10,323	9,842	107,144
Capital Equipment	10,585	15,349	15,341	12,384	9,173	7,278	7,348	7,648	6,778	6,778	98,662
Total FY 2013 DC Water CIP	\$297,378	\$531,742	\$665,700	\$470,343	\$417,971	\$383,644	\$362,386	\$241,142	\$214,401	\$239,462	\$3,824,170

**JOINT MEETING OF THE
ENVIRONMENTAL QUALITY & SEWERAGE SERVICES COMMITTEE
AND WATER QUALITY & WATER SERVICES COMMITTEE
PROPOSED FY 2013 BUDGET ACTION ITEMS**

ACTION ITEM B: FY 2013 Capital Authority Request

Congressional capital authority is required before DC Water can enter into any capital contracts. The amount of capital authority requested each year is based on the projected capital contracts to be executed in the upcoming two fiscal years, projected changes or risk and the carry-forward authority balance from prior years' appropriations. The U.S. Congress approves DC Water's capital authority in seven broad categories, which provides DC Water with additional flexibility in managing the capital improvement program, although capital budgets and spending are developed and monitored within DC Water at the project level. The FY 2013 capital authority request totals \$606.090 million, as shown on the attached worksheet.

Following the Joint Committee Meeting of Environmental Quality and Sewer Services and Water Quality and Water Services on December 15 and the Finance and Budget Committee Meeting on December 22, if any Committee approves a different level of CIP disbursements or lifetime budgets than shown in the attachments, staff will update this schedule and distribute to the Board prior to its January 5 meeting.

**Fiscal Year 2013
Capital Authority Request**

Service Areas

Blue Plains Wastewater Treatment	\$277,007
Sanitary Sewer System	88,795
Combined Sewer Overflow	124,734
Stormwater	2,683
Water System	91,894
Washington Aqueduct (DC Water share)	10,848
Capital Equipment	<u>10,129</u>
Total	<u>\$606,090</u>