

## City of Baltimore -- Six-Year Capital Program

### Water Resources Element

Amounts in Thousands

<b>520-020</b>	<b>Lakewood Avenue Relief Drain - Phase IV Construction</b>								
Description:	Design and reconstruct the portion of the Lakewood Avenue Drain from North of Hudson Street to Dillon Street.								
Location:	Hudson St to the Harbor								Impact on FY 2010 Operating Budget: 0
<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
800	City Motor Vehicle Revenue Funds	600	0	500	0	0	0	0	1100
Total		600	0	500	0	0	0	0	1100
<b>520-093</b>	<b>Race Street Box Culvert</b>								
Description:	Study, design, and reconstruct/rehabilitate an existing stormwater box culvert.								
Location:	Inner Harbor/Middle Branch section of the City								Impact on FY 2010 Operating Budget: 0
<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
800	City Motor Vehicle Revenue Funds	0	950	0	0	0	0	0	950
Total		0	950	0	0	0	0	0	950
<b>520-099</b>	<b>Small Storm Drain and Inlet Repairs</b>								
Description:	Repair, replace and/or install storm drain system or appurtenances to correct or improve the structural and conveyance capability of the system.								
Location:	Various								Impact on FY 2010 Operating Budget: 0
<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
800	City Motor Vehicle Revenue Funds	11090	1000	1500	2000	2000	2000	2000	21590
Total		11090	1000	1500	2000	2000	2000	2000	21590
<b>520-439</b>	<b>On Call Storm Drain Design/Engin. Service</b>								
Description:	Investigate, recommend solutions and design improvements to identified projects using the services of an On-Call Engineering consultant to resolve stormwater drainage problems.								
Location:	Citywide								Impact on FY 2010 Operating Budget: 0
<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
800	City Motor Vehicle Revenue Funds	2450	500	500	1000	1000	1000	1000	7450
Total		2450	500	500	1000	1000	1000	1000	7450
<b>520-708</b>	<b>Storm Water Pumping Stations Improvements</b>								
Description:	Study, design, and construct the necessary improvements to the existing storm water pumping stations (Colgate St., Charles St.) to improve performance and operational reliability.								
Location:	Various								Impact on FY 2010 Operating Budget: 0
<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
800	City Motor Vehicle Revenue Funds	200	700	700	0	0	0	0	1600
Total		200	700	700	0	0	0	0	1600
<b>520-711</b>	<b>Emergency Flood Mitigation</b>								
Description:	Study, inspect and develop a design strategy to clean the stream channels of debris accumulations, improve the stream channel cross section to be able to improve channel flow, and stabilize the stream bank to prevent erosion.								
Location:	Various								Impact on FY 2010 Operating Budget: 0
<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
800	City Motor Vehicle Revenue Funds	750	0	0	200	200	200	200	1550

# City of Baltimore -- Six-Year Capital Program

## Water Resources Element

Amounts in Thousands

Total	750	0	0	200	200	200	200	1550
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**520-934 Cherry Hill Utility Infrastructure Study**  
 Description: Study and develop a report in regard to the condition of the utility infrastructure of the City in the Cherry Hill area.  
 Location: Cherry Hill area of the City

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
800 City Motor Vehicle Revenue Funds	0	50	0	0	0	0	0	50

Total	0	50	0	0	0	0	0	50
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**551-233 Wastewater Collection System - Annual Improvements**  
 Description: Maintain collection systems under an on-going capital maintenance program.  
 Location: Various

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	6993	1000	1000	1000	1000	1000	1000	12993
401 Waste Water Utility Funds	318	0	0	0	0	0	0	318
902 County Grants	8771	1000	1000	1000	1000	1000	1000	14771

Total	16082	2000	2000	2000	2000	2000	2000	28082
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**551-401 Sewer Replacement Projects**  
 Description: Replace and improve sewers as necessary on an unscheduled basis.  
 Location: Citywide

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	9381	0	0	0	0	0	0	9381
401 Waste Water Utility Funds	10550	2000	2000	2000	2000	2000	2000	22550

Total	19931	2000	2000	2000	2000	2000	2000	31931
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**551-403 Small Sewer Extensions and Improvements**  
 Description: Extend and improve small sewers such as those needed to connect existing dwellings to the sewage system.  
 Location: Citywide

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	1832	0	0	0	0	0	0	1832
401 Waste Water Utility Funds	4250	750	750	750	750	750	750	8750

Total	6082	750	750	750	750	750	750	10582
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**551-404 Infiltration / Inflow Correction Program**  
 Description: Detect and correct the infiltration / inflow of clear water into sanitary sewers under an on-going program.  
 Location: Citywide

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	15424	0	0	0	0	0	0	15424
401 Waste Water Utility Funds	6125	2000	2000	2000	2000	2000	2000	18125

Total	21549	2000	2000	2000	2000	2000	2000	33549
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**551-410 Improvements to Herring Run Interceptor- Phase 1 SC 836**  
 Description: Study, design, and construct approximately 24,000 linear feet of the Herring Run Interceptor Sewer.  
 Location: High Level Sewer Shed

Impact on FY 2010 Operating Budget: 0

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Amounts in Thousands

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	2650	11941	0	0	0	0	0	14591
401 Waste Water Utility Funds	10937	0	0	0	0	0	0	10937
902 County Grants	7653	7319	0	0	0	0	0	14972
Total	21240	19260	0	0	0	0	0	40500

### 551-526

#### Back River Digester Renovations SC-8526

Description: Seal and structurally repair concrete of two digesters for the storage of digested sludge. Construct Acid Phase Reactor (APR) Tank, additional GBTs, and Equalization Tank.

Funding Wastewater Revenue 50%, County 50%.

Location: 8201 Eastern Ave Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	28288	0	0	1225	0	0	20000	49513
902 County Grants	28279	0	0	1225	0	0	20000	49504
Total	56567	0	0	2450	0	0	40000	99017

### 551-528

#### Patapsco WWTP - Enhanced Nutrient Removal - SC-845, SC-852, SC-855

Description: Design and construct facilities required for Enhanced Nutrient Removal (ENR) at Patapsco WWTP, including new ENR facilities and modifications to existing facilities.

Location: Patapsco WWTP Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	21934	5440	0	0	0	0	0	27374
690 Other State Funds	249500	68000	0	0	0	0	0	317500
902 County Grants	46611	11560	0	0	0	0	0	58171
Total	318045	85000	0	0	0	0	0	403045

### 551-533

#### Annual Facilities Improvements

Description: Rehabilitate, repair, and/or replace wastewater facility systems to maintain the operational function and performance reliability of aging systems.

Location: Various Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	5600	100	0	0	0	0	0	5700
401 Waste Water Utility Funds	900	900	1000	1000	1000	1000	1000	6800
902 County Grants	6500	1000	1000	1000	1000	1000	1000	12500
Total	13000	2000	2000	2000	2000	2000	2000	25000

### 551-557

#### Enhanced Nutrient Removal at Back River WWTP

Description: Design and modify existing Biological Nutrient Removal (BNR) Facilities to optimize the removal of ammonia and nitrogen from the Back River Wastewater Treatment Plant effluent.

Location: 8201 Eastern Blvd Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	1450	0	0	0	0	0	0	1450
690 Other State Funds	77900	0	286000	0	200000	0	0	563900
902 County Grants	1450	0	0	0	0	0	0	1450
Total	80800	0	286000	0	200000	0	0	566800

### 551-569

#### Urgent Sanitary A/E Services

Description: Rehabilitate, investigate and design sanitary sewers at various locations.

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Amounts in Thousands

Location: Various Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302	Waste Water Revenue Bonds	5500	0	2250	0	2250	0	2250	12250
Total		5500	0	2250	0	2250	0	2250	12250

**551-585 Patapsco Liquid Oxygen (LOX) Plant**  
 Description: Replace or upgrade the existing Liquid Oxygen generation facilities at the Patapsco Wastwater Treatment Plant.  
 Location: Patapsco WWTP

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302	Waste Water Revenue Bonds	320	0	0	2560	0	0	0	2880
902	County Grants	680	0	0	5440	0	0	0	6120
Total		1000	0	0	8000	0	0	0	9000

**551-606 Rehab of Existing Jones Falls Force Main / Pressure Sewer**  
 Description: Rehabilitate the existing Jones Falls Force Main and Pressure Sewer. Subject to EPA/MDE Consent Decree.  
 Location: Upper Jones Falls Sewershed

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302	Waste Water Revenue Bonds	0	0	349	0	2614	0	0	2963
902	County Grants	0	0	651	0	4868	0	0	5519
Total		0	0	1000	0	7482	0	0	8482

**551-609 Southwest Diversion Pressure Sewer Improvements**  
 Description: Improve the existing pressure sewer. Subject to EPA/MDE Consent Decree.  
 Location: Gwynns Falls Sewershed

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302	Waste Water Revenue Bonds	3110	2070	8487	4140	0	0	0	17807
902	County Grants	5890	7930	32513	15860	0	0	0	62193
Total		9000	10000	41000	20000	0	0	0	80000

**551-611 Sewer System Rehabilitation Program - Low Level Sewershed**  
 Description: Rehabilitate, repair, and replace wastewater collection and conveyance system. Subject to EPA/MDE Consent Decree.  
 Location: Low Level Sewershed

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302	Waste Water Revenue Bonds	0	4926	10252	10970	11738	12560	13438	63884
902	County Grants	0	25	52	55	59	63	68	322
Total		0	4951	10304	11025	11797	12623	13506	64206

**551-612 Sewer System Rehabilitation Program - Main Outfall Sewershed**  
 Description: Repair and replace the wastewater collection and conveyance system. Subject to EPA/MDE Consent Decree.  
 Location: Main Outfall Sewershed

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302	Waste Water Revenue Bonds	0	1233	2638	2117	2265	2424	2593	13270
902	County Grants	0	907	1942	1558	1667	1784	1909	9767

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## Water Resources Element

Amounts in Thousands

Total	0	2140	4580	3675	3932	4208	4502	23037
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**551-614 Sewer System Rehabilitation Program - Dundalk Sewershed**

Description: Repair and replace the wastewater collection and conveyance system. Subject to EPA/MDE Consent Decree.

Location: Dundalk Sewershed Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	1500	883	1260	1348	1442	1543	1651	9627
902 County Grants	0	722	1030	1102	1180	1262	1350	6646

Total	1500	1605	2290	2450	2622	2805	3001	16273
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**551-616 Sewer System Rehabilitation Program - Patapsco Sewershed**

Description: Repair and replace wastewater collection and conveyance system. Subject to EPA/MDE Consent Decree.

Location: Patapsco Sewershed Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	0	0	1972	2109	2258	3623	3876	13838
902 County Grants	0	0	318	341	364	585	626	2234

Total	0	0	2290	2450	2622	4208	4502	16072
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**551-620 Sewer System Rehabilitation Program - High Level Sewershed**

Description: Repair and replace wastewater collection and conveyance system. Subject to EPA/MDE Consent Decree.

Location: High Level Sewershed Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	0	1070	4580	6125	6554	7013	7503	32845

Total	0	1070	4580	6125	6554	7013	7503	32845
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**551-622 Sewer System Rehabilitation Program - Gwynns Falls Sewershed**

Description: Repair and replace wastewater collection and conveyance system. Subject to EPA/MDE Consent Decree.

Location: Gwynns Falls Sewershed Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	0	554	592	1268	1357	1452	1553	6776
902 County Grants	0	2121	2270	4857	5197	5561	5950	25956

Total	0	2675	2862	6125	6554	7013	7503	32732
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**551-624 Sewer System Rehabilitation Program - Herring Run Sewershed**

Description: Repair and replace the wastewater collection and conveyance system. Subject to EPA/MDE Consent Decree.

Location: Herring Run Sewershed Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	2137	3685	8438	10835	11593	12404	13272	62364
902 County Grants	113	1315	3011	3866	4137	4426	4736	21604

Total	2250	5000	11449	14701	15730	16830	18008	83968
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**551-626 Sewer System Rehabilitation Program - Jones Falls Sewershed**

Description: Repair and replace the wastewater collection and conveyance system. Subject to EPA/MDE Consent Decree.

Location: Jones Falls Sewershed Impact on FY 2010 Operating Budget: 0

**City of Baltimore -- Six-Year Capital Program**

## Water Resources Element

Amounts in Thousands

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	2300	10272	10272	19076	19076	19076	19076	99148
902 County Grants	0	5128	5128	9524	9524	9524	9524	48352
Total	2300	15400	15400	28600	28600	28600	28600	147500

## 551-627 Wet Weather Program

Description:	Execute Compliance Program under the SSO/CSO Consent Decree to eliminate Sanitary Sewer Overflows.
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Location:	Citywide	Impact on FY 2010 Operating Budget: 0
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<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	25078	4669	0	3328	0	3328	0	36403
902 County Grants	1922	2331	0	1672	0	1672	0	7597
Total	27000	7000	0	5000	0	5000	0	44000

## 551-681 Wastewater Facilities Security Improvements

Description:	Add, modify and upgrade security systems at the Bureau's wastewater conveyance and treatment facilities in response to Federal regulations and other security measures.
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Location:	Back River and Patapsco WWTPs	Impact on FY 2010 Operating Budget: 0
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**551-685 Back River WWTP Scum Facilities Improvements**

**Description:** Renovate scum and grease handling facilities at the Back River Wastewater Treatment Plant.

Location: 8201 Eastern Blvd. Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	500	5350	0	0	0	0	0	5850
902 County Grants	500	5350	0	0	0	0	0	5850
Total	1000	10700	0	0	0	0	0	11700

## 551-688 Back River Sodium Hypochlorite On-Site Generation

**Description:** Design and construct on-site facilities to generate sodium hypochlorite for disinfection at Back River WWTP.

Location:	Back River WWTP	Impact on FY 2010 Operating Budget: 0
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<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302 Waste Water Revenue Bonds	350	13500	0	0	0	0	0	13850
902 County Grants	350	13500	0	0	0	0	0	13850
Total	700	27000	0	0	0	0	0	27700

## 551-689 Back River WWTP Primary and Influent Facilities Rehabilitation

Description:	Evaluate capacity of Back River WWTP primary and influent facilities to handle anticipated future flows.
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Location:	Back River WWTP	Impact on FY 2010 Operating Budget: 0
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Source of Funds		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302	Waste Water Revenue Bonds	0	0	0	0	0	0	500	500
902	County Grants	0	0	0	0	0	0	500	500

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Amounts in Thousands

Total		0	0	0	0	0	0	1000	1000
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### **551-690 Wastewater Infrastructure Protection**

Description: Evaluate, design, and construct improvements to protect wastewater infrastructure from damage due to stream bed erosion.

Location: Various Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302	Waste Water Revenue Bonds	0	1700	1700	1700	1700	1700	1700	10200

Total		0	1700	1700	1700	1700	1700	1700	10200
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### **551-691 Wastewater System Strategic Plan**

Description: Funding to perform a Strategic Plan of the Baltimore Wastewater System.

Location: Citywide Impact on FY 2010 Operating Budget:

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302	Waste Water Revenue Bonds	0	1000	0	0	0	0	0	1000
902	County Grants	0	1000	0	0	0	0	0	1000

Total		0	2000	0	0	0	0	0	2000
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### **551-752 McComas St Pump Station Force Main Improvements**

Description: Design and construct improvements to the McComas Street Pump Station Force Main due to a number of emergency repairs.

Location: McComas Street Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302	Waste Water Revenue Bonds	200	1070	0	0	0	0	0	1270

Total		200	1070	0	0	0	0	0	1270
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### **551-754 Quad Ave Pump Station Force Main Improvements**

Description: Evaluate, design, and construct improvements to the Quad Avenue Pump Station Force Main due to a number of emergency repairs required over the past several years.

Location: Quad Ave Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302	Waste Water Revenue Bonds	145	567	0	0	0	0	0	712
902	County Grants	55	129	0	0	0	0	0	184

Total		200	696	0	0	0	0	0	896
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### **551-755 Dundalk Ave Pump Station Force Main Improvements**

Description: Evaluate, design, and construct improvements to the Dundalk Avenue Pump Station Force Main due to a number of emergency repairs required over the past several years.

Location: Dundalk Ave Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302	Waste Water Revenue Bonds	322	708	0	0	0	0	0	1030
902	County Grants	178	362	0	0	0	0	0	540

Total		500	1070	0	0	0	0	0	1570
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### **551-930 Uplands Wastewater Infrastructure**

Description: Provide wastewater infrastructure to support Uplands redevelopment.

Location: Uplands Impact on FY 2010 Operating Budget: 0

## City of Baltimore -- Six-Year Capital Program

### Water Resources Element

Amounts in Thousands

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302	Waste Water Revenue Bonds	1062	583	1417	0	0	0	0	3062
Total		1062	583	1417	0	0	0	0	3062

**551-932 EBDI Wastewater Infrastructure**  
 Description: Provide wastewater infrastructure to support a Life Sciences Center north of Johns Hopkins Medical Institutions.  
 Location: Middle East, Broadway, East Gay Street I, Oliver and Johnston Square

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
302	Waste Water Revenue Bonds	1290	690	738	0	0	0	0	2718
Total		1290	690	738	0	0	0	0	2718

**551-934 Cherry Hill Utility Infrastructure Study**  
 Description: Analyze existing utility infrastructure to reflect impact of sinkholes, flooding, and other infrastructure issues.  
 Location: Cherry Hill area of the City

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
401	Waste Water Utility Funds	0	100	0	0	0	0	0	100
Total		0	100	0	0	0	0	0	100

**557-031 Water Supply System Improvements**  
 Description: Repair or replace water system appurtenances that are old, broken or damaged. These improvements are to be done on a contractual basis.  
 Location: Various

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301	Water Revenue Bonds	7391	0	0	0	0	0	0	7391
402	Water Utility Funds	2085	1000	1000	1000	1000	1000	1000	8085
902	County Grants	11532	1000	1000	1000	1000	1000	1000	17532
Total		21008	2000	2000	2000	2000	2000	2000	33008

**557-070 Watershed Road and Bridge Maintenance**  
 Description: Repair or replace, clean and paint bridges and resurface roads. Rehabilitation/reconstruction to include Phoenix Road, Warren Road, Nicodemus Road, Beckleysville Road, George's Creek Road, Spook Hill Road, and Loch Raven Drive.  
 Location: Various

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301	Water Revenue Bonds	7572	3180	6900	600	600	600	600	20052
902	County Grants	5048	2120	4600	400	400	400	400	13368
Total		12620	5300	11500	1000	1000	1000	1000	33420

**557-100 Water Infrastructure Rehabilitation**  
 Description: Rehabilitate water infrastructure by cleaning and cement lining, looping dead end water mains, abandoning stubs, and replacing appurtenances in various communities as necessary.  
 Location: Various

Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301	Water Revenue Bonds	56135	15000	12500	13000	14000	15000	16000	141635
402	Water Utility Funds	1950	0	500	1000	1000	1000	1000	6450
902	County Grants	224	0	0	0	0	0	0	224



## City of Baltimore -- Six-Year Capital Program

### Water Resources Element

Amounts in Thousands

Total	58309	15000	13000	14000	15000	16000	17000	148309
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**557-101 Water Mains - Installation**

Description: Install water mains as needed to provide adequate water pressure and flows to serve users and fight fires. Such work will be performed in conjunction with work required by other City agencies such as the Dept. of Transportation.

Location: Various Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301 Water Revenue Bonds	9738	0	0	0	0	0	0	9738
402 Water Utility Funds	6092	4000	4000	4000	4000	4000	4000	30092
902 County Grants	11500	2000	2000	2000	2000	2000	2000	23500
<b>Total</b>	<b>27330</b>	<b>6000</b>	<b>6000</b>	<b>6000</b>	<b>6000</b>	<b>6000</b>	<b>6000</b>	<b>63330</b>

**557-130 Water System Cathodic Protection**

Description: Monitor the effects that the light and heavy rail systems and other corrosive sources have on the water distribution system. The work will be performed by city personnel or by consultants.

Location: Various Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301 Water Revenue Bonds	2315	0	0	0	0	0	0	2315
402 Water Utility Funds	1046	500	500	500	500	500	500	4046
902 County Grants	845	0	0	0	0	0	0	845
<b>Total</b>	<b>4206</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>7206</b>

**557-133 Meter Replacement Program**

Description: Replace aging water meters throughout the Baltimore metropolitan area with automated meter technology, and convert in-house meters to outside pit settings. This program is also to include large meter testing, repair and replacement.

Location: Various Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301 Water Revenue Bonds	5708	0	0	0	0	0	0	5708
402 Water Utility Funds	8375	500	500	500	500	500	500	11375
902 County Grants	10396	500	500	500	500	500	500	13396
<b>Total</b>	<b>24479</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>	<b>30479</b>

**557-300 Water Facilities - Annual Improvements**

Description: Repair and maintain water treatment and conveyance facilities as required as a result of unanticipated failures of equipment, operating systems or facilities.

Location: Various Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301 Water Revenue Bonds	6710	0	0	0	0	0	0	6710
402 Water Utility Funds	1800	900	900	900	900	900	900	7200
902 County Grants	5144	600	600	600	600	600	600	8744
<b>Total</b>	<b>13654</b>	<b>1500</b>	<b>1500</b>	<b>1500</b>	<b>1500</b>	<b>1500</b>	<b>1500</b>	<b>22654</b>

**557-312 Montebello WTP Filter Renovations**

Description: Upgrade existing filter boxes and controls at Water Filtration Plants. These plants were constructed in the early 20th century and require major upgrades.

Location: 3901 Hillen Rd Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
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# City of Baltimore -- Six-Year Capital Program

## Water Resources Element

Amounts in Thousands

301	Water Revenue Bonds	5492	0	13500	0	6600	0	0	25592
902	County Grants	3639	0	9000	0	4400	0	0	17039
Total		9131	0	22500	0	11000	0	0	42631

### 557-400 Valve and Hydrant Exercising - Annual

Description: Exercise (operate) and/or repair or replace water valves and fire hydrants, including cleaning and lining of related piping that is broken or damaged, on an urgent "as-needed" basis.

Location: Citywide Impact on FY 2010 Operating Budget: 0

Source of Funds		Appr. To Date	2010	2011	2012	2013	2014	2015	Total
301	Water Revenue Bonds	8535	0	0	0	0	0	0	8535
402	Water Utility Funds	11664	1000	1000	1000	1000	1000	1000	17664
902	County Grants	12853	1000	1000	1000	1000	1000	1000	18853
Total		33052	2000	2000	2000	2000	2000	2000	45052

### 557-501 Montebello Water Filtration Plant Laboratory Facilities

Description: Design and construct new laboratory facilities at the existing Montebello Water Filtration Plant.

Location: Montebello Water Filtration Plant Impact on FY 2010 Operating Budget: 0

Source of Funds		Appr. To Date	2010	2011	2012	2013	2014	2015	Total
301	Water Revenue Bonds	0	600	0	3900	0	0	0	4500
902	County Grants	0	400	0	2600	0	0	0	3000
Total		0	1000	0	6500	0	0	0	7500

### 557-502 Water System Strategic Plan

Description: Funding to perform a Strategic Plan of the Baltimore Water System.

Location: Citywide Impact on FY 2010 Operating Budget: 0

Source of Funds		Appr. To Date	2010	2011	2012	2013	2014	2015	Total
301	Water Revenue Bonds	0	1200	0	0	0	0	0	1200
902	County Grants	0	800	0	0	0	0	0	800
Total		0	2000	0	0	0	0	0	2000

### 557-638 Water Audit

Description: Perform a Water Audit of the Baltimore Water System to evaluate and reduce the percentage of water loss.

Location: Citywide Impact on FY 2010 Operating Budget: 0

Source of Funds		Appr. To Date	2010	2011	2012	2013	2014	2015	Total
301	Water Revenue Bonds	1225	0	0	0	0	0	0	1225
402	Water Utility Funds	300	600	600	600	600	600	600	3900
902	County Grants	975	400	400	400	400	400	400	3375
Total		2500	1000	1000	1000	1000	1000	1000	8500

### 557-689 Urgent Needs Water Engineering Services

Description: Investigate, report, recommend, design and prepare biddable documents for the repair or rehabilitation of facilities within the water system.

These Architectual/Engineering Consultant Services will be provided on an as-needed basis.

Location: Various Impact on FY 2010 Operating Budget: 0

Source of Funds		Appr. To Date	2010	2011	2012	2013	2014	2015	Total
301	Water Revenue Bonds	2475	900	0	900	0	900	0	5175

# City of Baltimore -- Six-Year Capital Program

## Water Resources Element

Amounts in Thousands

902	County Grants	1525	600	0	600	0	600	0	3325
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Total		4000	1500	0	1500	0	1500	0	8500
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### 557-696 Chlorine Handling Safety Improvements WC-1150

Description: Provide safety improvements by eliminating gaseous chlorine at each of the 15 chlorination facilities, including the Montebello Plants and substitution of sodium hypochlorite facilities.

Location: Various Impact on FY 2010 Operating Budget: 950

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301	Water Revenue Bonds	21850	1911	0	0	0	0	0	23761
902	County Grants	18850	3089	0	0	0	0	0	21939

Total		40700	5000	0	0	0	0	0	45700
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### 557-713 Towson Finished Water Reservoir Improvements

Description: Design covers and/or replace structures at Towson Finished Water Reservoir, including valve replacements and control improvements.

Location: 401 Hillen Road Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301	Water Revenue Bonds	11343	5310	0	0	0	0	0	16653
902	County Grants	20657	9690	0	0	0	0	0	30347

Total		32000	15000	0	0	0	0	0	47000
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### 557-714 Guilford Finished Water Reservoir Improvements

Description: Design covers and/or replace structures at Guilford Finished Water Reservoir, including valve replacements and control improvements.

Location: Millbrook Road & Old Cold Spring Lane Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301	Water Revenue Bonds	0	0	15171	0	0	0	0	15171
902	County Grants	0	0	27629	0	0	0	0	27629

Total		0	0	42800	0	0	0	0	42800
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### 557-715 Ashburton Finished Water Reservoir Improvements

Description: Design covers and/or replace structures at Ashburton Finished Water Reservoir, including valve replacements and control improvements.

Location: 3208 Powhattan Avenue Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301	Water Revenue Bonds	1200	0	0	0	0	0	18000	19200
902	County Grants	800	0	0	0	0	0	12000	12800

Total		2000	0	0	0	0	0	30000	32000
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### 557-716 Druid Lake Finished Water Reservoir Improvements

Description: Design covers and/or replace structures at Druid Lake Finished Water Reservoir, including valve replacements and control improvements.

Location: 718 Druid Park Lake Drive Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301	Water Revenue Bonds	3060	0	0	0	19584	0	0	22644
902	County Grants	1940	0	0	0	12416	0	0	14356

Total		5000	0	0	0	32000	0	0	37000
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### 557-730 Fullerton Water Filtration Plant

## City of Baltimore -- Six-Year Capital Program

### Water Resources Element

Amounts in Thousands

Description: Design and construct a new water filtration plant in the Fullerton Area of Baltimore County. The facility is needed to treat water from the Susquehanna River and will have an initial capacity of approximately 100 MGD.

Location: Belair Road - Baltimore County Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301 Water Revenue Bonds	400	5000	0	0	0	97600	0	103000
902 County Grants	3600	20000	0	0	0	390400	0	414000
<b>Total</b>	<b>4000</b>	<b>25000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>488000</b>	<b>0</b>	<b>517000</b>

#### **557-731 Montebello Water Recycle Program WC-1131**

Description: Design and construct a water recycling facility at the Montebello Water Treatment Plant. The facility is to reduce the demand on raw water supplies and minimize the impact on the environment.

Location: 3901 Hillen Road Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301 Water Revenue Bonds	1319	0	11700	0	0	0	0	13019
902 County Grants	781	0	7800	0	0	0	0	8581
<b>Total</b>	<b>2100</b>	<b>0</b>	<b>19500</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21600</b>

#### **557-732 Monitoring Water Transmission Mains**

Description: Perform an inspection program to evaluate the condition of prestressed pipelines used to transmit potable water throughout the City's water distribution system.

Location: Various Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
402 Water Utility Funds	1750	500	500	500	500	500	500	4750
902 County Grants	1750	500	500	500	500	500	500	4750
<b>Total</b>	<b>3500</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>	<b>9500</b>

#### **557-915 Maintenance Buildings at Prettyboy, Loch Raven and Liberty Dams**

Description: Evaluate condition of the existing maintenance facilities at the Prettyboy, Loch Raven and Liberty Dams and design and construct recommended improvements.

Location: Prettyboy Dam, Loch Raven Dam and Liberty Dam Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301 Water Revenue Bonds	3488	2568	750	0	9000	0	0	15806
902 County Grants	2312	1712	500	0	6000	0	0	10524
<b>Total</b>	<b>5800</b>	<b>4280</b>	<b>1250</b>	<b>0</b>	<b>15000</b>	<b>0</b>	<b>0</b>	<b>26330</b>

#### **557-917 Water Pumping Stations Annual Improvements**

Description: Rehabilitate, repair, replace, and/or maintain water pumping station facilities to maintain the operational function and performance reliability of aging systems and to address Citywide Homeland Security concerns.

Location: Various Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>	<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301 Water Revenue Bonds	900	3150	0	0	0	0	0	4050
902 County Grants	1100	3850	0	0	0	0	0	4950
<b>Total</b>	<b>2000</b>	<b>7000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9000</b>

#### **557-930 Uplands Water Infrastructure**

Description: Provide water Infrastructure to support Uplands redevelopment.

# City of Baltimore -- Six-Year Capital Program

## Water Resources Element

Amounts in Thousands

Location: Uplands Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301	Water Revenue Bonds	927	600	1500	0	0	0	0	3027
Total		927	600	1500	0	0	0	0	3027

**557-932**

### EBDI Water Infrastructure

Description: Provide water infrastructure to support a Life Sciences Center north of Johns Hopkins Medical Institutions.

Location: Middle East, Broadway, East Gay Street, Oliver and Johnston Square Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301	Water Revenue Bonds	1126	602	0	0	0	0	0	1728
Total		1126	602	0	0	0	0	0	1728

**557-934**

### Cherry Hill Utility Infrastructure Study

Description: Analyze existing utility infrastructure to guide physical improvements in the Cherry Hill area during build-out.

Location: Cherry Hill area of the City Impact on FY 2010 Operating Budget: 0

<u>Source of Funds</u>		<u>Appr. To Date</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>Total</u>
301	Water Revenue Bonds	0	100	0	0	0	0	0	100
Total		0	100	0	0	0	0	0	100