



New York City Council

Christine C. Quinn, Speaker

Finance Division

Preston Niblack, Director

Jeffrey Rodus, First Deputy Director

Hearing on the Mayor's Fiscal Year 2012 Executive Budget

Department of Environmental Protection

May 17, 2011

The Committee on Finance

Hon. Domenic M. Recchia, Jr., Chair

The Committee on Environmental Protection

Hon. James F. Gennaro, Chair

Andy Grossman, Deputy Director

Kate Seely-Kirk, Senior Legislative Financial Analyst

Overview

The Department of Environmental Protection (DEP or the Department) protects the environmental health, welfare, and natural resources of the City and its residents. The Department manages the City's water and wastewater system (the System), including 19 reservoirs and three controlled lakes, which provides more than one billion gallons of quality drinking water daily to more than eight million New York City residents and one million in nearby counties.¹ The wastewater system includes fourteen in-City wastewater treatment plants and treats 1.3 billion gallons of wastewater daily.² DEP also implements federal Clean Water Act rules and regulations, handles hazardous materials emergencies and toxic site remediation, oversees asbestos monitoring and removal, enforces the City's air and noise codes, bills and collects on approximately 835,000 water and sewer accounts, and manages citywide water conservation programs.³

Department of Environmental Protection Financial Summary

Dollars in Thousands

	2009 Actual	2010 Actual	2011 Adopted	2011 Exec. Plan	2012 Exec. Plan	Difference 2011–2012*
Spending						
Personal Services	\$424,346	\$684,280	\$452,710	\$458,105	\$454,668	\$1,958
Other Than Personal Services	609,749	786,650	564,112	556,753	581,419	17,307
TOTAL	\$1,034,095	\$1,470,930	\$1,016,822	\$1,014,858	\$1,036,087	\$19,265
Budget by Program Area						
Water & Sewer Maintenance & Operations	\$250,733	\$428,530	\$198,143	\$182,497	\$192,134	(\$6,009)
Wastewater Treatment Operations	367,104	606,446	389,300	390,230	387,125	(2,175)
Upstate Water Supply	231,988	254,959	255,508	252,781	277,063	21,555
Customer Services & Water Board Support	47,020	46,322	49,575	50,194	48,023	(1,552)
Engineering Design and Construction	30,278	31,769	31,774	31,715	36,009	4,235
Environmental Management	15,373	16,211	14,660	14,554	14,347	(313)
Environmental Control Board	7,988	92	58	10	10	(48)
Agency Administration & Support	80,020	79,538	76,709	77,574	80,407	3,698
Miscellaneous	3,590	7,062	1,095	15,303	969	(126)
TOTAL	\$1,034,095	\$1,470,930	\$1,016,822	\$1,014,858	\$1,036,087	\$19,265
Funding						
City Funds	N/A	N/A	\$956,280	\$936,932	\$970,759	\$14,479
Federal – Other	N/A	N/A	240	17,206	123	(117)
Intra-City	N/A	N/A	1,182	1,527	1,195	13
Other Categorical	N/A	N/A	0	0	0	0
Capital IFA	N/A	N/A	59,120	59,120	64,010	4,890

¹ See New York City Water Board, *Public Information Regarding Water and Wastewater Rates* (April 2011) at 1.

² See The City of New York, *Ten-Year Capital Strategy Fiscal Years 2012 - 2021* (May 2011) at 35.

³ See New York City Department of Environmental Protection, *Strategy 2011 - 2014* (February 2011) at 5.

	2009	2010	2011	2012	Difference	
	Actual	Actual	Adopted	Exec. Plan	2011-2012*	
State	N/A	N/A	0	73	0	
TOTAL	N/A	N/A	\$1,016,822	\$1,014,858	\$1,036,087	\$19,265
Positions						
Full-Time Positions - Civilian	5,785	5,749	5,968	6,007	5,938	(30)
TOTAL	5,785	5,749	5,968	6,007	5,938	(30)

*Difference refers to the variance between the Fiscal 2011 Adopted Budget and the Fiscal 2012 Executive Budget.

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The Department's Fiscal 2012 Executive Budget is \$1.04 billion, which is \$19.3 million more than its Fiscal 2011 Adopted Budget. At the time of the Fiscal 2011 Budget Adoption, the estimate for Fiscal 2012 was \$31.2 million less than the Fiscal 2011 budget of \$1.02 billion. Net changes in the Fiscal 2012 Preliminary Budget increased the Fiscal 2012 budget by \$1.7 million, and net changes in the Fiscal 2012 Executive Budget added \$48.8 million.

Fiscal 2012 Executive Budget Actions

- ☑ In the Executive Capital Commitment Plan for Fiscal 2012-2015 DEP's commitments of \$7.04 billion make up more than 25 percent of the City's total of \$28.1 billion (including City and Non-City funds).
- ☑ The Executive Budget includes a reduction of 108 budgeted DEP positions that serve the System, at a savings of \$9.4 million. Of these 108 positions 86 are existing vacancies, 21 will be met through attrition, and 1 will be a layoff. DEP is streamlining operations in an effort to minimize the Fiscal 2012 water rate increase.
- ☑ The Program to Eliminate the Gap (PEG) program for DEP totals \$31.4 million for Fiscal 2012. This is more than offset by new needs of \$47.8 million that include \$13.9 million for fuel, gas and utilities due to an increase in prices and new facilities coming online.

Additionally there is \$32.4 million of other adjustments with highlights such as: privately contracted support for the Bureau of Customer Service's billing system; upkeep by the Bureau of Water Supply of an upstate wastewater treatment plant, which DEP is legally obligated to help maintain as part of the Filtration Avoidance Determination; catch basin, sewer, and Combined Sewer Overflow (CSO) facility cleaning to keep the system operating at maximum capacity to minimize CSO during storms; and a projected increase in upstate real estate taxes.

The net change between the Preliminary and Executive Budget is \$48.8 million.

Budget Actions in the Executive Plan

<i>Dollars in Thousands</i>	FY 2011			FY 2012		
	City	Non-City	Total	City	Non-City	Total
Agency Budget as of the February 2011 Plan	\$958,453	\$77,565	\$1,036,018	\$926,953	\$60,347	\$987,301
Programs to Eliminate the Gap (PEGs)						
OTPS Reduction	\$0	\$0	\$0	(\$11,829)	\$0	(\$11,829)
Baselined OTPS Reduction	0	0	0	(9,999)	0	(9,999)
Headcount Reduction and Vacancies	0	0	0	(9,389)	0	(9,389)
Intra-City	0	0	0	0	(21)	(21)
Reduction to DERTA - Part-Time Budget	0	0	0	(34)	0	(34)
Reduction to DERTA - Vacancies	0	0	0	(89)	0	(89)
Total, PEGs	\$0	\$0	\$0	(\$31,340)	(\$21)	(\$31,361)
Other Adjustments						
BCS Longevity Differential	\$0	\$0	\$0	\$361	\$0	\$361
Federal Grants	0	14	14	0	0	0
DEC Consent Order	0	0	0	(24)	0	(24)
DEP Misc. PS Reductions	0	0	0	16	0	16
Fringe Benefit Adjustment	0	0	0	1,941	0	1,941
Lease Adjustment, Fuel, Gas, & Utilities	(5,418)	0	(5,418)	13,880	65	13,944
Longevity/ Service Increments	7	2	9	9	2	11
PlaNYC Intra-City Transfer	0	345	345	0	0	0
Reduction to DERTA - Part Time & Vacancy	0	0	0	21	0	21
Tax Levy Rollovers	(90)	0	(90)	90	0	90
Utility Rollovers	(16,022)	0	(16,022)	16,022	0	16,022
Total, Other Adjustments	(\$21,523)	\$361	(\$21,162)	\$32,317	\$67	\$32,383
New Needs						
Bureau Customer Service	\$0	\$0	\$0	\$5,141	\$0	\$5,141
Bureau of Police & Security Overtime	0	0	0	200	0	200
Bureau of Water Supply (Upstate)	0	0	0	5,687	0	5,687
Bureau of Water and Sewer Operations	0	0	0	154	0	154
Bureau for Wastewater Treatment	0	0	0	1,710	0	1,710
Catch Basin, Sewer, and CSO Plant Cleaning	0	0	0	4,962	0	4,962
Catskill/Delaware Ultraviolet Disinfection Plant FY 12 New Needs.	0	0	0	5,030	0	5,030
Croton Forestry MOU with NYC Parks Dept.	0	0	0	1,369	0	1,369
Chemicals	0	0	0	2,326	0	2,326
Green Infrastructure Plan	0	0	0	1,627	200	1,827
IFA Adjustments & DOI MOU	0	0	0	1,125	4,735	5,860
Jamaica Bay Nitrogen Reduction	0	0	0	0	2,000	2,000
Marine Science Personnel	0	0	0	109	0	109
Newtown Creek WPCP Contracts	0	0	0	1,500	0	1,500
Software Maintenance	0	0	0	2,943	0	2,943
Tax Litigation Avoidance Program	0	0	0	500	0	500
Upstate Property Taxes	0	0	0	6,447	0	6,447
Total, New Needs	\$0	\$0	\$0	\$12,892	6,935	\$47,764
Total, All Changes	(\$21,523)	\$361	(\$21,162)	\$13,868	\$6,981	\$48,786
Agency Budget as of the Executive 2012 Plan	\$936,930	\$77,926	\$1,014,856	\$940,821	\$67,328	\$1,036,087

Program to Eliminate the Gap (PEGs)

- ☑ DEP is unique in that it is mostly funded by revenues from water and sewer charges, and because of this DEP is not subject to the City-wide PEG program.⁴ However, under the leadership of Commissioner Holloway, DEP has instituted a voluntary PEG program.
- ☑ **OTPS Reduction** – The Department has identified \$11.8 million in cuts to Other Than Personal Services (OTPS) in Fiscal 2012, and an additional \$9.9 million in OTPS savings that will be recurring from Fiscal 2012 onward.
- ☑ **Additional Revenue** – The Department anticipates \$454,000 in recurring additional revenue starting in Fiscal 2012 from an upsurge in asbestos violations. This is partially attributable to more frequent weekend and after-hours inspections, and partially due to a higher percentage of inspections that yield violations.

Increased earnings of \$171,000 are expected from DEP's Hydroelectric Program on a recurring basis starting in Fiscal 2012. As the City's water flows from the reservoirs into the aqueducts, the water turns turbines creating electricity which generates revenue for the City.

⁴ According to the Administration, approximately 90% of DEP's revenue stream is obtained through water and sewer rates, while the remaining 10% is supported by tax levy funding.

Capital Program

Capital Budget Summary

The May 2011 Capital Commitment Plan includes \$7.04 billion in Fiscal 2012-2015 for the Department (including City and Non-City funds). This represents more than 25 percent of the City’s total \$28.1 billion Executive Plan for Fiscal 2012-2015. The agency’s Executive Commitment Plan for Fiscal 2012-2015 is 34.4 percent more than the \$5.24 billion scheduled in the September Commitment Plan, an increase of \$1.8 billion.

Over the past five years (2006-2010), DEP has only committed an average of 79 percent of its annual capital plan. Therefore, it is assumed that a portion of the agency’s Fiscal 2011 Capital Plan will be rolled into Fiscal 2012, thus increasing the size of the Fiscal 2012-2015 Capital Plan. Since adoption last June, the Capital Commitment Plan for Fiscal 2011 has decreased from \$2.3 billion to \$2.1 billion, a reduction of \$243.1 million or 10.4 percent. The decrease is somewhat offset by an increase in Fiscal 2012 in the Executive Budget, which is partially explained by the rolling of continuing capital projects from Fiscal 2011 to Fiscal 2012 and beyond.

Currently the Department’s remaining appropriations total \$5.5 billion in City-funds for Fiscal 2011. These appropriations are to be used to finance the remaining portion of the agency’s \$1.2 billion City-funded Fiscal 2011 Capital Commitment Program. The agency has \$4.4 billion, or approximately 378 percent, more funding than it needs to meet its entire Capital Commitment Program for the current fiscal year.

2011-2015 Commitment Plan: Adopted and Executive Budgets

Thousands of Dollars

	FY11	FY12	FY13	FY14	FY15	Total FY12 – FY15
Adopted						
Total Capital Plan	\$2,330,197	\$1,345,604	\$1,247,956	\$1,309,672	\$1,333,193	\$5,236,425
Executive						
Total Capital Plan	\$2,087,137	\$2,143,988	\$1,945,277	\$1,615,240	\$1,333,092	\$7,037,597
Change						
Level	(\$243,060)	\$798,384	\$697,321	\$305,568	(\$101)	\$1,801,172
Percentage	10.43%	59.37%	55.88%	23.33%	0.01%	34.40%

Capital Program Goals⁵

- ✓ Maintain water quality through protecting the City’s watersheds, and treating the water supply as needed.
- ✓ Provide upkeep to and improve upon the water distribution system.

⁵ See The City of New York, *Ten-Year Capital Strategy Fiscal Years 2012 - 2021* (May 2011) at 35.

- ✓ Improve the City's surrounding waterways by upgrading wastewater treatment facilities and reducing combined sewer overflows.
- ✓ Provide upkeep to, improve upon and extend the wastewater collection system.

Executive 2012-2015 Commitment Plan by Capital Program Area

Dollars in thousands

	FY12	FY13	FY14	FY15	Total FY12 – FY15
Equipment (EP)	\$121,395	\$1,247,956	\$1,309,672	\$1,333,193	\$4,012,216
Sewers (SE)	449,502	1,945,277	1,615,240	1,333,092	\$5,343,111
Water Mains, Sources and Treatment (WM)	964,339	697,321	305,568	-101	\$1,967,127
Water Pollution Control (WP)	438,536	1	0	0	\$438,537
Water Supply (W)	170,216	0	0	0	\$170,216
TOTAL	\$2,143,988	\$3,890,555	\$3,230,480	\$2,666,184	\$11,931,207

Executive Budget Highlights

The three entities that ensure the physical and fiscal integrity of the water and wastewater system are DEP, the New York City Water Board (Water Board) and the New York City Municipal Water Finance Authority (Water Authority).

The Water Board and the Water Authority were created in 1984 by a special act of the State legislature known as the "New York City Municipal Finance Authority Act".⁶ This Act governs the operational and financial relationship between the City, the Water Board and the Water Authority.

DEP's capital program is financed by bonds issued by the Water Authority, by agreement with the Water Board, which is charged with maintaining a revenue stream sufficient to pay debt service on the Water Authority's bonds and to keep the System self-sustaining.⁷ The Water Board sets water and wastewater rates for the System's nine million customers.

While the Administration asked other agencies, funded by General Obligation bonds, to identify a 20 percent reduction in capital commitments for fiscal years 2011 to 2021, DEP was not required to.

The Department's ten-year Capital Plan instead increases to \$12.6 billion. Of the total, \$12.3 billion is financed by the sale of Water Authority bonds and \$305.2 million is from non-City funding.⁸

Ten-Year Strategy

Maintaining the long-term integrity of the system is critical to the City's continued growth and success. New York City's population is expected to grow by over one million residents by 2030.⁹

⁶ See New York Public Authorities Law § 1045-a et seq.

⁷ See *id.*

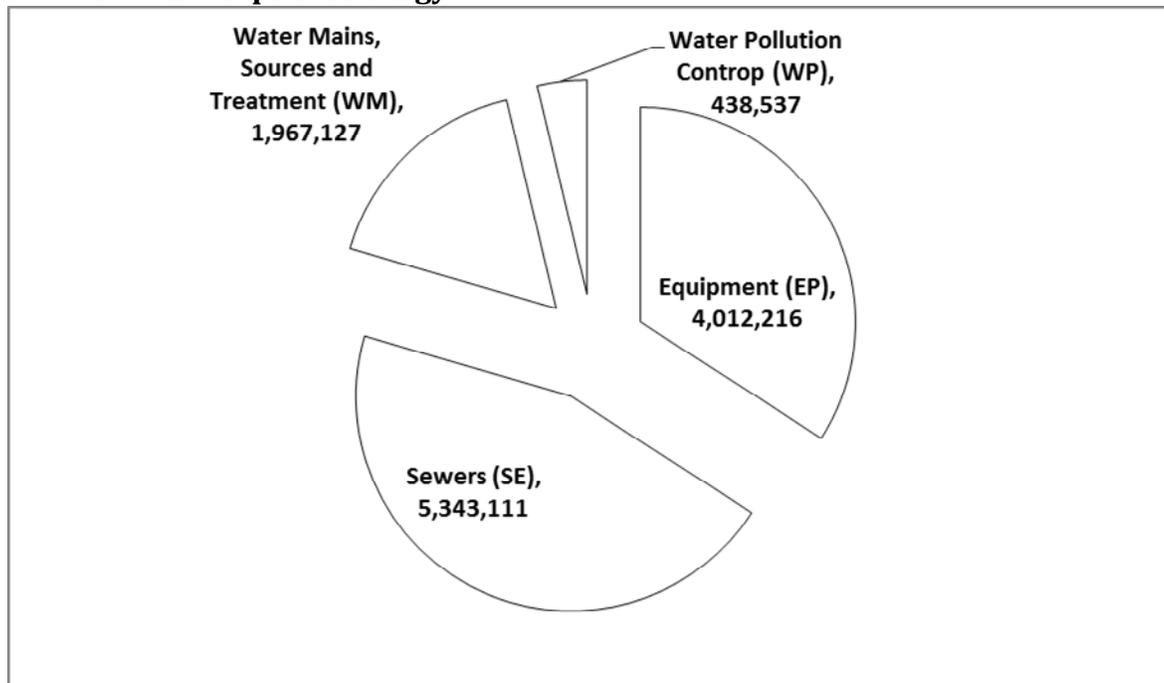
⁸ See The City of New York, *Executive Budget Fiscal Year 2012 Message of the Mayor* (2011) at 155.

⁹ See *id.* at 1.

There are huge costs associated with maintaining and improving the System, particularly due to unfunded State and Federal mandates with inflexible timelines. According to the Water Board’s annual report on its water rate proposal, “...for fiscal years 2002 through 2010, 72% of DEP’s capital commitments were directed for mandated projects. While the ratio of mandated to non-mandated capital projects will drop from 2012 onward, DEP’s current daily capital expenditure rate is nearly \$9 million per day on construction, design and construction management. The capital expenditures DEP has incurred were financed through debt that will be repaid over the next thirty years.”¹⁰ It is projected that debt service alone will make up 42% of the System’s Fiscal 2012 budget.¹¹

While a costly Capital Commitment Plan is unavoidable, the Department acknowledges the burden falls on rate payers and, “seeks to balance necessary investment in this vital service with as moderate an impact on City water and sewer ratepayers as can be achieved.”¹²

DEP Ten-Year Capital Strategy



The Ten-Year Capital Commitment Plan totals \$12.6 billion. Broken out by program area it includes: \$4.2 billion for Water Pollution Control; \$2.5 billion for Water Supply; \$3.3 billion for Water Mains, Sources and Treatments; \$1.8 billion for Sewers; and \$7.6 million for Equipment.

Major highlights comparing the Fiscal 2011 Adopted Capital Plan to the Fiscal 2012 Executive Capital Plan include:

¹⁰ See *id.* at 2.

¹¹ See New York City Water Board, *Public Information Regarding Water and Wastewater Rates* (April 2011) at 1.

¹² See The City of New York, *Ten-Year Capital Strategy Fiscal Years 2012 - 2021* (May 2011) at 35.

☑ **Delaware Aqueduct:** Due to a leaking portion of the Delaware Aqueduct, also known as Rondout-West Branch Tunnel (RWBT), a new 3-mile tunnel is being built to bypass the leak. Funding for this project increased by \$682.9 million to \$938.8 million through Fiscal 2015. This funding increase is due to the Department reassessing the seriousness of the leak and consequently raising its priority level. During construction, when the bypass is being connected, the entire Delaware Aqueduct will need to be shut down from the City's water supply for an extended period of time. Currently the aqueduct carries approximately half of New York City's (NYC) drinking water to more than eight million people daily—approximately 500 million gallons per day. Its capacity is up to 900 million gallons of water a day.

There are other costs of \$791.4 million through Fiscal 2015 associated with this project as the Department takes action to ensure that there will not be service impacts.

☑ **New Jersey Interconnections:** The sum of \$306.4 million has been added through Fiscal 2015 as one measure to ensure continuity of the City's water supply during the construction of the RWBT bypass tunnel. This project will connect Staten Island with the New Jersey Middlesex Water Company and New Jersey American Water.

☑ **Plant Upgrading and Reconstruction:** The sum of \$586.7 million was reallocated from Plant Upgrading and reconstruction in the Plan through Fiscal 2015. The budget line in question consisted of upgrading components of plants that are aged and obsolete. Funds were reallocated to other plant reconstruction projects.

☑ **Shaft 17B, Shaft 18B, and Valve Chamber:** There is a reduction of \$291.2 million through Fiscal 2015 when compared to the September Capital Plan due to a revised project schedule that pushed these funds to Fiscal 2021. This important project will connect the City's 3rd Water Tunnel to the existing distribution network. Shafts 17B and 18B are located in the borough of Queens.

☑ **Adaptive Management Strategy for Green Infrastructure:** A significant number of Capital Plan funding items have been reprioritized due to the creation of the Green Infrastructure Program (GIP) which incorporates a lot of different techniques to handle Combined Sewer Overflows (CSOs) without building massive tanks and tunnels (grey infrastructure) that the City had previously relied on. Through Fiscal 2015, \$190.8 million has been reallocated and consolidated into GIP, and another \$544.2 million was allocated through Fiscal 2021. As projects are identified, available funding will be available. Some examples of projects underway now are the rain barrel giveaway program, street-side swales and enhanced tree pits, and rooftop detention, including green and blue roofs.

The GIP reflects the City's goal to improve water quality outlined in PlaNYC 2030 by reducing CSOs into waterways by 40% by 2030, and many of the pilot programs already under way in Jamaica Bay are in accordance with Local Law 71 of 2005 (as amended in 2006). Additionally, Local Law 5 of 2008 required the Administration to develop and implement a sustainable storm water management plan with the goal of reducing the approximately 27 billion gallons of untreated sewage and storm water that is discharged into the City's waters in a typical year.

☑ **Jamaica Bay Watershed Protection Plan:** First issued in 2007, the Jamaica Bay Watershed Protection Plan focuses on water quality improvements, ecological restoration and enhancing valuable natural resources. The plan was undertaken in accordance with Local Law 71, which requires DEP to assess the technical, legal, environmental and economic feasibility of protection measures for Jamaica Bay and produce a report every three years. An Updated plan

was issued in October 2010 that includes wastewater treatment plant upgrades, oyster and eelgrass pilot restoration projects, a wetlands restoration at Paerdegat Basin, green infrastructure projects such as streetside swales and enhanced tree pits, and wetlands mapping. These pilot programs are already under way and are funded under GIP as outlined above.

Another example of the protection plan's prioritization in the Executive Capital Budget is the addition of \$110 million through fiscal 2015 for the rebuilding of the 26th Ward primary settling tank. This project will lead to reduced CSO from the wastewater treatment plant.

- Job Order Contracting Program Citywide at Various WPCPs:** Funds were reallocated and consolidated into the Job Order Contracting (JOC) project in the amount of \$196 million for critical Capital upgrades and repairs at the City's 14 Water Pollution Control Plants (WPCPs) and other collection facilities in the Plan through 2015, and an additional \$402 million has been made available through Fiscal 2021. These funds were taken from projects focused on individual plants. Optimizing the operating systems at the wastewater treatment plants so they can handle more flow is one technique that helps minimize CSOs. The JOC program is a contracting tool that gives DEP more flexibility and is more efficient. This marks a revamping of the Agency's old planning strategies, and is complimentary to the GIP.

DEP's Ten Year Capital Strategy has increased by approximately \$500 million, or 4.1 percent, from the \$12.1 billion Preliminary Ten Year Capital Strategy which was issued in February 2011. The increase includes \$366 million in ongoing projects that have rolled over from Fiscal 2011 in to Fiscal 2012 and beyond.

Appendix A: Budget Actions in the November and February Plans

<i>Dollars in thousands</i>	FY 2011			FY 2012		
	City	Non-City	Total	City	Non-City	Total
Agency Budget as of June 2010 Plan	\$956,280	\$60,541	\$1,016,821	\$925,255	\$60,378	\$985,633
Programs to Eliminate the Gap (PEGs)						
ECB - Technical Adjustment	(\$21)	\$0	(\$21)	(\$21)	\$0	(\$21)
FY 2011 PS Reduction	(29)	0	(29)	0	0	0
Intra-City with DEP	0	(31)	(31)	0	(31)	(31)
Reduction to DERTA- Part-Time Budget	(70)	0	(70)	(145)	0	(145)
Reduction to DERTA- Vacancy	(88)	0	(88)	(89)	0	(89)
Total, PEGs	(\$209)	(\$31)	(\$240)	(\$255)	(\$31)	(\$286)
New Needs						
Landfill Remediation	\$2,336	\$0	\$2,336	\$1,901	\$0	\$1,901
Total, New Needs	2,336	\$0	\$2,336	\$1,901	\$0	\$1,901
Other Adjustments						
Biowatch	\$0	\$4,687	\$4,687	\$0	\$0	\$0
Brownsfields	0	17	17	0	0	0
Buffer Zone- Police	0	318	318	0	0	0
Bzpp chem grant	0	654	654	0	0	0
DEP- DOI Technical Adjustment	24	0	24	24	0	25
Igrmif	0	73	73	0	0	0
Reduction to DERTA - Part Time	5	0	5	10	0	10
Reduction to DERTA - Vacancy	17	0	17	18	0	18
Remed - Rodm. Neck Fir. Range	0	30	30	0	0	0
Shsg'07	0	1,161	1,161	0	0	0
Shsg'08	0	1,398	1,398	0	0	0
Uasi'07	0	494	494	0	0	0
Water Security Initiative	0	8,223	8,223	0	0	0
Total, Other Adjustments	\$46	\$17,055	\$17,101	\$52	\$0	\$53
Total, All Changes	\$2,173	\$17,024	\$19,197	\$1,698	(\$31)	\$1,668
Agency Budget as of February 2011 Plan	\$958,453	\$77,565	\$1,036,018	\$926,953	\$60,347	\$987,301