BEFORE THE

PHILADELPHIA WATER, SEWER AND STORM WATER RATE BOARD

PHILADELPHIA WATER DEPARTMENT	**)** **)**	**FY17-2018 RATES**

PUBLIC ADVOCATE

HEARING EXHIBIT I

April 5, 2016

Itemization of Public Advocate Adjustments
Revenue Requirements in 000s

Line No.	Description of Adjustment	PA St.-1	2017	2018
1.	Revenue Growth Rate	Pp. 17-19	($5,960)	($9,493)
2.	Billing Adjustment	Pp. 19-20	($2,934)	($3,155)
3.	Liquidated Encumbrance Percentage	Pp. 31-32	($12,608)	($12,893)
4.	Payroll Spend Factor Adjustment	Pp. 22-23	($5,026)	($5,177)
5.	Pension Spend Factor Adjustment	Pp. 23-24	$852	$721
6.	PWD Additional Adjustments	Pp. 34-37	($16,892)	($16,178)
7.	Escalation Factor	Pp. 26-31	($1,543)	($3,624)
8.	Contributions/Indemnity Spend Factor	Pp. 24-25	($1,515)	($1,515)
9.	Change in Debt Interest Rate	Pp. 32-33		($675)
10.	Inter-Departmental Impacts	--	($3,297)	($4,139)

Note: Prepared by Lafayette K. Morgan, Jr., utilizing proprietary B&V rate model.

PA-MAB-1 Regarding the Direct Testimony of Mr. Clare, page 2, please provide a schedule supporting and detailing a breakdown of the following major cost factors; for example, in a) below, the schedule should show a separate calculation for each category of personnel costs and the corresponding revenue need:

a) increased personnel costs (pensions, wages, health care and fringe benefits) - 17.6% of revenue need;

b) increased debt service associated with Capital Program - 17.0% of revenue need;

c) increased costs of materials, services, supplies, general inflation and new programs - 20.6% of revenue need;

d) costs related to maintaining the Rate Stabilization Fund at targeted levels in line with major "A" and "AA" rated utilities (to provide increased liquidity, working capital and a reserve for contingencies) - 11.5% of revenue need;

e) increased costs associated with escalating regulatory requirements - 10.2% of revenue need;

f) costs related to revised financial plan and strategies to improve the financial sustainability of the Department - 8.2% of revenue need;

g) increased costs associated with customer assistance programs - 6.6% of revenue need;

h) decrease in revenue due to water conservation and related measures - 4.9% of revenue need; and

i) costs related to the replacement of the debt reserve surety - 3.4% of revenue need.

PWD Witness: Joseph S. Clare, III, Deputy Water Commissioner

Response: The table below details projected revenue requirements associated with each of the major cost factors. See also, responses to SI-1, SI-88 through SI-94, SI-100, SI-101.

Cost Factors and Breakdown of Revenue Requirement

Description of Major Cost Factor	Breakdown of Revenue Requirement Associated with Major Cost Factors
Personnel Costs (pensions, wages, health care and fringe benefits) – 17.6% of revenue need or $64.021 million.	Projected revenue requirements for personnel costs is comprised of projected increases in pension costs of $45.946 million and other fringe benefits of $18.073 million.
Debt Service associated with Capital Program - 17.0% of revenue need or $62.408 million.	Projected revenue requirements for debt service is related to capital repairs and replacements of $52.016 million; and projected increases in debt service costs related to flood mitigation projects of $10.302 million.
Materials, Services, Supplies, General Inflation and New Programs - 20.6% of revenue need or $75.049 million.	Projected revenue requirements in this area are made up of projected increases in operation and maintenance costs of $41.982 million; and projected increases in operation and maintenance costs related to new programs of $33.067 million.
Rate Stabilization Fund ("RSF") at targeted levels in line with major "A" and "AA" rated utilities (to provide increased liquidity, working capital and a reserve for contingencies) - 11.5% of revenue need or $42.002 million.	Revenue requirement is calculated based upon calculated decreases in Rate Stabilization Fund withdrawals in order to maintain a $100.0 million minimum instead of the previously targeted $45.0 million minimum RSF balance.
Regulatory Requirements - 10.2% of revenue need or $37.26 million.	Revenue requirement associated with projected increases in (i) debt service costs related to the Long Term Control Plan ("LTCP") of $17.434 million; (ii) operation and maintenance costs of $6.449 million related to the maintenance of "green" infrastructure; and (iii) operation and maintenance costs of $13.378 million related to new LTCP programs.
Financial Plan and strategies to improve the financial sustainability of the Department - 8.2% of revenue need or $29.872 million.	Revenue requirement associated with increasing debt service coverage from 1.20x to 1.30x (comparable to "AA" rated utilities).
Customer Assistance Programs - 6.6% of revenue need or $23.911 million.	Projected increase is spending for WRAP and other assistance programs given greater need in current economy and improved outreach.
Water Conservation and Related Measures - 4.9% of revenue need or $17.854 million.	Projected decreased revenue during the rate period associated lower total consumption and lower number of accounts.
Debt Reserve Surety - 3.4% of revenue need or $12.253 million.	Projected amount is net of Rate Stabilization Fund withdrawals to meet the requirement to replace the $67.0 surety, upon downgrade of AGM.

Philadelphia Water Department
FY 2013-2016 Rate Hearings
Initial Rate Filing
Standard Interrogatories

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101. Please describe in detail the record justification for additional revenues requested in connection with the increase in PWD customer assistance programs – 6.6% of revenue need.

Response: These are additional revenue requirements during the proposed four year rate period (2013-2016) for the activities specified in the attachments to SI-104. Increased revenue requirements for customer assistance programs in the aggregate amount of $23,911,000 are included in the rate filing over the four year period (6.6% of the additional revenues).

News (Http://www.philly.com/news)

— Breaking News (http://www.philly.com/philly/news/breaking)

Large water main break leads to evacuations in West Philly

Updated: JUNE 14, 2015 — 10:39 AM EDT

At least nine homes were initially evacuated after a water main burst in West Philadelphia, and several parked cars were submerged in as much as three feet of water.

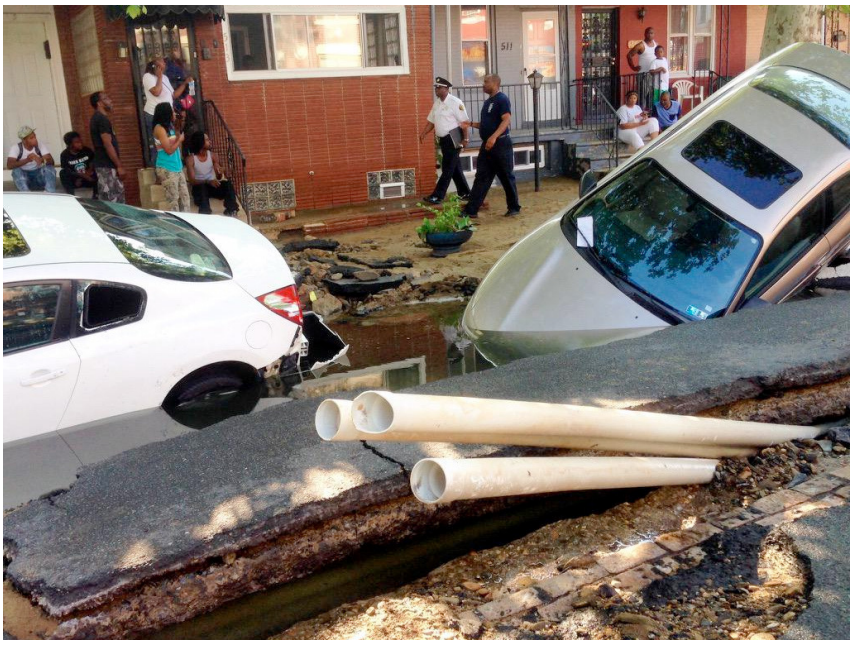
by **Philly.com staff**

A large water main break created havoc for West Philadelphia residents Sunday morning, sending millions of gallons of water coursing through the streets and causing the asphalt to buckle under the pressure.

Residents return after overnight water main break (http://www.philly.com/philly/news/breaking/Water_main_break_leads_to_evacuatior

A 36-inch water main ruptured about 4:30 a.m. in the 500 block of North 52nd Street, from Wyalusing to Westminster Avenue, according to Water Department spokesman John DiGiulio.

The break unleashed between eight and 10 million gallons of water, Digiulio said. At least nine homes were initially evacuated, and several parked cars were submerged in as much as three feet of water.



Water Department workers were able to successfully shut down the flow of water around 8 a.m., DiGiulio said, and the flooding began to recede.

By that point, more than 10 properties were damaged. Claims adjusters were on the scene conducting inspections late Sunday morning. Officials from the Philadelphia Office of Emergency Management, Gas Works, Water, Streets, Police, and Fire Departments were also assessing the situation. The American Red Cross was providing assistance to neighbors.

There was no word on how quickly repairs might begin, and a cause of the break had not yet been determined Sunday morning. The main was installed in 1885, DiGiulio said.

A shelter set up at West Catholic High School was closed about 9:30 a.m., as affected residents were permitted to return to their homes. Water service to the neighborhood was fully restored.

Drivers were advised to avoid the area bounded by Poplar and Parrish between 51st and 53rd streets, as street closures were expected to persist through Sunday afternoon.

Here are more pictures of the flooding by staff photographer Tom Gralish:

7 of 43

This is a breaking news report. Check back for updates.

MORE COVERAGE

Ten million gallons flood W. Philly

Jun 15 - 1:08 AM

(http://www.philly.com/philly

/news/20150615_Water_service_resumes__affected_residents_return_home_in

Published: June 14, 2015 — 6:45 AM EDT | **Updated:** June 14, 2015 — 10:39 AM EDT

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PA Statement 1

BEFORE THE

PHILADELPHIA WATER COMMISSIONER

IN THE MATTER OF A PROPOSED	**:**	
INCREASE IN WATER AND	**:**	**FY 2013-2016 RATES**
WASTEWATER RATES	**:**	

DIRECT TESTIMONY OF

MICHAEL A. BLEIWEIS

ON BEHALF OF THE PUBLIC ADVOCATE

July 20, 2012

Department has shown no basis for utilizing growth factors for interdepartmental Class 200-400 and Class 100 expenses that are different from the factors applicable to the same classes of direct departmental expense. Consistent with my recommendations presented above for direct departmental expenses, I, therefore, recommend a 1.5% growth factor for Class 200-400 expenses and no growth factor for Class 100 expenses.

D. <u>Indemnity Charges</u>

Q. What amount of Indemnity Charges was utilized for FY2013?

A. As shown on Workpapers OMone-9 and OMtwo-3, $6,360,000 was utilized for FY2013 Indemnity Charges. A 3% growth factor was applied for each of the next three years.

As shown on SI-2013-36, Exhibit JC-8 and below, the actual indemnity expense has not equaled or exceeded the budgeted expense since FY1995. In fact, the actual expense has exceeded the budgeted expense only three times since FY1986.

	INDEMNITIES				
	FISCAL YEAR	BUDGET	OBLIGATIONS	PLUS/(MINUS)	% actual/ budget
	(1)	(2)	(3)	(4)	(5)
1	1986	$2,420,000	$50,436	($2,369,564)	2.08%
2	1987	$2,420,000	$1,506,250	($913,750)	62.24%
3	1988	$2,420,000	$2,948,373	$528,373	121.83%
4	1989	$2,000,000	$4,348,872	$2,348,872	217.44%
5	1990	$4,502,000	$2,851,289	($1,650,711)	63.33%
6	1991	$5,000,000	$4,624,607	($375,393)	92.49%
7	1992	$5,000,000	$4,999,205	($795)	99.98%
8	1993	$5,000,000	$9,285,038	$4,285,038	185.70%
9	1994	$6,500,000	$6,472,905	($27,095)	99.58%
10	1995	$7,500,000	$8,428,786	$928,786	112.38%
11	1996	$6,500,000	$3,724,287	($2,775,713)	57.30%
12	1997	$6,500,000	$4,751,555	($1,748,445)	73.10%
13	1998	$6,500,000	$5,591,358	($908,642)	86.02%
14	1999	$6,500,000	$4,558,851	($1,941,149)	70.14%
15	2000	$6,500,000	$4,821,795	($1,678,205)	74.18%
16	2001	$6,500,000	$4,209,762	($2,290,238)	64.77%
17	2002	$6,500,000	$3,734,724	($2,765,276)	57.46%
18	2003	$6,500,000	$3,857,912	($2,642,088)	59.35%
19	2004	$6,500,000	$2,880,450	($3,619,550)	44.31%
20	2005	$6,500,000	$2,412,874	($4,087,126)	37.12%
21	2006	$6,500,000	$4,208,829	($2,291,171)	64.75%
22	2007	$6,500,000	$2,443,748	($4,056,252)	37.60%
23	2008	$6,500,000	$4,583,996	($1,916,004)	70.52%
24	2009	$6,500,000	$4,975,801	($1,524,199)	76.55%
25	2010	$6,500,000	$4,896,810	($1,603,190)	75.34%
26	2011	$6,500,000	$5,383,670	($1,116,330)	82.83%

Source: SI-2013-36

Q. Similar to the Department's general forecast methodology, have you calculated the weighted average actual-to-budget factor for Indemnities over several time periods?

A. Yes. These calculations are shown below:

	INDEMNITIES Weighted Average			
	Fiscal Years	Total Budget	Total Obligations	Weighted Average
	(1)	(2)	(3)	(4)
1	2007-2011	$32,500,000	$22,284,025	68.57%
2	2008-2011	$26,000,000	$19,840,277	76.31%
3	2009-2011	$19,500,000	$15,256,281	78.24%
4	2010-2011	$13,000,000	$10,280,480	79.08%

City of Philadelphia
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Click on each rating to see the most recent credit report.

Types of Bonds	Moody's	S&P	Fitch
General Obligation Bonds	A2	A+	A-
Other Tax Supported Debt	A2	A+	A-
Tax and Revenue Anticipation Notes	MIG1	SP-1+	NR
Water and Wastewater Revenue Bonds	A1	A	A+
Philadelphia Gas Works Revenue Bonds	Baa1	A-	BBB+
Philadelphia International Airport Revenue Bonds	A2	A	A

The ratings reflected above show the revised ratings.

RESPONSE TO PUBLIC ADVOCATE'S INTERROGATORIES AND REQUESTS FOR PRODUCTION OF DOCUMENTS

PA-EXE-103. Please provide a schedule similar to Exhibit ML-6, Attachment B, Table 11, Projected Revenue and Revenue Requirements, showing actual data for each FY 12 through FY15 and actual/projected data for FY 16.

Response:

Refer to attachment Response PA-EXE-103. The attached table presents a comparison of the projected revenue and revenue requirements from Table 11 of the settlement agreement for the previous rate proceeding versus the actual results for FY 12 to FY 15. The line numbers corresponding to Table 11 are presented in the left hand column.

For FY 16 projections of revenue and revenue requirements, refer to PWD Statement 9A-Direct Testimony and Exhibits of Black &Veatch Corporation, Table C-1 (PDF Page # 109). Table C-1 of the current rate proceeding is the equivalent of Table 11 for the prior rate proceedings.

Response Provided By: Ann Bui, Prabha Kumar and David Jagt, Black & Veatch

BRING DOWN OF 2013 RATE CASE FINANCIAL PLAN (TABLE 11)

		2013 Rate Case				Actual Results				Difference			
B&V Line No	**Description**	**2012**	**2013**	**2014**	**2015**	**2012**	**2013**	**2014**	**2015**	**2012**	**2013**	**2014**	**2015**
11	Total Water & Wastewater Service Revenue	565,396	576,239	615,631	639,682	568,378	580,180	617,225	646,702	2,982	3,941	1,594	7,020
12	Transfer From/(To) Rate Stabilization Fund	14,435	43,615	20,325	3,675	(8,526)	4,666	(22,925)	(21,456)	(22,961)	(38,949)	(43,250)	(25,131)
13 to 17	Other Income (a)	18,924	22,293	22,143	22,457	23,303	26,550	25,794	30,144	4,379	4,257	3,651	7,687
18	**Total Revenues**	598,755	642,147	658,099	665,814	583,155	611,396	620,094	655,390	(15,600)	(30,751)	(38,005)	(10,424)
21	**Liquidated Encumbrances**	21,500	21,500	21,500	21,500	20,802	31,148	37,436	23,859	(698)	9,648	15,936	2,359
21	**Total Operating Expense**	(390,033)	(417,619)	(427,730)	(429,937)	(375,085)	(399,316)	(410,797)	(426,767)	14,948	18,303	16,933	3,170
22	**Net Revenues available for Debt Service**	230,222	246,028	251,869	257,377	228,872	243,228	246,733	252,482	(1,350)	(2,800)	(5,136)	(4,895)
26	Total Senior Debt Service	(191,845)	(203,323)	(206,446)	(209,238)	(191,400)	(201,015)	(201,710)	(205,270)	445	2,308	4,736	3,968
30	Total Subordinate Debt Service	(1,022)	0	0	0	(1,023)				(1)	0	0	0
	Net Revenues after Debt Service	37,355	42,705	45,423	48,139	36,449	42,213	45,023	47,212	(906)	(492)	(400)	(927)
32	**Capital Account Deposit (1% NPPE)**	(18,476)	(19,000)	(19,380)	(19,767)	(18,867)	(19,380)	(20,194)	(20,705)	(391)	(380)	(814)	(938)
36	**Residual Fund Deposit from Water Operating**	18,879	23,705	26,043	28,372	16,496	22,273	24,829	26,507	(2,383)	(1,432)	(1,214)	(1,865)
37	**Residual Fund Deposit from Interest Earnings on DSRF (b)**	1,351	2,060	2,095	2,708	1,086	560			(265)	(1,500)	(2,095)	(2,708)
38	Transfer to Construction Fund (discretionary Transfer to the capital Fund)	0	0	0	0	0	0	0	0	0	0	0	0
39	Transfer to City General Fund (SCOOP)	(1,351)	(2,060)	(2,095)	(2,708)	(1,086)	(560)	(400)	(746)	265	1,500	1,695	1,962
40	Transfer to Debt Service Reserve Fund	(3,856)	(70,545)	(840)	0	0	(22,400)	0	0	3,856	48,145	840	0
	Debt Service Coverage Ratios:												
33	Total Coverage	1.09	1.11	1.12	1.12	1.08	1.10	1.11	1.12	-0.01	-0.01	-0.01	0.00
27	Total Senior Debt Service Coverage	1.20	1.21	1.22	1.23	1.20	1.21	1.22	1.23	0.00	0.00	0.00	0.00

(a) Includes other operating and nonoperation income, including interest income on funds and accounts transferable to the Revenue Fund
(b) Transfer of interest earnings from the Bond Reserve Account to the Residual Fund as shown in Line 39 to satisfy the requirements for the Transfer to the City General Fund
- Presented in thousand dollars

DSRF - Debt Service Reserve Fund
NPPE - Net Property, Plant and Equipment (Original Cost Less Depreciation)

BRING DOWN OF 2013 RATE CASE FINANCIAL PLAN - COMPONENTS OF O&M EXPENSE

	2013 Rate Case				Actual Results				Difference			
Description	**2012**	**2013**	**2014**	**2015**	**2012**	**2013**	**2014**	**2015**	**2012**	**2013**	**2014**	**2015**
Division of Technology	**(13,038)**	**(13,038)**	**(13,310)**	**(13,590)**	**(11,530)**	**(14,046)**	**(15,133)**	**(17,069)**	**1,508**	**(1,008)**	**(1,823)**	**(3,479)**
Personal Services	(4,587)	(4,587)	(4,605)	(4,624)	(3,995)	(4,040)	(4,621)	(5,233)	592	547	(16)	(609)
Purchase of Services	(7,570)	(7,570)	(7,797)	(8,031)	(6,798)	(9,215)	(9,567)	(10,227)	772	(1,645)	(1,770)	(2,196)
Materials, Supplies & Equipment	(881)	(881)	(908)	(935)	(738)	(791)	(944)	(1,609)	143	90	(37)	(674)
Public Property	**(3,115)**	**(3,208)**	**(3,305)**	**(3,404)**	**(3,726)**	**(3,739)**	**(3,786)**	**(3,960)**	**(611)**	**(531)**	**(482)**	**(556)**
Purchase of Services	(3,115)	(3,208)	(3,305)	(3,404)	(3,726)	(3,739)	(3,786)	(3,960)	(611)	(531)	(482)	(556)
Office of Fleet Management	**(7,744)**	**(7,744)**	**(7,775)**	**(7,806)**	**(7,602)**	**(7,219)**	**(8,186)**	**(8,323)**	**142**	**525**	**(411)**	**(517)**
Personal Services	(2,499)	(2,499)	(2,509)	(2,519)	(2,387)	(2,554)	(2,521)	(2,603)	112	(56)	(12)	(84)
Purchase of Services	(1,355)	(1,355)	(1,360)	(1,366)	(1,257)	(895)	(1,439)	(1,488)	98	460	(78)	(122)
Materials, Supplies & Equipment	(3,890)	(3,890)	(3,906)	(3,921)	(3,958)	(3,770)	(4,226)	(4,232)	(68)	120	(320)	(311)
Water	**(246,228)**	**(261,033)**	**(270,333)**	**(277,735)**	**(245,143)**	**(255,190)**	**(264,217)**	**(279,215)**	**1,085**	**5,843**	**6,115**	**(1,480)**
Personal Services	(85,544)	(87,436)	(88,068)	(88,716)	(82,407)	(85,258)	(89,650)	(98,443)	3,137	2,179	(1,582)	(9,727)
Purchase of Services	(112,176)	(121,952)	(128,354)	(132,802)	(113,005)	(116,003)	(114,345)	(129,760)	(829)	5,949	14,009	3,042
Materials, Supplies & Equipment	(38,545)	(40,174)	(42,563)	(45,131)	(40,657)	(43,136)	(43,539)	(40,926)	(2,112)	(2,962)	(976)	4,204
Contributions, Indemnities & Taxes					0	0	(6,036)	(3,841)	0	0	(6,036)	(3,841)
Payments to General Fund (interfund transfer)	(9,964)	(11,471)	(11,349)	(11,086)	(9,075)	(10,793)	(10,648)	(6,245)	889	678	700	4,841
Finance	**(103,525)**	**(116,248)**	**(116,478)**	**(110,686)**	**(90,055)**	**(101,419)**	**(101,800)**	**(100,570)**	**13,470**	**14,829**	**14,678**	**10,116**
Personal Services - Fringe Benefits	(97,350)	(111,135)	(111,365)	(105,573)	(87,008)	(96,329)	(101,800)	(100,570)	10,342	14,807	9,565	5,003
Contributions, Indemnities & Taxes	(6,175)	(5,113)	(5,113)	(5,113)	(3,047)	(5,090)	0	0	3,128	23	5,113	5,113
Revenue	**(13,625)**	**(13,510)**	**(13,665)**	**(13,824)**	**(13,933)**	**(14,602)**	**(14,523)**	**(14,887)**	**(309)**	**(1,092)**	**(858)**	**(1,063)**
Personal Services	(9,817)	(9,624)	(9,663)	(9,701)	(9,730)	(10,020)	(9,701)	(10,014)	87	(396)	(39)	(312)
Purchase of Services	(3,209)	(3,351)	(3,452)	(3,555)	(3,678)	(4,020)	(4,134)	(4,241)	(469)	(669)	(682)	(686)
Materials, Supplies & Equipment	(596)	(534)	(550)	(566)	(525)	(561)	(688)	(631)	71	(28)	(139)	(65)
Contributions, Indemnities & Taxes	(3)	(1)	(1)	(1)	(0)	(0)	(0)	(1)	3	1	1	0
Procurement	**(63)**	**(63)**	**(63)**	**(63)**	**(46)**	**(69)**	**(63)**	**(61)**	**17**	**(6)**	**0**	**3**
Personal Services	(63)	(63)	(63)	(63)	(46)	(69)	(63)	(61)	17	(6)	0	3
Law	**(2,645)**	**(2,724)**	**(2,751)**	**(2,779)**	**(2,993)**	**(2,861)**	**(2,880)**	**(2,455)**	**(348)**	**(137)**	**(129)**	**324**
Personal Services	(2,040)	(2,101)	(2,110)	(2,118)	(2,287)	(2,281)	(2,193)	(2,137)	(246)	(180)	(83)	(19)
Purchase of Services	(576)	(593)	(611)	(630)	(672)	(544)	(671)	(310)	(96)	50	(60)	320
Materials, Supplies & Equipment	(28)	(29)	(30)	(31)	(34)	(36)	(17)	(8)	(6)	(7)	13	23
Mayor's Office of Transportation & Utilities	**(51)**	**(51)**	**(51)**	**(52)**	**(56)**	**(170)**	**(208)**	**(228)**	**(5)**	**(119)**	**(157)**	**(176)**
Personal Services	(51)	(51)	(51)	(52)	(56)	(170)	(208)	(228)	(5)	(119)	(157)	(176)
Purchase of Services	0	0	0	0	0	0	0	0	0	0	0	0
Total Operating Expense	**(390,033)**	**(417,619)**	**(427,730)**	**(429,938)**	**(375,085)**	**(399,315)**	**(410,797)**	**(426,768)**	**14,948**	**18,304**	**16,933**	**3,170**

BRING DOWN OF 2013 RATE CASE FINANCIAL PLAN - COMPONENTS OF O&M EXPENSE

	2013 Rate Case				Actual Results				Difference			
Description	**2012**	**2013**	**2014**	**2015**	**2012**	**2013**	**2014**	**2015**	**2012**	**2013**	**2014**	**2015**
Summary by O&M Cost Component												
Personal Services	(104,600)	(106,362)	(107,069)	(107,793)	(100,907)	(104,392)	(108,957)	(118,718)	3,693	1,969	(1,888)	(10,925)
Personal Services - Fringe Benefits	(97,350)	(111,135)	(111,365)	(105,573)	(87,008)	(96,329)	(101,800)	(100,570)	10,342	14,807	9,565	5,003
Purchase of Services	(128,001)	(138,030)	(144,878)	(149,787)	(129,135)	(134,416)	(133,942)	(149,986)	(1,134)	3,613	10,936	(199)
Materials, Supplies & Equipment	(43,940)	(45,507)	(47,956)	(50,584)	(45,913)	(48,295)	(49,413)	(47,407)	(1,972)	(2,787)	(1,458)	3,177
Contributions, Indemnities & Taxes	(6,178)	(5,114)	(5,114)	(5,114)	(3,047)	(5,090)	(6,037)	(3,842)	3,131	24	(922)	1,272
Payments to General Fund (interfund transfer)	(9,964)	(11,471)	(11,349)	(11,086)	(9,075)	(10,793)	(10,648)	(6,245)	889	678	700	4,841
Total Operating Expense	**(390,033)**	**(417,619)**	**(427,730)**	**(429,938)**	**(375,085)**	**(399,315)**	**(410,797)**	**(426,768)**	**14,948**	**18,304**	**16,933**	**3,170**

- Presented in thousand dollars
- Minor difference in total due to rounding

IMPACT TO PROJECTED RATE STABILIZATION FUND TRANSFER BY COMPONENT

		2013 Rate Case				Actual Results				Impact to RSF			
B&V Line No	**Description**	**2012**	**2013**	**2014**	**2015**	**2012**	**2013**	**2014**	**2015**	**2012**	**2013**	**2014**	**2015**
11	Total Water & Wastewater Service Revenue	565,396	576,239	615,631	639,682	568,378	580,180	617,225	646,702	(2,982)	(3,941)	(1,594)	(7,020)
13 to 17	Other Income	18,924	22,293	22,143	22,457	23,303	26,550	25,794	30,144	(4,379)	(4,257)	(3,651)	(7,687)
21	Liquidated Encumbrances	21,500	21,500	21,500	21,500	20,802	31,148	37,436	23,859	698	(9,648)	(15,936)	(2,359)
21	Total Operating Expense	(390,033)	(417,619)	(427,730)	(429,937)	(375,085)	(399,316)	(410,797)	(426,767)	(14,948)	(18,303)	(16,933)	(3,170)
26	Total Senior Debt Service	(191,845)	(203,323)	(206,446)	(209,238)	(191,400)	(201,015)	(201,710)	(205,270)	(445)	(2,308)	(4,736)	(3,968)
30	Total Subordinate Debt Service	(1,022)	0	0	0	(1,023)				1	0	0	0
22	Less (Net Revenues available for Debt Service) (a)	(37,355)	(42,705)	(45,423)	(48,139)	(36,449)	(42,213)	(45,023)	(47,212)	(906)	(492)	(400)	(927)
	Total Impact									(22,961)	(38,949)	(43,250)	(25,131)

(a) Reflects total impact on additional revenues required for coverage.
- Presented in thousand dollars

RSF - Rate Stabilization Fund

NEW ISSUE – BOOK-ENTRY ONLY **RATINGS: See "RATINGS" herein.**

In the opinion of Co-Bond Counsel, interest on the Bonds is excludable from gross income for purposes of federal income tax, assuming continuing compliance with the requirements of the federal tax laws. Interest on the Bonds is not a preference item for purposes of either individual or corporate federal alternative minimum tax; however, interest paid to corporate holders of the Bonds may be indirectly subject to alternative minimum tax under circumstances described under "TAX EXEMPTION" herein. Under the laws of the Commonwealth of Pennsylvania, the Bonds are exempt from personal property taxes and interest on the Bonds is exempt from Pennsylvania personal income tax and Pennsylvania corporate net income tax. For a more complete discussion of federal and state tax exemptions, see "TAX EXEMPTION" herein.

$70,370,000
CITY OF PHILADELPHIA, PENNSYLVANIA
Water and Wastewater Revenue Refunding Bonds
Series 2012

Dated: Date of Delivery **Due: As shown on the inside front cover**

The City of Philadelphia, Pennsylvania, a corporation, body politic and city of the first class existing under the laws of the Commonwealth of Pennsylvania (the "City") is issuing its Water and Wastewater Revenue Refunding Bonds, Series 2012 (the "Bonds") pursuant to (i) the First Class City Revenue Bond Act, P.L. 955, Act No. 234 of the General Assembly of the Commonwealth of Pennsylvania, approved October 18, 1972 (the "Act"), and (ii) the City's Restated General Water and Wastewater Revenue Bond Ordinance of 1989, approved June 24, 1993 (the "Restated General Ordinance"), as supplemented and amended from time to time, including by the Fifteenth Supplemental Ordinance, approved July 5, 2011 (the "Fifteenth Supplemental Ordinance" and together with the Restated General Ordinance, the "General Ordinance"), authorizing the issuance of Water and Wastewater Revenue Bonds, including without limitation, the Bonds, for the purposes of refunding Outstanding Bonds. The proceeds of the Bonds, together with other available funds of the Water Department (defined herein), will be used to finance (i) the current refunding of all of the City's outstanding Water and Wastewater Revenue Bonds, Series 2001A and the current refunding of all of the City's Water and Wastewater Revenue Refunding Bonds, Series 2001B maturing after November 1, 2012, and (ii) the costs of issuance relating to the Bonds.

The Bonds are special obligations of the City secured, equally and ratably with the City's Water and Wastewater Revenue Bonds currently outstanding (as of September 30, 2012) in the aggregate principal amount of $1,861,524,362 issued under the General Ordinance and all Water and Wastewater Revenue Bonds hereafter issued, by a pledge of and security interest in all Project Revenues (defined herein) derived from the City's Water and Wastewater Systems and by moneys deposited in the funds and accounts (other than the Rebate Fund) established by the City under the General Ordinance (the "Water and Wastewater Funds").

THE BONDS ARE PAYABLE SOLELY FROM PROJECT REVENUES AND MONEYS DEPOSITED IN THE WATER AND WASTEWATER FUNDS. THE BONDS ARE SPECIAL OBLIGATIONS OF THE CITY AND DO NOT PLEDGE THE FULL FAITH, CREDIT OR TAXING POWER OF THE CITY, OR CREATE ANY DEBT OR CHARGE AGAINST THE TAX OR GENERAL REVENUES OF THE CITY, OR CREATE ANY LIEN OR CHARGE AGAINST ANY PROPERTY OF THE CITY, OTHER THAN AGAINST THE PROJECT REVENUES AND AMOUNTS, IF ANY, AT ANY TIME ON DEPOSIT IN THE WATER AND WASTEWATER FUNDS.

The Bonds will be issued only as fully registered bonds and, when issued, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), which will act as securities depository for the Bonds. Purchasers will not receive certificates representing their ownership interest in the Bonds purchased. U.S. Bank National Association, Philadelphia, Pennsylvania, is the Fiscal Agent for the Bonds. The principal of and interest on the Bonds are payable to DTC for redistribution to its participants and in turn to the beneficial owners of the Bonds. See "THE BONDS – Book-Entry Only System" herein. Disbursements of such payments to DTC participants and beneficial owners is the responsibility of DTC.

The Bonds will be issued in denominations of $5,000 or any integral multiple thereof. The Bonds will be dated and will bear interest from the date of delivery thereof. Interest on the Bonds will be payable semiannually on November 1 and May 1 of each year, beginning May 1, 2013.

The Bonds are subject to redemption as provided herein.

This cover page contains information for quick reference only. It is not a summary of this issue. Investors must read the entire Official Statement, including the Appendices, which are an integral part hereof, to obtain information essential to making an informed investment decision regarding the Bonds.

The Bonds are offered when, as and if issued and delivered to and received by the Underwriters, and subject to the legal opinion of Ballard Spahr LLP and The Smyler Firm, both of Philadelphia, Pennsylvania, Co-Bond Counsel. Certain legal matters will be passed upon for the Underwriters by Greenberg Traurig, LLP and Andre C. Dasent, P.C., both of Philadelphia, Pennsylvania. Certain legal matters will be passed upon for the City by the City Solicitor. It is expected that the Bonds will be available for delivery to DTC in New York, New York on or about November 1, 2012.

SIEBERT BRANDFORD SHANK & CO., L.L.C.
Morgan Stanley

RAMIREZ & CO., INC.
Wells Fargo Securities

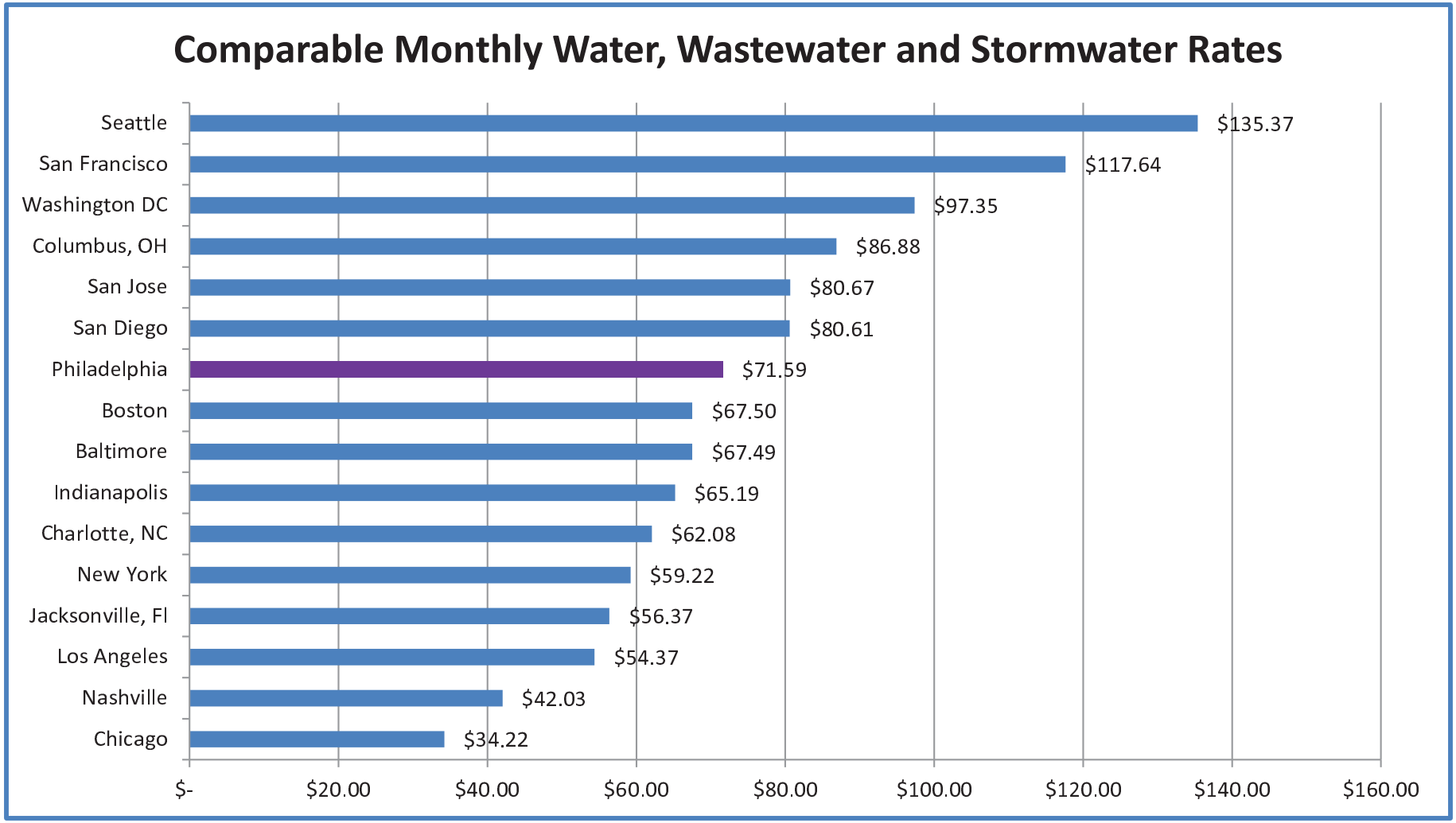
October 24, 2012

TABLE A
PROJECTED REVENUE AND REVENUE REQUIREMENTS
(in thousands of dollars)

Line No.	Description			2012	2013	2014	2015	2016	2017	2018
	OPERATING REVENUE									
1	Water Service - Existing Rates			233,546	233,780	232,370	230,658	228,939	227,219	225,496
2	Wastewater Service - Existing Rates			331,850	332,913	331,597	330,215	328,823	327,435	326,042
3	Total Service Revenue - Existing Rates			565,396	566,693	563,967	560,873	557,762	554,654	551,538
	Additional Service Revenue Required									
	Year	Percent Increase	Months Effective							
4	FY 2013	4.48%	6		9,546	25,266	25,127	24,988	24,848	24,709
5	FY 2014	4.48%	12			26,398	26,253	26,107	25,962	25,816
6	FY 2015	4.48%	12				27,429	27,277	27,125	26,972
7	FY 2016	5.10%	12					32,443	32,262	32,081
8	FY 2017	5.10%	12						33,907	33,717
9	FY 2018	5.10%	12							35,436
10	Total Additional Service Revenue Required			0	9,546	51,664	78,809	110,815	144,104	178,731
11	Total Water & Wastewater Service Revenue			565,396	576,239	615,631	639,682	668,577	698,758	730,269
12	Transfer From/(To) Rate Stabilization Fund			14,435	43,140	12,095	2,245	10,635	(14,355)	(11,645)
	Other Income (a)									
13	Other Operating Revenue			16,663	19,622	19,676	19,631	19,485	19,440	19,395
14	Construction Fund Interest Income			1,156	1,215	2,018	1,454	2,083	3,137	4,443
15	Debt Reserve Fund Interest Income			0	0	0	0	0	0	0
16	Operating Fund Interest Income			356	550	735	943	1,173	1,363	1,606
17	Rate Stabilization Interest Income			749	908	934	1,079	1,199	1,433	1,903
18	Total Revenues			598,755	641,674	651,089	665,034	703,152	709,776	745,971
	OPERATING EXPENSES									
19	Water & Wastewater Operations			320,010	344,788	354,719	357,559	369,134	378,802	388,901
20	Direct Interdepartmental Charges			48,523	51,331	51,511	50,878	52,014	52,551	53,097
21	Total Operating Expenses			368,533	396,119	406,230	408,437	421,148	431,353	441,998
22	**NET REVENUES AFTER OPERATIONS**			230,222	245,555	244,859	256,597	282,004	278,423	303,973
	DEBT SERVICE									
	Senior Debt Service									
	Revenue Bonds									
23	Outstanding Bonds (b)			187,537	190,262	185,279	177,241	183,171	155,359	155,440
24	Pennvest Parity Bonds (c)			3,180	10,211	11,839	12,175	12,175	12,310	12,844
25	Projected Future Bonds			1,128	2,461	3,584	19,198	32,073	55,069	72,963
26	Total Senior Debt Service			191,845	202,934	200,702	208,614	227,419	222,738	241,247
27	**TOTAL SENIOR DEBT SERVICE COVERAGE (L22/L26)**			1.200 x	1.210 x	1.220 x	1.230 x	1.240 x	1.250 x	1.260 x
	Subordinate Debt Service									
28	Outstanding General Obligation Bonds			0	0	0	0	0	0	0
29	Pennvest Subordinate Bonds			1,022	0	0	0	0	0	0
30	Total Subordinate Debt Service			1,022	0	0	0	0	0	0
31	Total Debt Service on Bonds			192,867	202,934	200,702	208,614	227,419	222,738	241,247
32	**CAPITAL ACCOUNT DEPOSIT**			18,476	19,000	19,380	19,767	20,163	20,566	20,977
33	**TOTAL COVERAGE (L22/(L31+L32))**			1.08 x	1.10 x	1.11 x	1.12 x	1.13 x	1.14 x	1.15 x
	RESIDUAL FUND									
34	Beginning of Year Balance			34,909	50,169	2,412	7,689	15,404	15,826	15,944
35	Interest Income (d)			237	398	0	0	0	0	0
	Plus:									
36	End of Year Revenue Fund Balance			18,879	23,621	24,777	28,216	34,422	35,119	41,749
37	Deposit for Transfer to City General Fund (e)			1,351	2,073	2,153	2,762	3,433	4,011	4,589
	Less:									
38	Transfer to Construction Fund			0	0	19,500	20,500	34,000	35,000	42,300
39	Transfer to City General Fund			1,351	2,073	2,153	2,762	3,433	4,011	4,589
40	Transfer to Debt Service Reserve Fund			3,856	71,776	0	0	0	0	0
41	End of Year Balance			50,169	2,412	7,689	15,404	15,826	15,944	15,394
	RATE STABILIZATION FUND									
42	Beginning of Year Balance			156,563	142,128	98,988	86,893	84,648	74,013	88,368
43	Deposit From/(To) Revenue Fund			(14,435)	(43,140)	(12,095)	(2,245)	(10,635)	14,355	11,645
44	End of Year Balance			142,128	98,988	86,893	84,648	74,013	88,368	100,013

Notes: (a) Includes other operating and nonoperating income, including interest income on funds and accounts transferable to the Revenue Fund.
(b) Excludes debt service refunded by proposed 2012 Bonds.
(c) Includes 2009 Pennvest Loans.
(d) Includes interest earnings on Debt Service Reserve substitution funds deposited in the Special Water Infrastructure Account.
(e) Transfer of interest earnings from the Bond Reserve Account to the Residual Fund as shown in Line 35 to satisfy the requirements for the Transfer to the City General Fund.

Exhibit JP-2



Source: Rates based on published water, sewer, and stormwater rate schedules available online as of 8/1/15 and assumes 6 CCF or 4,488 gallons of billed water and sewer discharges

- Note: Rate increases were approved for 2016 for the following cities: Seattle, San Francisco, New Orleans, and San Antonio.

** City of Louisville rates reflect sewer and stormwater charges billed by the Louisville and Jefferson County Metropolitan Sewer District and water rates billed by the Louisville Water Company

*** City of St. Louis rates reflect sewer rates billed by the Metropolitan St. Louis Sewer District and water rates billed by the City of St. Louis

**** Effective June 2016, Chicago will raise rates whenever the CPI raises.

+ Philadelphia: Proposed rate for 7/1/16 was used

Philadelphia Compares Favorably Nationally

COMPARABLE MONTHLY WATER, SEWER AND STORMWATER RATES

Source: Rates based on published water, sewer, and stormwater rate schedules available online as of 8/1/15 and assumes 6 CCF or 4,488 gallons of billed water and sewer discharges

Notes: 1) Rate increases were approved for 2016 for the following cities: Seattle and San Francisco.
2) Effective June 2016, Chicago will raise rates whenever the CPI raises.
3) Philadelphia: Based upon FY 2015 and FY 2016. Increase based upon proposed rate for 7/1/16.
4) Washington DC includes $6.00 for DC Water System Replacement Fee.
5) Stormwater rates based upon impervious area of 3,000 sf or 1 Equivalent Residential Unit (ERU)

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Cleveland Water efforts result in no rate increase for customers through 2018

12/07/2015

Cleveland Water takes its responsibility to deliver a reliable supply of safe drinking water at an affordable price seriously. We have worked hard to identify ways to improve service levels and become more efficient. As we enter our next five year rate cycle, we are excited to announce this hard work—and our forward thinking approach to how we have invested in our system over the past 30 plus years – has resulted in a 0% rate increase for 2016, 2017 and 2018, and only small increases in 2019 and 2020.

"In 2013, Mayor Jackson gave us a clear goal to provide as much rate relief as possible to customers while protecting the long term financial position of Cleveland Water," said Director Robert Davis, Department of Public Utilities. "The proposed 0% rate increase represents the best option to do that."

With the approved ordinance by Cleveland City Council today, beginning in 2016 and continuing through 2018, customers will not see any increases in their bills unless they change how much water they use.

In 2019 and 2020, average residential users – customers who use about 2 MCF per quarter – may see their bills increase by between $1.30 and $2.60 per month depending on how far and high they live in relation to Lake Erie.

To help understand how unprecedented this is, we looked back several years, and found from 1993 to 2015, on average, rates went up about 7% per year. We are excited we have been able to minimize the impact on our customers' pocketbooks, all while protecting the long term financial position of Cleveland Water so that future rate increases can be minimized as well.

How did we do it?

This new rate schedule raises the natural question of "how did we do it?" The answer is through a combination of hard work and smart planning. The rate increases passed in 2011 provided the base necessary to better align our rates with our fixed costs, stabilize our customer service operations, effectively implement our AMR (Automated Meter Reading) program, support the continuation of our capital program, and improve our operational efficiency. Without these rate increases, we would not be at the point we are today.

Two projects in particular have been instrumental in achieving three years of 0% rate increases. The Customer Service Turnaround Project helped identify additional accounts that were not being billed, improved the consistency of our billing and call center operations, and helped implement a more effective collections process that stabilized our accounts receivables. But, perhaps, no project has been as important as our AMR project. The AMR technology is already paying huge dividends through a dramatic decline in estimated bills and the ability to more accurately measure consumption, all while providing an expanded and improved level of service to our customers.

But, the hard work put in over the past 5 years is only part of the story. We have also taken an aggressive and forward thinking approach to capital investment. Over the past 30 years, we have invested more than $1.6 billion in our infrastructure. We have fully modernized our four interconnected water treatment plants, as well as the pumps, tanks and towers located throughout our system. As a result, we are not facing the same financial burden as many other water utilities across the country.

This does not, however, mean we are done investing. Instead, we are shifting our focus to water mains buried underground that can break causing a great deal of customer inconvenience. Over the next nine years, we will invest more than $235 million in replacing these mains, all while maintaining reasonable water rates. "We're working very hard to make smart investments in the water system, making sure every dollar counts," says Alex Margevicius, Interim Commissioner, Cleveland Water.

Just like our capital planning, we are not done trying to find ways to become more efficient while continuing to improve the service we provide our customers. The approved rate structure will now allow for us to tackle new projects – such as expanded technology based customer service options and a transition to monthly billing – all designed to make it easier to do business with Cleveland Water.

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Water Quality Report (/2015WQR.pdf)

2013 Annual Report (/2013-annual-report.pdf)

Lake Condition Webcam (http://206.140.121.226)

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RESPONSE TO PUBLIC ADVOCATE'S INTERROGATORIES AND REQUESTS FOR PRODUCTION OF DOCUMENTS

Regarding PWD Exhibit 6, FINPLAN15.XLS Direct O&M

PA-EXE-143 (**Supplemental Response**). Reference Direct O&M-2. Please provide detailed workpapers supporting each O&M adjustment for FYs 17 and 18:

a. Human Resources and Administration;

b. Finance;

c. Planning and Engineering;

d. Operations;

e. Planning & Environmental Services; and

f. Public Affairs.

Response: Please refer to Response Attachment PA-EXE-143 EXE-145 EXE-146 for the detailed work papers supporting all adjustments.

Response Provided by: Ann Bui, Prabha Kumar and David Jagt, Black & Veatch

RESPONSE TO PUBLIC ADVOCATE'S INTERROGATORIES AND REQUESTS FOR PRODUCTION OF DOCUMENTS

Regarding PWD Exhibit 6, FINPLAN15.XLS Inter Dept O&M

PA-EXE-145 (**Supplemental Response**). Reference InterDept O&M-2. Please provide detailed workpapers supporting each O&M adjustment for FYs 17 and 18:

a. Fleet Management;

b. City Finance; and

c. Revenue.

Response: Please refer to Response Attachment PA-EXE-143 EXE-145 EXE-146 for the detailed work papers supporting all adjustments.

Response Provided by: Ann Bui, Prabha Kumar and David Jagt, Black & Veatch

RESPONSE TO PUBLIC ADVOCATE'S INTERROGATORIES AND REQUESTS FOR PRODUCTION OF DOCUMENTS

Regarding PWD Exhibit 6, FINPLAN15.XLS O&M Adjustments

PA-EXE-146 (**Supplemental Response**). Please provide detailed workpapers supporting all adjustments shown on these worksheets for FYs17 and 18:

a. Additional SMIP Costs;

b. General Fund Reimbursement (combined sewer outfall construction);

c. AMI;

d. OOW Additional Staffing, and Class 200 Additions;

e. Funding for Grants;

f. HR & Admin Additional Staffing and Class 200 Revision;

g. P&E Additional Staffing and Class 200 Costs;

h. Finance Additional Staffing;

i. Public Affairs Additional Staffing;

j. Operations Add Package Adjustments; and

k. Affordability Program.

Response: Please refer to Response Attachment PA-EXE-143 EXE-145 EXE-146 for the detailed work papers supporting all adjustments.

Response Provided by: Ann Bui, Prabha Kumar and David Jagt, Black & Veatch

O&M Adjustment #1 - SMIP/GARP

Line. No.	SMIP/GARP	2015	2016	2017	2018
	Finance				
1	Class 2xx (SMIP/GARP)[1]	$ 2,000,000	$ -	$ 3,550,000	$ 3,550,000
2	**Total Direct Adjustments**	**$ 2,000,000**	**$ -**	**$ 3,550,000**	**$ 3,550,000**
3	**Total Inter Dept Adjustments**	**$ -**	**$ -**	**$ -**	**$ -**
4	**Total Adjustments (Line 2 + Line 3)**			**$ 3,550,000**	**$ 3,550,000**

Notes: 1. Additional costs based on discussion with PWD Staff.
For additional details please refer to PWD_St-9B Supplemental Direct Testimony of Black & Veatch Corporation, on page 7 of Financial Plan: Revenue & Revenue Requirement Assumptions (Ref#: BV-S1)

O&M Adjustment #2 - CSO Outfall Construction

Line. No.	FINANCE - Transfer	2015	2016	2017	2018
	Finance				
1	Transfers (CSO Outfall Construction)[1]	$ -	$ -	$ 1,800,000	$ 3,500,000
2	**Total Direct Adjustments**	**$ -**	**$ -**	**$ 1,800,000**	**$ 3,500,000**
3	**Total Inter Dept Adjustments**	**$ -**	**$ -**	**$ -**	**$ -**
4	**Total Adjustments (Line 2 + Line 3)**	**$ -**	**$ -**	**$ 1,800,000**	**$ 3,500,000**

Notes: 1. Additional costs based on discussion with PWD Staff.
For additional details please refer to PWD_St-9B Supplemental Direct Testimony of Black & Veatch Corporation, on page 7 of Financial Plan: Revenue & Revenue Requirement Assumptions (Ref#: BV-S1)

O&M Adjustment #3 - AMI Implementation Costs

Line. No.	AMI IMPLEMENTATION COSTS	2015	2016	2017	2018
	COST BASIS				
	Operations				
1	Class 100, Fringes, and Benefits				$ 94,465
	Water Fund Class 100 Distribution [See Pension & Fringes Ratio Worksheet]				
2	Salaries				53.31%
3	Benefits				21.99%
4	Pension				19.76%
5	Pension Obligations				4.94%
6	Salaries (Line 1 x Line 2)				$ 50,000
7	Benefits (Line 1 x Line 3)				$ 21,000
8	Pension (Line 1 x Line 4)				$ 19,000
9	Pension Obligations (Line 1 x Line 5)				$ 5,000
10	**Total**				**$ 95,000**
	ADJUSTMENTS				
	Operations				
11	Class 100 (Line 6)				$ 50,000
12	Class 200				$ 216,000
13	Class 300				$ 106,000
14	**Total Direct Adjustments**				**$ 372,000**

O&M Adjustment #3 - AMI Implementation Costs

Line. No.	AMI IMPLEMENTATION COSTS	2015	2016	2017	2018
	City Finance - Pension & Fringes				
15	Benefits (Line 7)				$ 21,000
16	Pension (Line 8)				$ 19,000
17	Pension Obligations (Line 9)				$ 5,000
	Fleet				
18	Class 300				$ 14,000
19	**Total Inter Dept Adjustments**				**$ 59,000**
20	**Total Adjustments (Line 14 + Line 9)**				**$ 431,000**

Notes: 1. Additional costs/savings provided by PWD.
For additional details please refer to PWD_St-9B Supplemental Direct Testimony of Black & Veatch Corporation, on pages 7 and 8 of Financial Plan: Revenue & Revenue Requirement Assumptions (Ref#: BV-S1)

O&M Adjustment #4 - Planning & Environmental Services

Line. No.	STAFFING	2015	2016	2017	2018
	COST BASIS				
	OOW Class 100				
1	Class 100[1]		$ 3,400,254	$ 4,273,696	$ 4,558,887
2	Class 100 Inflation Factor			3.00%	3.00%
3	Base Model Projection		$ 3,400,254	$ 3,502,262	$ 3,607,329
	Water Fund Salary Ratios [See Pension & Fringes Ratio Worksheet]				
4	Benefits			40.63%	41.26%
5	Pension			37.55%	37.07%
6	Pension Obligations			9.54%	9.26%
	ADJUSTMENTS				
	Planning & Environmental Services				
7	Additional Class 100 Costs[2]			$ 771,000	$ 952,000
8	Class 200[1]			$ 600,000	$ 800,000
9	**Total Direct Adjustments**	**$ -**	**$ -**	**$ 1,371,000**	**$ 1,752,000**
	City Finance - Pension & Fringes				
10	Benefits (Line 7 x Line 4)			$ 313,000	$ 393,000
11	Pension (Line 7 x Line 5)			$ 290,000	$ 353,000
12	Pension Obligations (Line 7 x Line 6)			$ 74,000	$ 88,000
13	**Total Inter Dept Adjustments**			**$ 677,000**	**$ 834,000**
14	**Total Adjustments**			**$ 2,048,000**	**$ 2,586,000**

Notes:
1. Additional costs/savings provided by PWD.
2. FY 2017 - FY 2018 based on increase in projected Class 100 costs (Line 1 - Line 3).

For additional details please refer to PWD_St-9B Supplemental Direct Testimony of Black & Veatch Corporation, on page 8 of Financial Plan: Revenue & Revenue Requirement Assumptions (Ref#: BV-S1)

O&M Adjustment #5 - City Grants

Line. No.	CITY GRANTS	2015	2016	2017	2018
	Finance				
1	Class 200 - GRANTS		$ 4,000,000	$ 4,000,000	$ 4,000,000
2	Reduction in Grants for Affordability Program				$ (2,730,000)
3	**Total Direct Adjustments**		**$ 4,000,000**	**$ 4,000,000**	**$ 1,270,000**
4	**Total Inter Dept Adjustments**				
5	**Total Adjustments (Line 3 + Line 4)**		**$ 4,000,000**	**$ 4,000,000**	**$ 1,270,000**

Notes: Includes reduction in City Grants due to affordability program.
Based upon affordability program costs as provided by Raftelis Financial Consultants, Inc. (RFC). Refer to Response Attachment PA-RDC-60

O&M Adjustment #6 - Human Resources & Administration

Line. No.	Human Resources & Admin	2015	2016	2017	2018
	COST BASIS				
	Inflation Factors				
1	Class 100 Inflation Factor				3.00%
2	Class 200 Inflation Factor				3.50%
	Water Fund Salary Ratios [See Pension & Fringes Ratio Worksheet]				
3	Benefits			40.63%	41.26%
4	Pension			37.55%	37.07%
5	Pension Obligations			9.54%	9.26%
	ADJUSTMENTS				
	Human Resources & Administration - Class 100				
6	Additional Class 100 Costs[1]			$ 375,000	$ 386,000
	Human Resources & Administration - Class 200 Costs				
7	Additional Class 200 Costs[1]			$ 1,000,000	$ 1,035,000
8	**TOTAL DIRECT ADJUSTMENTS**			**$ 1,375,000**	**$ 1,421,000**
	City Finance - Pension & Fringes				
9	Benefits (Line 6 x Line 3)			$ 152,000	$ 159,000
10	Pension (Line 6 x Line 4)			$ 141,000	$ 143,000
11	Pension Obligations (Line 6 x Line 5)			$ 36,000	$ 36,000
12	**TOTAL INTER DEPT ADJUSTMENTS**			**$ 329,000**	**$ 338,000**
13	**TOTAL ADJUSTMENTS (Line 8 + Line 12)**			**$ 1,704,000**	**$ 1,759,000**

Notes: 1. FY 2017 Additional costs based on discussion with PWD Staff. Projected costs inflated based on inflation factor by class For additional details please refer to PWD_St-9B Supplemental Direct Testimony of Black & Veatch Corporation, on page 7 of Financial Plan: Revenue & Revenue Requirement Assumptions (Ref#: BV-S1)

O&M Adjustment #7 - Planning & Engineering

Line. No.	Planning & Engineering	2015	2016	2017	2018
	COST BASIS				
	Inflation Factors				
1	Class 100 Inflation Factor				3.00%
2	Class 200 Inflation Factor				3.50%
	Water Fund Salary Ratios [See Pension & Fringes Ratio Worksheet]				
3	Benefits			40.63%	41.26%
4	Pension			37.55%	37.07%
5	Pension Obligations			9.54%	9.26%
	ADJUSTMENTS				
	Planning & Engineering - Class 100				
6	Additional Class 100 Costs[1]			$ 500,000	$ 515,000
	Planning & Engineering - Class 200				
7	Additional Class 200 Costs[1]			$ 600,000	$ 621,000
8	**TOTAL DIRECT ADJUSTMENTS**			**$ 1,100,000**	**$ 1,136,000**
	City Finance - Pension & Fringes				
9	Benefits (Line 6 x Line 3)			$ 203,000	$ 212,000
10	Pension (Line 6 x Line 4)			$ 188,000	$ 191,000
11	Pension Obligations (Line 6 x Line 5)			$ 48,000	$ 48,000
12	**TOTAL INTER DEPT ADJUSTMENTS**			**$ 439,000**	**$ 451,000**
13	**TOTAL ADJUSTMENTS (Line 8 + Line 12)**			**$ 1,539,000**	**$ 1,587,000**

Notes: 1. FY 2017 Additional costs based on discussion with PWD Staff. Projected costs inflated based on inflation factor by class. For additional details please refer to PWD_St-9B Supplemental Direct Testimony of Black & Veatch Corporation, on page 8 of Financial Plan: Revenue & Revenue Requirement Assumptions (Ref#: BV-S1)

O&M Adjustment #8 - Finance

Line. No.	Description	2015	2016	2017	2018
	COST BASIS				
	Inflation Factors				
1	Class 100 Inflation Factor				3.00%
	Water Fund Salary Ratios [See Pension & Fringes Ratio Worksheet]				
2	Benefits			40.63%	41.26%
3	Pension			37.55%	37.07%
4	Pension Obligations			9.54%	9.26%
	ADJUSTMENTS				
	Finance - Class 100				
5	Additional Class 100 Costs[1]			$ 56,000	$ 58,000
6	**TOTAL DIRECT ADJUSTMENTS**			**$ 56,000**	**$ 58,000**
	City Finance - Pension & Fringes				
7	Benefits (Line 5 x Line 2)			$ 23,000	$ 24,000
8	Pension (Line 5 x Line 3)			$ 21,000	$ 21,000
9	Pension Obligations (Line 5 x Line 4)			$ 5,000	$ 5,000
10	**TOTAL INTER DEPT ADJUSTMENTS**			**$ 49,000**	**$ 50,000**
11	**TOTAL ADJUSTMENTS (Line 6 + Line 10)**			**$ 105,000**	**$ 108,000**

Notes: 1. FY 2017 Additional costs based on discussion with PWD Staff. Projected costs inflated based on inflation factor by class. For additional details please refer to PWD_St-9B Supplemental Direct Testimony of Black & Veatch Corporation, on page 7 of Financial Plan: Revenue & Revenue Requirement Assumptions (Ref#: BV-S1)

O&M Adjustment #9 - Public Affairs

Line. No.	Description	2015	2016	2017	2018
	COST BASIS				
	Inflation Factors				
1	Class 100 Inflation Factor				3.00%
	Water Fund Salary Ratios [See Pension & Fringes Ratio Worksheet]				
2	Benefits			40.63%	41.26%
3	Pension			37.55%	37.07%
4	Pension Obligations			9.54%	9.26%
	ADJUSTMENTS				
	Public Affairs - Class 100				
5	Additional Class 100 Costs[1]			$ 100,000	$ 103,000
6	**TOTAL DIRECT ADJUSTMENTS**			**$ 100,000**	**$ 103,000**
	City Finance - Pension & Fringes				
7	Benefits (Line 5 x Line 2)			$ 41,000	$ 42,000
8	Pension (Line 5 x Line 3)			$ 38,000	$ 38,000
9	Pension Obligations (Line 5 x Line 4)			$ 10,000	$ 10,000
10	**TOTAL INTER DEPT ADJUSTMENTS**			**$ 89,000**	**$ 90,000**
11	**TOTAL ADJUSTMENTS (Line 6 + Line 10)**			**$ 189,000**	**$ 193,000**

Notes: 1. FY 2017 Additional costs based on discussion with PWD Staff. Projected costs inflated based on inflation factor by class. For additional details please refer to PWD_St-9B Supplemental Direct Testimony of Black & Veatch Corporation, on page 8 of Financial Plan: Revenue & Revenue Requirement Assumptions (Ref#: BV-S1)

O&M Adjustment #10 - Operations

Line No.	Operations	2015	2016	2017	2018
	COST BASIS				
	Inflation Factors				
1	Class 100 Inflation Factor				3.00%
2	Class 200 Inflation Factor				3.50%
3	Class 300 Inflation Factor				2.00%
4	Class 400 Inflation Factor				2.25%
	Projected Salary Ratio				
5	Benefits			40.63%	41.26%
6	Pension			37.55%	37.07%
7	Pension Obligations			9.54%	9.26%
	ADJUSTMENTS				
	OPERATIONS - CLASS 100				
	Additional Class 100 Costs[1]				
8	Industrial Waste				
9	NE WPCP				
10	**Total Class 100**			**$ -**	**$ -**
	OPERATIONS - CLASS 200				
11	Industrial Waste			$ -	$ -
12	NE WPCP			$ 1,260,000	$ 1,190,000
13	SE WPCP			$ -	$ -
14	SW WPCP			$ -	$ -
15	Customer Field Services			$ 500,000	$ 518,000
16	**Total Class 200**			**$ 1,760,000**	**$ 1,708,000**

O&M Adjustment #10 - Operations

Line No.	Operations	2015	2016	2017	2018
	OPERATIONS - CLASS 300				
17	Industrial Waste			$ 100,000	$ 100,000
18	NE WPCP			$ 200,000	$ 310,000
19	SW WPCP			$ 150,000	$ 150,000
20	**Total Class 300**			**$ 450,000**	**$ 560,000**
	OPERATIONS - CLASS 400				
21	Industrial Waste			$ -	$ -
22	SE WPCP			$ 85,000	$ 85,000
23	SW WPCP			$ 40,000	$ 40,000
24	**Total Class 400**			**$ 125,000**	**$ 125,000**
25	**TOTAL DIRECT ADJUSTMENTS**			**$ 2,335,000**	**$ 2,393,000**
	City Finance - Pension & Fringes				
26	Benefits (Line 10 x Line 5)			$ -	$ -
27	Pension (Line 10 x Line 6)			$ -	$ -
28	Pension Obligations (Line 10 x Line 7)			$ -	$ -
29	**TOTAL INTER DEPT ADJUSTMENTS**			**$ -**	**$ -**
30	**TOTAL ADJUSTMENTS (Line 22 + Line 61)**			**$ 2,335,000**	**$ 2,393,000**

Notes: 1. Additional costs based on discussion with PWD Staff.
For additional details please refer to PWD_St-9B Supplemental Direct Testimony of Black & Veatch Corporation, on pages 7 and 8 of Financial Plan: Revenue & Revenue Requirement Assumptions (Ref#: BV-S1)

O&M Adjustment #11 - Affordability Program

Line No.	Operations	2015	2016	2017	2018
	COST BASIS				
	Inflation Factors				
1	Class 100 Inflation Factor		3.00%	3.00%	3.00%
2	Class 200 Inflation Factor		3.50%	3.50%	3.50%
3	Class 200 Inflation Factor - Properties		0.00%	0.00%	4.76%
	Class 200 - Base Cost (FY 2015 Costs) Adjusted for Inflation				
4	IT/Technical Startup[1]	$ 1,125,000	$ 1,164,000	$ 1,205,000	
5	Ongoing IT Support[1]	$ 562,500	$ 582,000	$ 602,000	$ 623,000
	Annual CAP Administration - Base Cost (FY 2015 Costs) Adjusted for Inflation				
	Salary				
6	Collection Customer Rep[2]	$ 775,340	$ 799,000	$ 823,000	848,000
7	Collection Rep Supervisor[2]	120,780	124,000	128,000	132,000
8	Data Services Support Clerk[2]	176,325	182,000	187,000	193,000
9	Subtotal - Salary	$ 1,072,445	$ 1,105,000	$ 1,138,000	$ 1,173,000
10	Fringes and benefits	$ 2,122,798			
11	Space costs[3]	$ 111,250	$ 111,000	$ 111,000	$ 116,000
12	TOTAL	$ 4,378,938			
	Water Fund Salary Ratio (Percentage of Salary) [See Pension & Fringes Ratio Worksheet]				
13	Benefits		40.06%	40.63%	41.26%
14	Pension		37.77%	37.55%	37.07%
15	Pension Obligation		9.82%	9.54%	9.26%

O&M Adjustment #11 - Affordability Program

Line No.	Operations	2015	2016	2017	2018
	ADJUSTMENTS				
	Finance & Admin - Class 200 (Excludes Reduction in City Grants)				
16	Technology Implementation (Line 4)			$ 1,205,000	
17	Technology Annual Cost (Line 5)				$ 623,000
18	**TOTAL**	**$ -**	$ -	$ 1,205,000	$ 623,000
19	Direct (Line 18)	$ -	$ -	$ 1,205,000	$ 623,000
	WRB - Class 100				
20	Cost Basis (Line 9)		$ 1,105,000	$ 1,138,000	$ 1,173,000
21	Cost Factor[4]		0.00%	75.00%	100.00%
22	Projected Cost (Line 20 x Line 21)	$ -	$ -	$ 854,000	$ 1,173,000
	WRB - Class 200				
23	WRB - Class 200 (Line 11)			$ 111,000	$ 116,000
	City Finance				
24	Benefits (Line 22 x Line 13)		$ -	$ 347,000	$ 484,000
25	Pension (Line 22 x Line 14)		$ -	$ 321,000	$ 435,000
26	Pension Obligation (Line 22 x Line 15)		$ -	$ 81,000	$ 109,000
27	Total Inter Depart Adjustments		$ -	$ 1,714,000	$ 2,317,000
	Total Adjustment				
28	**Total Adjustments (Lines 19 + 27)**		**$ -**	**$ 5,771,001**	**$ 6,430,001**

Notes: Refer to OM Adj 5 for reduction in City Grants due to the implementation of the new affordability program.
Estimated cost impact (*shown in yellow cells*) based upon affordability program costs as provided by Raftelis Financial Consultants, Inc. (RFC).
Refer to Response Attachment PA-RDC-60 for source documentation.
Per RFC, base year salary, Class 200, and Space costs are based upon FY 2015 cost levels.
[1]Inflated based on Class 200 Inflation Factor
[2]Inflated based on Class 100 Inflation Factor
[3]Inflated based on Class 200 - Properties Inflation Factor
[4]Implementation Factor - Per discussions with RFC and PWD, staffing increases pro-rated for FY 2017 to account for hiring schedule and on-boarding activities.

Pension & Fringes Ratios

Line No.	Class Code	Description	2016	2017	2018
		Projected Water Fund Class 100 Costs (Source: Workpaper Finplan15.xls, InterDept O&M - 7)			
1	100	Salaries & Wages	$ 123,198,999	$ 126,894,969	$ 130,701,818
2	1xx	Benefits	$ 49,358,102	$ 51,556,567	$ 53,921,078
3	191	Pension	$ 46,529,000	$ 47,655,080	$ 48,444,900
4	190	Pension Obligations	$ 12,100,000	$ 12,100,000	$ 12,100,000
5		**Total**	**$ 231,186,101**	**$ 238,206,616**	**$ 245,167,796**
		Water Fund Salary Ratios (Percentage of Salary)			
6		Benefits (Line 2 / Line 1)	40.06%	40.63%	41.26%
7		Pension (Line 3 / Line 1)	37.77%	37.55%	37.07%
8		Pension Obligations (Line 4 / Line 1)	9.82%	9.54%	9.26%
		Water Fund Class 100 Distribution			
9		Salaries & Wages (Line 1 / Line 5)	53.29%	53.27%	53.31%
10		Benefits (Line 2 / Line 5)	21.35%	21.64%	21.99%
11		Pension (Line 3 / Line 5)	20.13%	20.01%	19.76%
12		Pension Obligations (Line 4 / Line 5)	5.23%	5.08%	4.94%

	CHECK				
	Class 100				
13		Direct	$ 102,961,600	$ 106,050,448	$ 109,231,961
14		Inter Departmental	$ 20,237,399	$ 20,844,521	$ 21,469,857
15		**Total**	**$ 123,198,999**	**$ 126,894,969**	**$ 130,701,818**
16		**Difference**	**$ -**	**$ -**	**$ -**

TOTAL ADJUSTMENTS

Line No.	Description	2015	2016	2017	2018
1	DIRECT	$ 2,000,000	$ 4,000,000	$ 16,892,000	$ 16,178,000
2	INTER DEPARTMENTAL	$ -	$ -	$ 3,297,000	$ 4,139,000
3	**TOTAL**	**$ 2,000,000**	**$ 4,000,000**	**$ 20,189,000**	**$ 20,317,000**