

**FY 2015**

**Budget Testimony**

# Testimony

**FY 2015 Operating Budget Testimony  
Commissioner Howard M. Neukrug, PE  
Philadelphia Water Department  
Presented to Philadelphia City Council  
May 6, 2014**

Good morning, Council President Clarke and Members of City Council. I am Howard Neukrug, Water Commissioner, testifying on behalf of the Philadelphia Water Department and its FY2015 operating budget request.

So far, 2014 has been an interesting year for water. The Polar vortex, record-breaking snows and floods, water main breaks and 2 48 inch breaks kept us very busy. Fortunately for the residents of Philadelphia, the Water Department workforce is second to none and despite these challenges, our drinking water has remained pure, our supplies constant and our rivers are running clean. The 2000 dedicated employees of the PWD are doing an outstanding job protecting our public's health and their environment and deserve to be recognized and commended.

But as we move our utility well into the 21<sup>st</sup> century – and towards the Utility of the Future - we are balancing an aging infrastructure, new “smart water” technologies, affordability of our water, an aging workforce, limited resources and the need to provide services on beautiful days like today as well as during catastrophic natural or man-made events.

And as our infrastructure ages, the demands on our employees increase and the long-term solution is the continued commitment of the City and the Water Department to optimize and upgrade its system of water reservoirs, pipes, pumps and plants.

The FY15 Water Department operating budget is proposed at \$354.8 million or \$33.7 million over the FY 14 estimated obligations.

The Class 100 budget request of \$93.8 million is \$4.8 million over FY14 estimated obligations for the full funding of anticipated new hires, filling vacancies and the transfer of employees from the WRB to water shut-offs and restore units.

The Class 200 budget request of \$146.1 million is \$17.9 Million over FY14 estimated obligations for costs associated with new programs aligned with our Strategic Plan for planning the future of our water supply and infrastructure network, increasing our business assistance program to help commercial properties manage stormwater, a required costs of service study, and energy costs.

The Class 300 and 400 budget request of \$47.7 million is \$1.8 million above FY14 estimated obligations due to increases in costs for chemicals, building materials, machinery and equipment.

The Class 800 budget request of \$66.9 million is \$9.1 million above FY14 estimated obligations due to increased transfers to various fund categories (Residual, General, Capital and Rate Stabilization).

I would like to thank City Council for their support as PWD moves forward with significant programs geared to reduce costs and improve services.

In particular, our efforts to reduce energy costs through projects like the Biogas Cogeneration facility and Geo-sewer-thermal installation are state-of-the-art and bode well for our future generation of energy and reduced costs for our utility.

Our Green City, Clean Waters program is coordinating activities with a variety of partners like Streets, Parks and Recreation, the School District and with members of Council to leverage investments that make Philadelphia a more attractive, place to live and work.

In closing, we are moving forward to improve service, reduce costs and remain sustainable for future generations on many fronts, including our efforts to create a 21<sup>st</sup> century workforce, reviewing costs and processes for our Field Operations and the Water Revenue Bureau, and examining water needs for our city for tomorrow and the next century.

I look forward to continued partnership with City Council toward further improvement in FY14 and the years ahead. At this time, I would be happy to answer any questions that you may have.

**PHILADELPHIA WATER DEPARTMENT  
FISCAL YEAR 2015 BUDGET TESTIMONY  
MAY 6, 2014**

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**EXECUTIVE SUMMARY**

**DEPARTMENT MISSION AND FUNCTION**

**PWD mission:**

The Philadelphia Water Department (PWD) aims to be America's model 21st Century urban water utility- one that fully meets the complex responsibilities and opportunities of our time and environment. PWD's mission is to:

- Provide the Greater Philadelphia region with integrated water, wastewater and stormwater services
- Protect public health by always delivering PWD's customers the highest quality of drinking water at a competitive and affordable cost
- Protect the environment by managing and treating the region's wastewater and stormwater, protecting and advocating for rivers and streams and their watersheds, and protecting sources of drinking water
- Support the sustainable growth of Philadelphia and its residents, communities, businesses and industry as well as the financial well-being of the utility
- Continue to be America's most innovative utility with a constant focus on quality, efficiency, customer service and affordability

**PWD's short and long term goals:**

PWD recently completed a new Strategic Plan, which was created with the input of PWD's own staff, other city and government agencies, and external partners. The plan focuses on eight key areas:

- Improve customer service, outreach and assistance
- Increase workforce strength and diversity
- Improve our financial health
- Invest in capital planning
- Protect our infrastructure
- Uphold excellence in core services
- Ensure sustainable utility operations
- Support a strong and diverse Philadelphia business community

There are over 50 short, medium and long-term sub-objectives that fall into these eight areas. A copy of the strategic plan is enclosed for reference.

**PWD FY14 accomplishments:**

- Northeast Biogas Cogeneration Facility: Construction was completed in November 2013 on the Northeast Biogas Cogeneration Facility, at PWD's Northeast Water Pollution Control Plant. This innovative wastewater biogas-to-energy facility will capture methane biogas from the existing sewage treatment process and use it to generate electricity and thermal energy for use on-site. The project will generate 5.6 MW of power per year, or enough to meet 85% of the plant's current requirements for heat and electrical power, a great step towards PWD's goal of making all of our facilities energy neutral to cut costs. Additionally, PWD met its aggressive Economic Opportunity Plan goals with minority contractor participation at 44% and with workforce inclusion percentages at 32% minority journeymen, 7% female journeypersons and 54% minority apprentice, and 86% local apprentice. During this past winter's polar vortex when energy rates spiked, the CoGen facility saved PWD \$621,000 in avoided increased energy costs.
- Green City, Clean Waters: Two and half years into the 25-year program, *Green City Clean Waters* has made vital progress in managing stormwater to pollution entering our waterways, while also helping to abate flooding, and greening Philadelphia's neighborhoods. To date, there have been nearly 435 greened acres developed on parks, playgrounds, schoolyards, streets, and other properties. PWD has also restored two

miles of local stream, created three and a half acres of wetlands and cleared area waterways for the safe passage of at least 3,500 migratory fish.

- **Product Quality at 100%:** While other cities struggle with water quality issues that make it necessary to issue “boil water” alerts, PWD met the goals of the U.S. Environmental Protection Agency (EPA) Partnership for Safe Water, providing the highest quality drinking water, 100% of the time, to all our customers. We are also protecting our rivers 100% of the time, an accomplishment that will be recognized with a Gold Peak Performance Award from the National Association of Clean Water Agencies (NACWA) and continues a 12-year streak of meeting these goals. PWD was able to achieve this performance even under peak stress conditions.
- **Infrastructure Soundness:** In FY13, PWD bid \$211 million in capital projects, renewed or replaced 30 miles of water and sewer pipes, and reinvested in our water and wastewater facilities. Water main breaks remained below the national average, at fewer than 2.25 breaks daily. A major new capital project, the Venice Island sewer overflow Basin Project (\$47 million), was placed into service, significantly reducing the amount of wet weather overflows to the Schuylkill River. PWD also began its ramp up in 2013 of Capital Improvement Projects, increasing spending from \$170 million/year to \$250 million/year. In addition, the Department implemented a major part of the projects funded through the \$200M awarded from the PennVest fund.
- **Commercial Customer Assistance - Stormwater Management Incentives Program (SMIP):** This \$5 million/year grant program provides non-residential PWD customers with financial incentives to manage stormwater runoff and reduce their stormwater bill. In its second year, the City awarded \$4.7 million to 17 projects that will capture runoff totaling 77 greened acres. Non-residential customers in Special Services Districts can also apply collectively for additional funding through Business Improvement District Grants. The third round applications were due at the end of January 2014.
- **Customer Service - Emergency and Bill Call Center Performance:** The addition of cloud technology to the PWD call center in 2013 has resulted in significant increase in the number of calls taken each business day. The center now has the capacity handle and track all calls, and the addition of a customer call back system ensures that every customer gets the chance to speak directly with a representative. The centers are showing significantly fewer abandoned calls and shorter customer hold times. For example, among the approximately 213,000 calls received in 2013, the average customer wait time was 39 seconds -- that’s 30% shorter than the average among call centers across all industries (56 seconds). Additionally PWD and WRB customer service are working on offering self-service options including automated account balance information and enhancements to online payment options through an updated website.
- **21<sup>st</sup> Century Workforce Initiative** - Since initiating this effort in 2012 to strengthen and diversify its employee base, PWD has made some notable accomplishments in workforce support. As a current PowerCorpsPHL participant, PWD will provide ongoing 6-month sessions of full time service and training to groups of Philadelphia area young people, then help them afterward with job placement support. In addition, more than 10% of PWD’s workforce has already taken advantage of new in-house training programs which prepare them to successfully take the civil service exams that will allow them to earn job promotions. Other upcoming training opportunities include a three-phase leadership development program for all PWD supervisors and managers. PWD is also successfully reorganizing its personnel unit to make essential improvements that will facilitate the recruitment and hiring of a highly qualified and diverse workforce.
- **Increased Contracting Participation** -In FY13, PWD achieved an overall participation rate 26% on all contracts, slightly over its 25% goal. (Please see chart at the end for explanation on difference in OEO’s reporting) Specifically, subcontracting opportunities amounted to contract awards totaling \$56.2 million to disadvantaged business enterprises in FY13. Through the second quarter of FY14, PWD achieved 25% participation on overall PWD contracts. To meet our goal of engaging and assisting the local M/W/DSBE market, our Director of Participation is working to implement PWD’s Participation Plan. This plan includes methods to improve communications through our website, the *Take Part!* online newsletter and informational sessions like the recently launched Contractor Quarterly Seminars. Additionally, we are exploring partnerships to bring resources to the disadvantaged business community including short term lending programs, bonding education, joint venture opportunities and strategic partnering.

## **PROPOSED BUDGET HIGHLIGHTS/FUNDING REQUEST**

### **PWD Budget Summary**

The proposed Water Fund operating budget for FY15 is \$727.7 million which includes not only the operating budget of PWD (\$354.7 million) but other significant costs, such as the operating budgets of the Water Revenue Bureau and the Office of Innovation and Technology (OIT)-Water, debt service, employee fringe benefits, and other central agency support services.

- The proposed PWD operating budget for FY15 is \$354.7 million which reflects a \$33.7 million increase over FY14 estimated obligations. The increase is attributable to higher costs in nearly every area of operation.
- The PWD Class 100 budget request of \$93.8 million is \$4.8 million over FY14 estimated obligations. The increase is attributed to the transfer of 19 positions from the water revenue bureau to the water department in order to consolidate the management of water shut-offs and restores, lump sum payments for an increasing number retirees during the fiscal period, funding the filling of existing vacancies, and new hires required for meeting the U.S. EPA Consent Order for the reduction of Combined Sewer Overflows.
- The Class 200 budget request of \$146.1 million is \$17.9 Million over FY14 estimated obligations. This increase is primarily associated with implementing the goals of the PWD Strategic Plan, increasing our business assistance program to help manage stormwater fees, Storm Flood Relief modeling and planning expense, funding a cost of service study, and conducting a study of the future water wastewater capital needs for the City for 2040 and beyond, and energy costs.
- The Class 300 and 400 budget request of \$47.7 million is \$1.8 million above FY14 estimated obligations due primarily to an increase in chemical costs, building materials, machinery and equipment at our water treatment and water pollution control plants.
- The Class 800 budget request of \$66.9 million is \$9.1 million above FY14 estimated obligations, primarily due to increased transfers to the Residual Fund and to the General Fund for services rendered.
- The total Water department operating budget increase of \$33.7 Million represents a 10.5% increase from the approved FY14 estimated obligations, or a 5.7% overall budget to budget increase.
- We continue to plan for our future and invest in our water infrastructure. We have developed strategic business and financial plans, and have developed a 25-year, \$10.8 billion capital investment program to proactively tackle both the immediate and the long-term projects that will ensure the stability and efficiency of our city's wastewater, storm-water and drinking water systems.

### **Accomplishments in PWD Financial Management and Operational Accountability**

- **New, Predictable Rates:** In 2012, Water rates were approved for a three year period. The last scheduled increase under that rate order occurs on July 1, 2014, when typical rates will increase by 5%. Despite the adjustments, PWD rates will remain among the lowest in the region. These new rates will meet the requirements of the Department's Financial Plan, directed at maintaining or improving PWD's credit rating, and supporting the new Capital Improvement Plan, which is re-investing in the City's aging water and sewer infrastructure.
- **\$200 million in New Money Revenue Bonds fund the Capital Improvement Program and \$6.8 million of refunding savings:** On August 24, 2013, PWD settled on \$170,000,000 in new money Water & Sewer revenue bonds. The bonds were issued as the City of Philadelphia, Pennsylvania-Water and Wastewater Revenue Bonds, Series 2013A. These bonds will be used to finance a portion of the FY 2013 and 2014 Capital program and to pay costs related to the transaction. The bonds were issued at total average interest cost of 4.166341%. The final bond maturity is in FY 2043. The 2013A issue included only uninsured bonds. The department recently received confirmation of its existing bond ratings from each of the three major bond rating agencies. (MOODY'S: A1 Stable S&P: A Stable FITCH: A+ Stable). On January 14<sup>th</sup>, 2014, PWD sold \$123,170,000 in refunding and new money Water & Sewer revenue bonds. The bonds were issued as the City of Philadelphia, Pennsylvania-Water and Wastewater Revenue Bonds, Series 2014A. These bonds will be used to refund a portion of the Water & Sewer Revenue Bonds, Series 2005A, to finance a portion of the Capital program and to pay costs related to the transaction. The bonds were issued at an all-in true interest cost of 3.850857%. The refunding portion of the transaction generated approximately \$6.8 million in net present value savings with savings occurring in years 2016 to 2027. The new money portion of transaction was structured as a term bond with a final maturity of July 1, 2043. The term bond was priced to yield a

4.70%. PWD has not issued a long-dated 30 year term bond at or below this level since November 2011. The 2014A issue included only uninsured bonds.

- New wastewater treatment agreement with DELCORA: On April 1, 2013 PWD executed a new 15 year wastewater treatment agreement with its largest wastewater customer, the Delaware County Regional Water Quality Control Authority. The contract maintains the 50 MGD average daily treatment limit that was established in the prior 1974 agreement. The agreement also provides for DELCORA's payment for their proportional share of LTCP costs along with a management fee, which are projected to exceed \$178 million over the next 25 years.
- New wastewater treatment agreement with Springfield Township: On February 24, 2014 PWD executed a new 10-year wastewater treatment agreement with Springfield Township. The contract maintains the 4.2 million gallons per day average daily treatment limit that was established in the prior agreement. The agreement also provides for the township's payment for their proportional share of the Long Term Control Plan costs along with a management fee, which are projected to exceed \$15 million over the next 25 years.

#### **PWD Fiscal 2013 Financial Results**

During FY13, PWD continued its record of exceeding its financial projections and demonstrating fiscal responsibility.

- **Revenues.** Total operating revenues increased \$23,600,000 primarily due to a 5.8% water and sewer rate increase effective on July 1, 2012. Total non-operating revenues increased \$1,500,000 due to an increase in miscellaneous revenues.
- **Expenses.** Total operating expenses increased \$24,300,000 due to a \$12,800,000 increase in the personal services, including fringe benefits, combined with an increase of \$7,700,000 in the purchase of contracted services, material, and supplies, an increase of \$2,000,000 in contributions, indemnities and taxes, and an increase of \$1,700,000 in charges due to the General Fund.

In FY13, a withdrawal of \$4,666,000 was made from the Rate Stabilization Fund. Deposits of \$19,380,000 to the Capital Account and \$22,833,000 to the Residual Fund were made from the Water Fund Account. These capital and residual fund deposits will be used to provide funding for capital projects in lieu of additional borrowing.



**WATER DEPARTMENT  
BUDGET SUMMARY AND OTHER BUDGET DRIVERS**

**Financial Summary by Class**

	Fiscal 2013 Actual Obligations	Fiscal 2014 Original Appropriations	Fiscal 2014 Estimated Obligations	Fiscal 2015 Proposed Appropriations	Difference FY14 - FY15
Class 100 - Employee Compensation	\$85,257,781	\$93,863,950	\$89,035,750	\$93,863,950	\$4,828,200
Class 200 - Purchase of Services	\$116,003,428	\$136,195,600	\$128,128,300	\$146,093,400	\$17,965,100
Class 300 - Materials and Supplies	\$41,242,018	\$44,017,500	\$43,199,600	\$45,096,500	\$1,896,900
Class 400 - Equipment	\$1,893,948	\$3,637,500	\$2,809,100	\$2,666,850	(\$142,250)
Class 500 - Contributions	\$0	\$100,000	\$0	\$100,000	\$100,000
Class 700 - Debt Service	\$0	\$0	\$0	\$0	\$0
Class 800 - Payment to Other Funds	\$53,006,195	\$58,456,300	\$57,864,100	\$66,965,000	\$9,100,900
Class 900 - Advances/Misc. Payments	\$0	\$0	\$0	\$0	\$0
<b>TOTAL</b>	<b>\$297,403,370</b>	<b>\$336,270,850</b>	<b>\$321,036,850</b>	<b>\$354,785,700</b>	<b>\$33,748,850</b>

**Staff Demographics Summary\***

	Total	Minority	White	Female
Full-Time Staff	1701	60%	40%	19%
Executive Staff	16	25%	75%	44%
Average Salary - ES	\$117,972	\$104,500	\$122,462	\$104,973
Median Salary - ES	\$117,500	\$102,500	\$121,597	\$101,371

**Employment Levels\***

	Budgeted	Approved	Filled
Full-Time Positions	1947	1905	1701
Part-Time Positions	0	0	0
Executive Positions	16	16	16

**Contracts Summary\***

	FY09	FY10	FY11	FY12	FY13	FY14*
Total amount of contracts	\$111,156,928	\$58,790,962	\$130,695,391	\$105,911,350	\$145,599,508	\$88,835,600
Total amount to M/W/DBE	\$13,951,121	\$10,013,494	\$32,535,549	\$22,336,432	\$33,113,328	\$21,835,600
Participation Rate	13%	17%	25%	21%	23%**	25%

\*As of December 2013

\*\* PWD's participation rate is 26% for FY13. The 23% excludes state and federal contracts managed through an authority, which is not counted by OEO's reporting

**PHILADELPHIA WATER DEPARTMENT  
PERFORMANCE, CHALLENGES AND INITIATIVES**

**DEPARTMENT PERFORMANCE (OPERATIONS)**

Performance Measure	FY08	FY12	FY13	FY13- FY12 Change	FY13 Q1-Q2	FY14 Q1-Q2	FY14- FY13 Q1-Q2 Change	FY14 Goal	FY15 Goal
Millions of Gallons of Treated Water	93,679	87,341	89,616	2.6%	45,578	44,783	-1.7%	93,252	97,920
Percent of Time Philadelphia's Drinking Water Met or Surpassed State & Federal Standards	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	0.0%	100.0%	100.0%
Miles of Pipeline Surveyed for Leakage	1,113	1,137	968	-14.9%	516	478	-7.4%	1,130	1,130
Water Main Breaks Repaired	687	563	823	46.2%	316	355	12.3%	905	905
Average Time to Repair a Water Main Break upon Crew Arrival at Site (Hours)	7.6	7.7	7.7	0.0%	6.7	6.4	-4.5%	< 8.0 hours	< 8.0 hours
Percent of Hydrants Available	99.7%	99.7%	99.7%	0.0%	99.7%	99.7%	-0.1%	99.7%	99.7%
Number of Storm Drains Cleaned	75,804	84,395	100,251	18.8%	50,182	49,746	-0.9%	111,444	111,444
Acres of Watershed Plans Approved	485	264	251	-4.9%	129	202	56.6%	240	75
Resultant Watershed Stormwater Flow Reduction (Million Gallons)	461	249	236	-5.2%	122	192	57.4%	228	N/A

PWD operates three drinking water plants which treat and deliver about 236 million gallons per day of top quality drinking water that meets or exceeds all federal, state and local regulations, 100% of the time. Additionally, it operates three water pollution control plants that treat approximately 490 million gallons of wastewater per day at a level that meets or exceeds federal and state standards, protecting and preserving our vital waterways. Gallons of water treated decreased by 7% between FY11 and FY12 but increased again by 3% in the first half of FY13 compared to FY12. These plants have each received multiple national awards for achieving 100% compliance with environmental regulations.

PWD surveyed 968 miles of pipeline for leakage in FY13, 15% fewer miles than in FY12, but expects to meet its end of year target of 1,130. The variation in miles of pipeline surveyed is partly explained by the trends in water main breaks, as the same crew and equipment are used to conduct the surveys and locate active leaks. PWD repaired 563 water main breaks in FY12, 41% fewer than in FY11 due to milder weather conditions in FY12 compared to FY11. The number of water main breaks is 3% higher in the first half of FY13 compared to the first half of FY12. With fewer main breaks to locate in FY12, the crews were able to survey more miles of pipeline for leakage. The Department continues to repair water main breaks in roughly 7.7 hours, below the 8-hour target. Additionally, PWD cleaned 17% more storm drains in FY12 than in FY11 and again 22% more in the first half of FY13 compared to the first half of FY12, as a result of increased operational efficiencies and staffing. Additionally, PWD is currently meeting the target of ensuring 99.7% of hydrants are available.

The Department is pursuing an aggressive plan to reduce stormwater overflows through greening its infrastructure, and has approved private development plans across the entire city, representing 264 acres in FY12 and an additional 250 acres in FY13.

Additionally, PWD and WRB's call center fielded approximately 213,000 calls in FY13. The average customer wait time was 39 seconds, 30% shorter than the average among call centers across all industries (56 seconds).

## DEPARTMENT CHALLENGES

- Knowledge retention- This is an area of critical concern to PWD and specifically addressed in our Strategic Plan. Because of this prominence, the Department is in the process of developing and institutionalizing the documentation and retention of our policies, practices, standard operating procedures and other operational and management information. While much of this critical data is already sufficiently documented and maintained throughout the Department's many facilities it will, nevertheless, require significant financial and personnel resources to complete, periodically update and maintain in an easily accessible format. Fortunately, this massive undertaking will be facilitated by new and innovative document management systems such as Sharepoint, which is now being deployed Department-wide. We are also currently formalizing an apprentice program and are expanding internship opportunities to create our own pipeline for future employees. Additionally, we continue to maintain and improve access to training courses in-house to develop and ensure our own internal pool of candidates capable of meeting our future employment needs. In 2013 our HR established a focus group to review past practices in recruitment that has led to improved decisions of when and where to actively recruit young, competitive and diverse entry-level candidates. Since 2013, PWD has participated in two career fair recruitment seasons covering a range of colleges and universities on the east coast including unprecedented visits to Historic Black Colleges and University (HBCU) career fairs at Morgan State, Delaware State University and Howard University.
- Aging infrastructure and limited capital- In order to keep up with the degradation associated with an aging system, PWD is ramping up reinvestment in its infrastructure. PWD continues to schedule infrastructure replacement and rehabilitation projects as infrastructure reaches the end of its useful life. PWD utilizes various asset management tools and a strong maintenance program to optimize the capital program in order to maximize an asset's useful life while maintaining a high level of reliability. With a replacement value in excess of \$30 billion, the goal of the program is to maintain its assets in a reliable state without prematurely replacing them, and consequently increasing debt service costs. This is also a key reason why PWD has embarked on a master capital planning process for the water and wastewater systems for beyond 2040.
- Customer delinquencies- PWD and the Water Revenue Bureau with the Revenue Department have developed a working group which meets on a monthly basis to identify and seek solutions to business processes and customer communications that can impact a customer's ability to stay current on their water/sewer/stormwater bills. Over the past year and a half, the working group has implemented and/or revised public information materials (shut off notices, assistance programs fact sheets, bill design, website materials) and business processes and policies (online payment options, zero usage bill policy, meter readers re-assignment, estimated bills) to assist customers with achieving on time payment. The Working Group will be implementing new customer service enhancements over the next six months via IVR applications for customer self-service options.

## STAFFING LEVELS

- PWD is budgeted for approximately 1900 positions comprising 277 job titles—the most of any city department.
- On any given date there are approximately 150 -200 vacancies, or about a 10% rate. This is a reduction from the approximately 270 vacancies that existed during last year's budget cycle.
- These vacancies, in part, are the result of the movement (promotional and lateral) of staff both internally and to other Departments that is the natural result of the Civil Service system.
- The remaining balance of vacancies is the result of employee attrition and retirement and in some instances an impediment to the efficient management and operation of the system.
- During the past year numerous initiatives have been undertaken to further reduce the overall vacancy level. These include the addition of new PWD Personnel staff, better I.T. data management capabilities and improved civil service test scheduling to ensure the availability of qualified candidates for all open positions.
- It is expected that during the next year the overall vacancy rate will be further reduced to around 7% of budgeted positions, which is sustainable budgetarily and operationally.
- Our staff continues to grow and fill vacant positions to respond to needs related to planning implementation and maintenance of our EPA Consent Order to manage stormwater, Storm Flood Relief project planning,

expediting of development plan reviews, succession and legal obligations. The augmentation of business support, Office of Economic Opportunity (OEO) coordination and participation data tracking, workforce diversity and training coordination, and improved internal control function have also contributed to these increases.

*Number of staff by language:* PWD does not track the foreign language proficiency of our staff. For customer service, PWD uses Language Line, a service that PWD and WRB call centers use for third-party translation. When written communications are sent to a neighborhood where a language other than English is predominantly used, we translate the communication using the translation service provided by the Managing Director's Office.

## PAST INITIATIVES

- **Public Private Partnership projects-** PWD has been an active advocate of public-private partnerships (P3s) in an effort to reap the benefits of these ventures of all stakeholders. P3s, such as described below, offer the public sectors the expertise and efficiencies that the private sector typically brings to delivery of facilities while offering the private sector business a broader base for financing the delivery of such services or facilities thus creating a mutually beneficial situation.
  - Northeast Water Pollution Control Plant Biogas Project (CoGen) - PWD has had great success through our active involvement in an innovative public/private partnership called The Northeast Water Pollution Control Plant (NEWPCP) Biogas Project. This partnership was created between PWD, Ameresco, and Bank of America capital leasing unit to support the generation of both thermal energy and electricity at the NEWPCP facility which can recycled on-site to meet 85% of the plant's energy needs. The project was led by Ameresco as the project developer, AP Construction as the general contractor, and AECOM as the Engineer of Record. The project achieved over 44% participation - exceeding its EOP goal of 40%. The workforce goals were also met in many areas. The project had 32% participation of minority journeymen, 54% minority apprentice, 86% local apprentice and 7% female journeypersons.
  - Synagro/ The Philadelphia Biosolids program is a comprehensive management system of the City's biosolids which includes the design, financing, construction, maintenance, and operation of facilities at the City's Biosolids Recycling Center. This P3 team includes Philadelphia Biosolids Services, LLC (PBS), a joint venture comprised of Synagro-WWT, Inc. with 70% holdings, McKissack & McKissack (a minority female owned firm) with 20% holdings and Len Parker & Associates (LPA), (a minority male owned firm) with 10% holdings. The estimated cost of this project is 350 million dollars for over a 25 year span. The project began in August 2008. The Project was set up in 4 phases: Interim Operations, Design, Construction, and Long Term Operations offering ample opportunities for inclusion. For example during the construction phase which was completed in 2010, offered an EOP eligible portion of the work equal to \$27,080,422. It is noteworthy that the goals set by OEO are articulated in the form of ranges. PWD has responded to these ranges in a manner that reflects the availability of services in the current market place in combination with an awareness of the limitations that has unique technical procurement requirements of a given project to develop the proposed plan of action detailed below.
    - The participation on the project to date:
      - Interim Operations Phase – **Complete**
        - **Contract Value: \$13,342,557**
        - Subcontracts – (Goals: MBE - 32%; WBE – 15%; DSBE – 3%)
          - MBE documented participation - 32%
          - WBE documented participation- 29%
        - Workforce – (Goal is 50% local residents, no minority or female goal was stipulated)
          - Local workforce – 45%
          - Minority workforce – 33%
          - Female workforce – 9%
      - Design phase - **Complete**

- **Contract Value: %1,846,200**
- Subcontracts (Goals: MBE – 26% - 31%; WBE 12%-14%; DSBE 2%-3%)
  - MBE documented participation – 27%
  - WBE documented participation – 10%
  - Workforce is not applicable during design phase.
- **Construction – Complete**
  - **Contract Value: \$27,080,422**
  - Total spend and EOP eligible \$27,080,422
  - Subcontracts (Goal: 35% combined MBE/WBE)
    - MBE documented participation- 37%
    - WBE documented participation- 8%
  - Workforce (Goals: 50% local; 35% minority; 7% female)
    - Local journeypersons –32%
    - Minority journeypersons – 21%
    - Female journeypersons – 3%
- **Long term operations – In progress (Year 2)**
  - Spend for FY 13 - \$21,350,000
  - Subcontracts (Goal: MBE – 15%; WBE – 10%)
    - MBE/WBE documented participation – 28%
  - Community Benefits Agreement - PBS currently has an agreement with Penrose to hire local residents. The Economic Opportunity Plan specifies that PBS will make Best and Good Faith Efforts to require its contractors to utilize Philadelphia-based subcontractors that employ local residents in its long term operations workforce consistent with a workforce utilization goal of 50%. For any jobs created in connection with the operation of the new facility the minimum goal for employment of minority persons is 30%; 15% for females and encouraged participation for disabled. PBS will use its Best and Good Faith Efforts to reach out to sources of employment like the Philadelphia Works and the Urban League of Philadelphia that can refer minority, female and disabled workers. PBS is also in partnership with local organizations to develop appropriate workforce development programs to provide training to employees.

## **CURRENT INITIATIVES**

- **M/W/DSBE Participation and Business Development-** As part of our broader mission of supporting the sustainable growth of business diversity, PWD is committed to helping the long-term development of market opportunities for minority, women, and disabled-owned business enterprises (M/W/DSBEs) in the greater Philadelphia region. Towards that end, PWD identified seven leverage points for action that include:
  - increasing public awareness of PWD's business practices;
  - improving contract requirement processes to enhance participation;
  - addressing structural barriers to participation;
  - coordinating data tracking and monitoring tools for improved communication;
  - maintaining reliable communication with resource partners;
  - exploring options for the introduction of new Best Practices in diversity procurement programs; and
  - improving staff awareness of the importance of supplier diversity and participation.
- **Project Labor Agreements-** Currently, PWD has six Project Labor Agreements (PLAs) in place for projects estimating from \$4.5 million to \$38.9 million. PWD anticipates increasing its PLA portfolio with an additional 10 projects during the remaining part of FY14 into FY15; one project of which will be a four part bid. The PLAs for these projects include requirements for diversity in the trades and the inclusion of local, minority and women hiring goals.

- Strategic and Financial Planning- This year, we published a new department-wide strategic plan, revised our strategic business plan and developed a new financial plan. These plans, along with the capital improvement plan, serve as a guide for moving our utility into the 21<sup>st</sup> Century with a strong and diverse workforce, sound infrastructure investment, lower cost of capital, new metering and customer service technologies, and water treatment and management reviews to identify areas of cost savings and increase service levels. In FY 2013, the three major Wall Street rating agencies, Moody's, Standard and Poor's, and Fitch, rated PWD's bonds in the A range, allowing us to borrow at lower interest rates to fund our infrastructure improvements.
- 21<sup>st</sup> Century Workforce Initiative- PWD has initiated an effort to strengthen and diversify its workforce, while also preparing the next generation of Philadelphians for skilled, high-paying jobs. This effort reinforces an organizational culture that values diversity, high performance and accountability. Over the next two years, PWD will be focusing on passing on the knowledge and skills needed to perform the tasks we do every day by, among other things, re-launching an Apprenticeship program to train and employ young people in the skilled trades highly desired by PWD. Additionally, the Department's team of more than 1,900 employees brings a diverse and valuable range of skills, and PWD is working to further strengthen our workforce through targeted, thoughtful recruitment, training and promotion.
- Storm Flood Relief- Flooding is occurring throughout the city due to an increase of extreme storm events the past several years. Citywide, PWD is spending \$40 to 50 million dollars reducing runoff every year and spending upwards of \$30 million dollars in capital every year enhancing and improving our collection system capacity. PWD is also studying potentially \$1 billion in system improvements. Since 2005, PWD has spent \$1.7 million to install basement back-up protection devices at 455 homes in the city. PWD is coordinating response and recovery with other city, state, and federal agencies to provide advanced warning forecasts in advance of large storms, tidal and neighborhood flooding projections and vulnerability analyses, FEMA flood map revisions, projecting climate change impacts, installing signage in vulnerable areas, reviewing zoning and building codes, and meeting with communities. These have led to changes in the City's Emergency Plan by OEM. PWD is also working with PennDOT on I-95 reconstruction and other riverfront areas for removing their drainage from the combined sewer system.
- Green City, Clean Waters -PWD is the steward of the city's streams, rivers, and water supply. As part of this role, PWD is working to reduce and manage stormwater and its impacts on the city's rivers and streams through sustainable, cost-effective, and innovative green infrastructure practices. Using a triple bottom line analysis, it was determined using green infrastructure would achieve the greatest social, environmental, and financial benefits while also proving to be the least costly way to meet obligations. PWD is projected to spend approximately \$1.2 billion to implement this program over 25 years to meet its regulatory consent order obligations to PADEP and EPA. PWD currently expects to meet its 2016 runoff reduction and overflow reduction requirements. Metrics tracking includes acres of impervious area managed, greened acres, and combined sewer overflow reduction are being measured and modeled in a variety of manners. The costs of each project are evaluated against the benefit of reduced runoff for comparison. To date, PWD has managed the runoff from 1,644.2 acres (2.6 square miles) through this program citywide. Much of this success is due to partnerships with the private sector, with community and civic groups, with peer agencies, and with City Council. For the astounding level of enthusiasm and support we have received for this program, we are extremely grateful.
- Energy Program -Electricity and natural gas costs exceed \$20 million in operating expenses for PWD. Due to the volatility of these markets and costs PWD embarked on a formal energy program to buy electricity and natural gas cheaper from markets, use our energy more efficiently, and make our own energy whenever possible and cost effective. In FY13, This program has helped us reduce electrical loads to achieve \$290,000 in performance payments, saved \$4 million on natural gas by using our biogas, saved \$23,000 using solar power, obtained a \$400,000 sewer geothermal system via partner grants, and generated \$196,000 in air de-icing fluid tipping fee revenues. All of these efforts that save money and increase our resilience, including the biogas cogeneration facility, have led to a more than 20% decrease in greenhouse gas emissions for PWD.

## NEW INITIATIVES

- Master Water and Wastewater Plans for 2050 – PWD initiated the process of evaluating and planning the infrastructure needs for the next 35 years for its water and wastewater systems. This includes projecting capacity and service requirements and infrastructure service life replacement schedules. The results of these plans will inform more strategic and efficient capital investments over the coming decades at PWD and position our infrastructure to be more adaptable and resilient to future unforeseen challenges.
- PWD Management Study of Customer Service and Field Operations- In March 2014, PWD kicked off a management and efficiency review of all aspects of its operations that impact its customers including: Call Center Operations, Customer Service, Inlet Cleaning, Water and Sewer Main Repair, Metering and Construction operations. This study is designed to benchmark PWD with comparable utilities to identify opportunities for improvements through improved business processes, benchmarking and the identification of resource gaps. This work will continue into FY15.
- WRB Strategic Review of Customer Service Functions: In March 2014, PWD and WRB initiated an audit to analyze WRB operational/financial practices and procedures and to make recommendations with regard to (1) creating an overall high level of customer service; (2) assuring maximum receipt of revenues; (3) assuring timely, accurate and reliable financial and management information; and (4) evaluating whether to improve or replace the existing billing operating system. This work will continue into FY15.

## **OTHER BUDGETARY IMPACTS**

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### **FEDERAL AND STATE (WHERE APPLICABLE)**

- 99% of all PWD funds come from the ratepayers, so a decreased in state or federal funding at this time would have a limited impact on our current operations. However, state and federal funds received in the past have help PWD start new programs that have proven successful. For example, the federal tax credit was used to help finance the Cogen facility.
- An increase in state and federal funds would help PWD make smart investments and increase the repair and replacement schedule for aging water infrastructure. It could also help enable PWD to strengthen existing programs, like the contaminant warning system, or to pilot more efficient stormwater management tools. PWD has appreciated our ability to access state revolving funds, and if we were able to access additional funds through PennVest we could allocate them towards programs to help meeting our Consent Agreement regarding Combined Sewer Overflows.
- PWD supports any efforts to create more funding tools. Specifically, PWD supports the federal Water Infrastructure Finance and Innovation Act, which would establish a five-year \$50 million pilot program to offer low-interest loans for water and wastewater infrastructure projects costing at least \$20 million.
- PWD is also interested in pursuing additional public private partnerships that can help leverage additional funds for infrastructure investment. Of interest is Chicago's emerging Infrastructure Bank, and efforts in the Pennsylvania legislature to expand authorization for public private partnership projects to local governments and school district projects such as utility infrastructure and facilities use for public water supply or treatment or stormwater disposal.

APPENDIX (WATER DEPARTMENT)

DEPARTMENT EMPLOYEE DATA

Staff Demographics

Full-Time Staff

Executive Staff

Full-Time Staff		Executive Staff	
		Male	Female
Total	1370	331	7
% of Total	81%	19%	44%
African-American		African-American	
Total	689	177	1
% of Total	41%	10%	6%
White		White	
Total	572	114	4
% of Total	34%	7%	25%
Hispanic		Hispanic	
Total	29	8	1
% of Total	2%	0%	6%
Asian		Asian	
Total	51	22	1
% of Total	3%	1%	6%
Other		Other	
Total	29	10	0
% of Total	2%	1%	0%
Bi-lingual		Bi-lingual	
Total	0	0	2
% of Total	0%	0%	13%



## CONTRACTING EXPERIENCE

## M/W/DBE Participation on Large Contracts

## FY14 Contracts (Operating and Capital)

Vendor	Service Provided	Amount of Contract	RFP Issue Date	Contract Start Date	Range in RFP	% of M/W/DBE Participation Achieved	\$ Value of M/W/DBE Participation	Total % and \$ Value Participation - All DBEs	Living Wage Compliant?
PMA - Synagro/BRC	Biosolid Services	\$ 21,100,000	5/28/04	10/24/08	MBE: 23% WBE: 5% DSBE: 0%	23%	\$4,853,000	28%	Y
AP Construction	Northern Liberties Flood Relief	\$ 19,371,128	8/29/13	2/24/14	MBE: 18% WBE: 10% DSBE: 0%	18%	\$3,486,803	28%	Y
CDM Smith	General Consultant Services	\$ 8,095,000	4/8/13	7/1/13	MBE: 30% WBE: 5% DSBE: 0%	30%	\$2,428,500	35%	Y
AP Construction	Clear Well Basin Replacement Site Prep at Baxter Water Plant	\$ 5,317,000	11/26/13	1/9/14	MBE: 10% WBE: 5% DSBE: 0%	10%	\$531,700	15%	Y
PIDC	Stormwater Management Program	\$ 5,200,000	N/A - contract managed through a quasi-agency	5/23/12	MBE: 15% WBE: 10% DSBE: 0%	15%	\$780,000	25%	Y

## FY14 Operating Contracts

Vendor	Service Provided	Amount of Contract	RFP Issue Date	Contract Start Date	Range in RFP	% of M/W/DBE Participation Achieved	\$ Value of M/W/DBE Participation	Total % and \$ Value Participation - All DBEs	Living Wage Compliant?
PMA - Synagro/BRC	Biosolid Services	\$ 21,100,000	5/24/04	10/24/08	MBE: 23% WBE: 5% DSBE: 0%	23%	\$4,853,000	28%	Y
CDM Smith	General Consultant Services	\$ 8,095,000	4/8/13	7/1/13	MBE: 30% WBE: 5% DSBE: 0%	30%	\$2,428,500	35%	Y
PIDC	Stormwater Management Program	\$ 5,200,000	N/A - contract managed through a quasi-agency	5/23/12	MBE: 15% WBE: 10% DSBE: 0%	15%	\$780,000	25%	Y
PMA - NE Biogas	Cogeneration	\$ 3,848,254	9/17/10	12/23/11	MBE: 30% WBE: 5% DSBE: 0%	30%	\$1,154,476	35%	Y
PMA - AMR	AMR	\$ 2,062,000	3/8/96	7/10/97	MBE: 30% WBE: 5% DSBE: 0%	30%	\$618,600	35%	Y

## FY14 Capital Contracts

Vendor	Scope	Amount of Contract	Bid Issue Date	Contract Start Date	Range in RFP	% of M/W/DBE Participation Achieved	\$ Value of M/W/DBE Participation	Total % and \$ Value Participation - All DBEs	Living Wage Compliant?
AP Construction	Northern Liberties Flood Relief	\$ 19,371,128	8/29/13	2/24/14	MBE: 18% WBE: 10% DSBE: 0%	18%	\$3,486,803	28%	Y
AP Construction	Clear Well Basin Replacement Site Prep at Baxter WTP	\$ 5,317,000	11/26/13	1/9/14	MBE: 10% WBE: 5% DSBE: 0%	10%	\$531,700	15%	Y
Stone Hill Contracting Co. Inc.	New Ferric Chloride Storage Tanks at Baxter Water Plant	\$ 3,728,579	11/26/13	12/11/13	MBE: 10% WBE: 7% DSBE: 0%	10%	\$372,858	17%	Y
Carusone Construction	Reconstruct of Sewers & Relay Water Mains	\$ 2,727,000	8/20/13	10/28/13	MBE: 11% WBE: 5% DSBE: 0%	11%	\$299,970	16%	Y
Buckley and Co. Inc.	Lock Street Bridge Reconstruction at Venice Island	\$ 2,423,955	9/17/13	3/3/14	MBE: 10% WBE: 6% DSBE: 0%	10%	\$242,396	16%	Y

# APPENDIX (Water Department)

## CONTRACTING EXPERIENCE

### M/W/DBE Participation on Large Contracts

#### FY13 Operating Contracts

Vendor	Service Provided	Amount of Contract	RFP Issue Date	Contract Start Date	Ranges in RFP	% of M/W/DBE Participation Achieved	\$ Value of M/W/DBE Participation	Total % and \$ Value Participation - All DBEs	Living Wage Compliant?
PMA	Synagro- Biosolids Recycling Center	\$21,350,000	5/24/04	10/24/08	MBE: WBE: DSBE:	20% 5% 0%	\$ 4,270,000 \$ 1,067,500 \$ -	25% \$ 5,337,500	y y y
PIDC	Stormwater Management Incentive Program	\$10,175,000	N/A - contract managed through a quasi agency	5/23/12	MBE: WBE: DSBE:	15% 10% 0%	\$ 1,526,250 \$ 1,017,500 \$ -	25% \$ 2,543,750	y y y
CDM Smith, Inc.	CSO	\$8,025,000	6/3/09	7/1/09	MBE: WBE: DSBE:	14% 7% 0%	\$ 1,083,375 \$ 521,625 \$ -	20% \$ 1,605,000	y y y
PMA	AMR - Automatic Meter Reading	\$2,362,000	3/8/96	7/10/97	MBE: WBE: DSBE:	20% 20% 0%	\$ 472,400 \$ 472,400 \$ -	40% \$ 944,800	y y y
Duffield Associates	Stormwater Plan Review	\$1,527,955	5/12/10	8/1/10	MBE: WBE: DSBE:	20% 15% 0%	\$ 305,591 \$ 229,193 \$ -	35% \$ 534,784	y y y

### M/W/DBE Participation on Large Contracts

#### FY12 Operating Contracts

Vendor	Service Provided	Amount of Contract	RFP Issue Date	Contract Start Date	Ranges in RFP	% of M/W/DBE Participation Achieved	\$ Value of M/W/DBE Participation	Total % and \$ Value Participation - All DBEs	Living Wage Compliant?
PMA	Synagro- Biosolids Recycling Center	\$22,510,000	5/24/04	10/24/08	MBE: WBE: DSBE:	30% 3% 0%	\$ 6,710,231 \$ 706,814 \$ -	33% \$ 7,417,045	y y y
Camp Dresser & McKee	CSO	\$6,609,800	6/3/09	7/1/09	MBE: WBE: DSBE:	15% 5% 0%	\$ 991,470 \$ 330,490 \$ -	20% \$ 1,321,960	y y y
PIDC	Stormwater Management Incentive Program	\$5,200,000	N/A - contract managed through a quasi agency	5/23/12	MBE: WBE: DSBE:	15% 10% 0%	\$ 780,000 \$ 520,000 \$ -	25% \$ 1,300,000	y y y
PMA	AMR - Automatic Meter Reading	\$2,362,000	3/8/96	7/10/97	MBE: WBE: DSBE:	20% 15% 0%	\$ 472,400 \$ 354,300 \$ -	35% \$ 826,700	y y y
CSL	Flow Monitoring	\$1,500,000	6/1/11	8/1/11	MBE: WBE: DSBE:	10% 10% 0%	\$ 150,000 \$ 150,000 \$ -	20% \$ 300,000	y y y

**PHILADELPHIA WATER DEPARTMENT**  
**(Other Relevant Data and Charts)**

**Explanation of difference between OEO Annual Report and PWD reporting on Participation:**

The annual OEO report stated that PWD achieved 23% participation, however, that report did not include PWD projects that were let through a third party source or federal, state, and private projects.

The below charts have been vetted with and approved by OEO to demonstrate how PWD achieved 26% participation.

Table I illustrates combined participation on contracts that are reported in FY13 as awards and contracts under federal, state, and public, private partnerships; in addition to, projects that have expended dollars in FY13 under an Economic Opportunity Plan (EOP).

<b>Table I: FY13 Contracts By Budget Type</b>	<b>Contracts Awarded</b>	<b>Commitment Participation</b>	<b>%</b>
Operating and Capital	145,599,908	33,113,328	23%
Federal/State/Private	73,645,878	23,118,581	31%
<b>Overall Participation</b>	<b>219,245,386</b>	<b>56,231,909</b>	<b>26%</b>

Table II summarizes the various contract types under the operating and capital budget by which participation commitments were made.

**Table II: FY 13 Contracts By Contract Type Under Operating And Capital Budget**

<b>Contract Type</b>	<b>Contract Awarded</b>	<b>Commitment Participation</b>	<b>%</b>
Professional Services	45,582,396	13,914,177	31%
Miscellaneous Purchase Orders	896,892	210,000	23%
Public Works	86,090,330	17,594,861	20%
Supply Services and Equipment	12,418,886	1,361,047	11%
Small Order Purchases	611,404	33,243	5%
	<b>145,599,908</b>	<b>33,113,328</b>	<b>23%</b>

Table III summarizes contracts with EOPs which also include projects funded by federal/states grants; and actively spent in FY 13.

**Table III: FY 13 Contracts By Grant And Project Type**

<b>Grant/Project Type</b>	<b>Contract Award</b>	<b>Commitment Participation</b>	<b>%</b>
PMA - NEWPCP Biogas	27,054,827	11,363,027	42%
PMA - Philadelphia BioSolids	21,350,000	5,337,500	25%
Federal/State grants DEP/EPA Public Works	12,704,051	3,047,604	24%
PIDC – Stormwater Management Incentives Program	10,175,000	2,543,750	25%
PMA – Automatic Meter Reading	2,362,000	826,700	35%
	<b>73,645,878</b>	<b>23,118,581</b>	<b>31%</b>

**Table VI: 2<sup>nd</sup> Qtr FY14 Contracts By Budget Type:**

<b>Budget</b>	<b>Contracts Awarded</b>	<b>Commitment Participation</b>	<b>%</b>
Operating and Capital	88,914,326	21,835,600	25%
PMA/PIDC	32,210,254	9,276,589	29%
<b>Overall Participation</b>	<b>121,124,580</b>	<b>31,112,189</b>	<b>26%</b>

**Table VII: 2<sup>nd</sup> Qtr FY 14 Contracts By Contract Type Under Operating And Capital Budget**

<b>Contract Type</b>	<b>Contract Awarded</b>	<b>Commitment Participation</b>	<b>%</b>
Professional Services	32,249,463	10,936,611	34%
Miscellaneous Purchase Orders	1,017,500	214,000	21%
Public Works	53,054,197	10,599,312	20%
Small Order Purchases	524,746	41,997	8%
Supply Services and Equipment	2,068,421	43,680	2%
	<b>88,914,326</b>	<b>21,835,600</b>	<b>25%</b>

**Table VIII: 2<sup>nd</sup> Qtr FY 14 Contracts By Project Type awarded through an Authority**

<b>Grant/Project Type</b>	<b>Contract Award</b>	<b>Commitment Participation</b>	<b>%</b>
PMA - Philadelphia BioSolids	21,100,000	5,908,000	28%
PIDC – Stormwater Management Incentives Program	5,200,000	1,300,000	25%
PMA - NEWPCP Biogas	3,848,254	1,346,889	35%
PMA – Automatic Meter Reading	2,062,000	721,700	35%
	<b>32,210,254</b>	<b>9,276,589</b>	<b>29%</b>

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## Department Specific Questions

### Water

The Water Revenue Bureau within the Revenue Department handles the collection of water revenues for PWD. PWD and WRB collaborated on these answers. Additional questions should be referred to Revenue and WRB.

- *Please provide the number of all properties currently with unpaid water balances, amount owed by property, length of time unpaid, and residential owner/occupant status.*
  - There are over 207,000 accounts in some degree of delinquency
- *Please provide the number of applications received for WRAP and the number of applications for WRAP that were disapproved, broken down by reason for disapproval.*

#### Summary of WRAP Applications

Line #	Description	Fiscal Year 2013	Fiscal Year 2014
		(Jul 2012 - Jun 2013)	(Jul 2013 - Feb 2014)
1	Number of WRAP Applications Processed	18,899	11,132
2	Number of WRAP Applications Approved	10,438	6,158
	<b>Applications Disapproved:</b>		
	Number of WRAP Applications Rejected		
3	Reason: Incomplete Applications	7,107	4,178
	Number of WRAP Applications Rejected		
4	Reason: Ineligible for WRAP	1,354	796
5	<b>Total Applications Disapproved (Line 3 + Line 4)</b>	<b>8,461</b>	<b>4,974</b>

Data Source: Water Revenue Bureau

- *Please provide copies of any policies regarding how the monthly WRAP payment amounts and the length of WRAP agreements are calculated.*

### Senior Citizen Discount Policy

In order to enhance customer relations and to provide extended service to the elderly exceptions have been added to the senior citizen discount policy.

Senior citizen(s) who meet the requirement for a discount (Water Regulations #75 See B1) and have been approved will be allowed to continue the discount with an off location mailing address if one of the following conditions is met:

- A) The senior citizen has established an authorized power of attorney with the person who resides at the off location address, or
- B) Customer is ill, unable to handle their affairs (Physician verification required)

### Occupant Policy

This policy statement outlines the conditions under which an Occupant supplies for and is granted status as a customer of the Water Department/Water Revenue Bureau.

- I. The definitions below are found in the Residential Customer Service Regulations, promulgated 12/18/87:

**Occupant:** A person to whom an owner has yielded possession of a residential property of a dwelling unit and who has reasonable expectation of residing at such dwelling unit for six months.

**Dwelling Unit:** An individual housing unit, in residential Property such as a single family home or a single apartment within a multi-unit apartment building

- II. For purposes of this Policy the following definitions apply:

**Occupant Customer:** An occupant of a single family, residential dwelling unit who has completed an application for customer status, and who has been accepted as a customer under the conditions and guidelines set forth in the customer service regulations, and this policy.

**Yielded Possession:** To give temporary or permanent right of Ownership or custody

Yielded possession occurs where an applicant:

- A) Has ownership interest in the property through the following conditions:
  - a. Legal documentation, for example, Lease purchase agreement, unregistered deed
  - b. Qualified housing program
  - c. Death-heir(s) to property
  - d. Gift/donationOR
- B) Has no ownership interest in property through the following conditions:
  - a. Death of owner where property is yielded to an individual who previously occupied the property with the deceased owner (not an heir)
  - b. Absence or removal of owner from property, where the owner has agreed to allow an individual to occupy the property in his absence

All applicants may be required to provide two pieces of identification and one of the following proof of occupancy:

A) With ownership interest

- Lease Purchase agreement with the registered owner
- An unregistered deed in the applicant's name
- A contract between the applicant and a qualified Housing Program
- A death certificate of the owner and other documentation of the Occupant's relationship to the owner, and a list of all names and addresses of other heirs

B) Without ownership interest

- A death certificate of the owner and other documentation of the Occupant's relationship to the owner
- Legal/Official documents that were mailed to the occupant at the property address which may include utility bills in the Occupant's name at the address
- Notarized statement attesting to occupancy status (owner, family members or neighbors)

### Low Income Assistance Eligibility

All customers rights apply as outlined in customer service regulations except:

Occupant Customer without ownership interest

- May apply for assistance on indebtedness incurred after customer status. Occupant Customer without ownership interest may not be referred to the component of Water Revenue Assistance Program known as the Water Revenue Bureau Conference Committee, suspension of arrears.

### Collection

Water Revenue Bureau and/or its agent may use all remedies at its discretion to collect charges out-standing against the property.

### Low Income Policy

In order to help identify WRB's low income population, a special payment agreement application must be completed on each applicant. Low income customers at or below 250% of poverty who have proof of household income for the past 30 days and are at least one (1) cycle delinquent may be allowed to enter into a low income payment agreement.

There are several agreement plans available.

10/5 agreement- customer's down payment is 10% of the delinquent bill or 15% of the gross household income, whichever is less. Subsequent charges- 5% on arrearage balance

plus current charges. The delinquent balance will be paid off in up to twenty (20) monthly installments along with the current monthly bill.

D/1 agreement- Customer down payment is 10% of the delinquent bill or 15% of the gross household income, whichever is less. The delinquent balance will be paid off in up to sixty (6) monthly installments along with the current monthly bill.

### **Low Income Payment Agreement Policy**

Water Revenue Bureau customers who meet low income requirements may apply for assistance through the Water Revenue Assistance Program (WRAP).

Customers with enforceable balances who are at or below 250% of the Federal Poverty Level may apply for extended payment terms of up to sixty (60) months. The down payment may be waived or paid with a city grant.

Payment on past due charges must be at least \$25.00 a month in addition to current monthly charges.

Customers with extenuating circumstances may be referred to the Water Revenue Bureau Conference Committee by WRB Managers. The WRBCC may approve payment terms up to 60 months.



# Participation

## Participation

- Top Talking Points
  - FY15 Department Goal – 27%
    - We are committed to overall City goal of 30%, however, we believe for the next year it is more realistic for us to achieve 27% based on the disparity study and our review of contracts to be let
  - FY13 Achievement- 26%
    - FY13 DBE Participation (with exclusions)

Net Contract Awards	Contract \$ Value	Overall Participation	%
Department Operating & Capital	\$ 145,599,508	\$ 33,113,328	23%
PMA, PIDC, Federal PW	\$ 73,645,878	\$ 23,118,581	31%
	\$ 219,245,386	\$ 56,231,909	26%

\*Net Contract Awards has "few or no" contract exclusions.

- Ethnic Breakdown on the 23% (OEO's Annual Report for FY13)
  - African American- \$10.2 million (7%)
  - Hispanic/Latino- \$7.3 million (5%)
  - Asian- \$4.1 million (2.8%)
  - Native American- 0
  - Native Hawaiian/Pacific Islander- \$539,000 (.37%)
  - Caucasian Female- \$10.8 million (7.5%)
- If you count ALL contracts (no exclusions)- DBE commitments is 24%

All Contract Awards	Contract \$ Value	Overall Participation	%
Department Operating & Capital	\$ 159,467,649	\$ 33,113,328	21%
PMA, PIDC, Federal PW	\$ 73,645,878	\$ 23,118,581	31%
	\$ 233,113,527	\$ 56,231,909	24%

- While the OEO annual report states that PWD achieved 23% participation, PWD actually achieved 26% when you count in contracts let through quasi-city agencies like PIDC and PMA. There were also some small non-profit contracts that were included in the annual report that should not have been.
- Comparison to past years (Operating Only)

Fiscal Year	Total \$ Value of Contracts Awarded	MBE Commitment \$	%	WBE Commitment \$	%	Combined M/W \$	Combined M/W %
FY09	\$111,156,928	\$8,481,274	7.63%	\$5,402,227	4.86%	\$13,951,121	12.55%
FY10	\$58,790,962	\$5,809,370	9.88%	\$4,204,124	7.15%	\$10,013,494	17.03%

FY11	\$130,695,391	\$15,475,845	11.84%	\$17,059,704	13.05%	\$32,535,549	24.89%
FY12	\$105,911,350 Net Contracts <sup>2</sup> \$105,653,665	\$14,499,980	13.69%	\$7,836,451	7.40%	\$22,336,432	21.14%
FY13	\$159,467,649 Net Contracts <sup>2</sup> \$145,599,508	\$21,487,344	14.76%	\$11,596,084	7.96%	\$33,083,428	22.72%
2 <sup>nd</sup> Qtr FY14	\$91,431,638 Net Contracts <sup>2</sup> \$88,914,326	\$13,665,903	15.37%	\$8,229,697	9.26%	\$21,895,600	24.63%

(1) Beginning in FY 12, the dollar value for supplies and materials only captured the percentage of commission to be paid to vendor

(2) Net contracts are the net amount after non-opportunity deductions are considered; net contract awards have available MWDBE contractors to perform on a contract

- Participation Plan and Implementation

- PWD continued implementing its Participation Plan in FY14. Please find a copy of the plan enclosed. The plan focuses on seven leverage points for action to increase participation and PWD has made progress in each area:

- Increasing public awareness of PWD's business practices;
  - Created new section of website with information on how to do business with PWD
  - Issued quarterly Take Part! Newsletters that shares upcoming opportunities, resources and events
  - Held information sessions like Contractor Seminars and working with SBA on new seminar series
  - Created new script for staff that receive calls from businesses interested in working with PWD to direct them to resources
- Improving contract requirement processes to enhance participation;
  - Coordinated Public Works and Professional Services units to work with the Director of Participation in addressing contract planning, using appropriate contract participation language, and contract compliance
  - Working closely with OEO in assessing goal setting methods and modifying reporting requirements; in addition to, performing monthly audits of the Contract Compliance Reporting System to ensure payment tracking and utilization of M/W/DSBEs
- Addressing structural barriers to participation;
  - Commissioned report from Sustainable Business Network on barriers to doing business with PWD
  - Exploring partnerships to bring resources to the disadvantaged business community such as short term lending programs, bonding education, joint venture opportunities and strategic partnering
  - Met with the Contractor Association of Eastern Pennsylvania to identify barriers among prime contractors.
  - Working closely with the City's Procurement Department to identify changes and improvements to the City's bidding process.

- Increasing the outreach efforts to willing and able business to do business with PWD.
  - Coordinating data tracking and monitoring tools for improved communication;
    - Working with IT to determine database responsibilities and reporting protocol
    - Evaluating other systems to support data collection
  - Maintaining reliable communication with resource partners;
    - Sustained relationships with
      - Sustainable Business Network/GSI Partners
      - U.S. Small Business Administration
      - U.S. DOT Office of Small and Disadvantaged Business Utilization
      - Urban League of Philadelphia Entrepreneurship Center
      - Job Opportunity Investment Network
  - Exploring options for the introduction of new Best Practices in diversity procurement programs; and
    - Researching NYC's Small Business Services office
    - Researching participation practices of municipal utilities
  - Improving staff awareness of the importance of supplier diversity and participation.
    - Designing a training for staff on importance of participation and city's requirement in contracts
- EOPs
  - PWD has 108 EOPs in place, all of which are in varying stages of the project life. During FY13, 14 of the 108 projects were closed. The participation of MWDSBEs exceeded the contract commitment on 8 of these projects and 2 projects met their goal. 4 of the projects fell short of their commitment but remained in compliance. Some of the shortfall is due to less material and hauling being needed than predicted. Also, in many instances where contractors have their own laborers present on a project, they assume the responsibility of cleanup and disposal, reducing the need to subcontract it out. Overall, PWD achieved 17.4% of actual participation on EOP construction projects closed within FY13.
  - Currently, there are 55 active projects underway. While 22 of these active projects are exceeding their goal, it will be difficult to predict the status of the remaining 33 projects until we move closer to their completion. On average, PWD is exceeding goal by achieving 28.3% on all active construction projects.
  - An additional 21 have been approved through the second quarter of FY14; performance data for these projects are not available. These EOPs are between 0% to 15% complete.
- PLAs
  - Six PLAs in place for projects ranging from \$4.5 million to \$47 million
  - We participate in monthly meetings on active PLA's, like Venice Island
  - We anticipate increasing our PLA portfolio with 9 new projects in the remainder of FY14 and FY15.
  - Example:
    - Venice Island Underground Storage Tank and Recreation Center project, which is achieving 31% contractor participation, above the goal
      - Minority Journeypersons- 32%

- Female Journeypersons- 5.2%
  - Local Journeypersons- 45%
  - Minority Apprentices- 34%
  - Female Apprentices- 4.3%
  - Local Apprentices- 53%
- Water Chemical Contracts
  - PWD has formed a working group with OEO, Procurement, and Law to better understand the current supply chain in the water treatment chemicals industry.
  - PWD reached out to 5 MBE/WBE suppliers via phone and email recommended to us by OEO. They are:
    - BKM Resources, Inc.
    - ChemCeed, LLC
    - GC3 Specialty Chemicals
    - Maryland Chemicals
    - TRICON Chemical Corporation
  - We made contact with two of the five vendors; BKM and TRICON. The remaining vendors have not responded to meeting requests.
  - We met with TRICON in January 2014. BKM had scheduled a meeting with us but canceled and they have not rescheduled to date. We have followed up with BKM but to no avail.
  - Four of the five suppliers (BKM, GC3, Maryland Chemicals, TRICON) are in the OEO registry. Two have been added to the Bidder's List (BKM and TRICON).
  - We provided written and oral testimony to OEO and the Economic Opportunity Review Committee in December 2013, highlighting our outreach efforts and plan of action to increase participation on PWD contracts.
  - OEO provided a written response to Councilman Goode's Office in January 2014 regarding questions asked by his office on how the City plans to expand inclusion on these contracts.
  - PWD along with OEO and Procurement sent a joint letter in February 2014 to current supply vendors to explore their best and good faith efforts for inclusion and if they had any supplier diversity programs.
  - PWD met with Steve Masters, who is providing pro-bono legal assistance to some MWDBSEs, at his request to discuss the water treatment chemical contract and his agenda in pursuing this matter. (a memo was drafted summarizing the meeting)
  - PWD, OEO, and Procurement received responses from all vendors stating their status in exercising best and good faith efforts and if they have supplier diversity programs in place. (a summary of the responses is available)
  - In our exploration of the current vendors, we found that two vendors are owned by women (Carus and Kuehne). Two other vendors (PVS and Shannon) are using MBE and WBE subcontractors and PVS intends to formalize a supplier diversity plan.
  - Next steps:
    - Confirm with Procurement whether they plan to rebid the contract (as a citywide contract, it is entirely in their jurisdiction)
    - Continue meeting with working group to further evaluate the chemical industry and work with Law to evaluate bid contract structure.

- Outreach to Carus Corporation a woman-owned vendor, interested in pursuing registration with OEO.
  - Expand research of potential minority/women suppliers and distributors.
- Largest Contracts
  - See 11x17 foldout
- Largest upcoming projects for FY15 (Capital and Operating)
  - Two (2) 30 Million Gallon Storage Capacity Tanks at East Park - \$70 million
  - New 10 MG Concrete CWB tanks at Baxter - \$53 million
  - New Gravity Thickeners at NEWPCP- \$36.7 million
  - PMA-Synagro/BRC- \$21.6 million
  - Four-part Capital Project for New West Phila. Sewer Maintenance yard
    - Const. New West Phila. Sewer Maintenance Yard- General- Flow Control- \$10.6 million
    - Const. New West Phila. Sewer Maintenance Yard- Elect- Flow Control- \$2.2 million
    - Const. New West Phila. Sewer Maintenance Yard- HVAC-Flow Control- \$1.3 million
    - Const. New West Phila. Sewer Maintenance Yard- Plumbing- Flow Control- \$650,000
- Local participation
  - In FY 13 - 58% of PWD contracts were to local firms
  - Through the second quarter of FY 14 - 55% local firms were awarded
- Council specific questions
  - Water chemical supplier situation (Goode)
    - See above explanation, and reference Memo
  - Approval of contract renewals (Kenney)
    - See Department Contract Renewal Process
  - Make-up of non-profit boards we have large contracts with (Brown)
    - Only reference attached chart
    - We understand that the administration may compile information for all departments and submit
  - Contracts that replaced workforce and their local participation and Living Wage compliance (Goode)
    - Synagro/BRC
      - When contract started – FY 2008
      - Size of contract – For FY14, its 21,100,000
      - How many workers – 26 staff people; 30% Philadelphia resident; 20% minority; 4% female
      - How many lost jobs - none
      - Local make-up - operations of the facility and Philadelphia Biosolid Services, LLC is locally based;
      - Living Wage compliance - Yes

**Largest Public Works Capital Projects**

Vendor	Scope	Amount of Contract	Bid Issue Date	Contract Start Date	Ranges in RFP	% of M/W/DBE Participation Achieved	\$ Value of M/W/DBE Participation	Total % and \$ Value Participation - All DSBES	Living Wage Compliant?
P Construction	Northern Liberties Flood Relief	\$ 19,371,128	8/29/13	2/24/14	MBE:	18%	\$ 3,486,803	\$ 5,423,916	y
					WBE:	10%	\$ 1,937,113	28%	
					DSBE:	0%	\$ -		
P Construction	Clear Well Basin Replacement Site Prep at Baxter WTP	\$ 5,317,000	11/26/13	1/9/14	MBE:	10%	\$ 531,700	\$ 797,550	y
					WBE:	5%	\$ 265,850	15%	
					DSBE:	0%	\$ -		
Stone Hill Contracting Co. Inc.	New Ferric Chloride Store Tanks at Baxter Water Plant	\$ 3,728,579	11/26/13	12/11/13	MBE:	10%	\$ 372,858	\$ 633,858	y
					WBE:	7%	\$ 261,001	17%	
					DSBE:	0%	\$ -		
Carusone Construction	Reconstruct of Sewers & Relay Water Mains	\$ 2,727,000	8/20/13	10/28/13	MBE:	11%	\$ 299,970	\$ 436,320	y
					WBE:	5%	\$ 136,350	16%	
Muckley and Co. Inc.	Lock Street Bridge Reconstruction at Venice Island	\$ 2,423,955	9/17/13	3/3/14	MBE:	10%	\$ 242,396	\$ 387,833	y
					WBE:	6%	\$ 145,437	16%	
					DSBE:	0%	0		

### Largest Operating Contract Projects

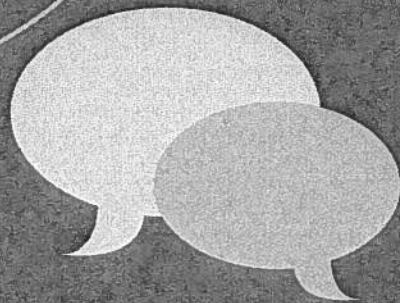
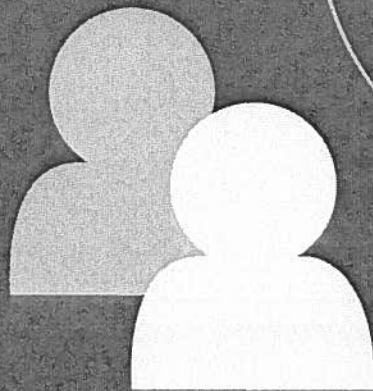
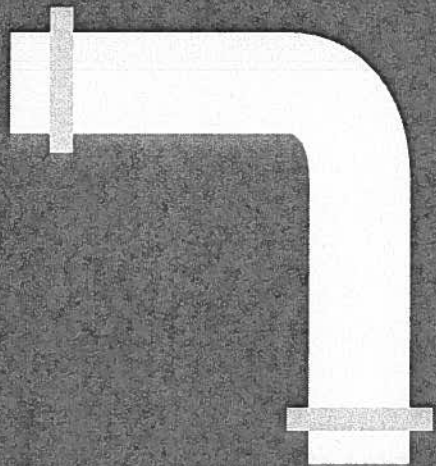
Vendor	Service Provided	Amount of Contract	RFP Issue Date	Contract Start Date	Ranges in RFP	% of M/W/DBE Participation Achieved	\$ Value of M/W/DBE Participation	Total % and \$ Value Participation - All DSBES	Living Wage Compliant?
PMA - ynagro/BRC	Biosolid Services	\$ 21,650,000	5/24/04	10/24/08	MBE:	23%	\$ 4,979,500	\$ 6,062,000	y
					WBE:	5%	\$ 1,082,500	28%	
					DSBE:	0%	\$ -		
CDM Smith	General Consultant Services	\$ 8,095,000	4/8/13	9/13/13	WBE:	5%	\$ 404,750	35%	
					DSBE:	0%			
PIDC	Stormwater Management Program	\$ 5,200,000	N/A - contract managed through a quasi agency	5/23/12	MBE:	15%	\$ 780,000	\$ 1,300,000	y
					WBE:	10%	\$ 520,000	25%	
					DSBE:	0%	\$ -		
IA - NE Biogas	Cogeneration	\$ 4,707,000	9/17/10	12/23/11	MBE:	30%	\$ 1,412,100	\$ 1,647,450	y
					WBE:	5%	\$ 235,350	35%	
					DSBE:	0%	\$ -		
PMA - AMR	AMR	\$ 2,062,000	3/8/96	7/10/97	MBE:	30%	\$ 618,600	\$ 721,700	y
					WBE:	5%	\$ 103,100	35%	
					DSBE:	0%	\$ -		

Largest Operating Contract Projects



Largest Professional Service Capital Projects

Vendor	Service Provided	Amount of Contract	Ranges in RFP	% of M/W/DBE Participation Achieved	\$ Value of M/W/DBE Participation	Total % and \$ Value Participation - All DSBes	Living Wage Compliant?
O'Brien & Gere	General Engineering - Plant	\$1,200,000	MBE:	15%	180000		y
			WBE:	10%	120000	25%	y
			DSBE:	0%	0	\$300,000	y
Arcadis	General Engineering - Plant	\$1,200,000	MBE:	15%	180000		y
			WBE:	10%	120000	25%	y
			DSBE:	0%	0	\$300,000	y
Birdsall	General Engineering - Street	\$1,200,000	MBE:	15%	180000		y
			WBE:	10%	\$120,000	25%	y
			DSBE:	0%	0	\$300,000	y
Pennoni	General Engineering - Street	\$1,200,000	MBE:	15%	180000		y
			WBE:	10%	120000	25%	y
			DSBE:	0%	0	\$300,000	y
Hatch Mott MacDonald	General Engineering - Street	\$1,200,000	MBE:	15%	180000		y
			WBE:	10%	120000	25%	y
			DSBE:	0%	0	\$300,000	y



**Philadelphia Water Department**  
**Participation Plan 2014**

**The Philadelphia Water Department (PWD) is committed to recruiting, preparing and maintaining a reserve of local, small and disadvantaged businesses with capacities and skill sets conducive to their participation as contractors and/or subcontractors on all PWD projects.**

There are policy and regulatory mandates regarding participation in the City of Philadelphia's Code and Home Rule Charter, in addition to the Mayoral Executive Order 3-12. Specifically, Chapter 17-1600 of The Philadelphia Code, entitled "Economic Opportunity Plans", which requires projects over \$250,000 to have workforce and contract goals that is inclusive of minority and female journeypersons and apprentices as well vendors that are certified with the Office of Economic Opportunity (OEO) as minority, woman, and/or disabled-- owned business enterprise (MWDSBE). Per the Home Rule Charter, Chapter 17 entitled "Contracts and Procurement" and the Mayoral Executive Order 3-12, it is the policy of the City of Philadelphia to provide an equal opportunity for all businesses to compete for City contracts and to assure that any contracts using public funds, sourced, administered or authorized by the City, including contracts requiring City Council approval, are not used to promote, reinforce, or perpetuate discrimination.

PWD's Participation Plan will enable the Department to meet and exceed all regulatory requirements to create meaningful economic opportunities for all Philadelphians. PWD will continue to work closely with OEO to set contract goals and to ensure the availability of MWDSBEs to effectively meet project completion demands. In addition to minority, woman and disabled-owned businesses, PWD is committed to create economic opportunities for ex-offenders, veterans, and local and green businesses.

The goal of this long-term, integrative plan is to implement strategies that engage local, small, and disadvantaged businesses and residents to increase their participation as contractors and/or subcontractors on all PWD projects.

Additional outcomes of this effort will be:

- 1) Meaningful creation of gainful employment for under-represented populations in the Philadelphia region;
- 2) Maintaining and exceeding PWD's economic inclusion compliance standard mandates;
- 3) Providing support for PWD projects, like Green City, Clean Waters and other anticipated opportunities, which require participants with specialized skill sets and education.

This plan will employ seven (7) primary points of action:

- I. Establishing and maintaining partnerships to help identify appropriate prospective contracting businesses and build mutual awareness between PWD and these businesses.
- II. Addressing barriers to participation by building on existing networks through OEO which mitigate factors currently deterring or prohibiting new and lower-capital businesses from successfully participating in public works projects with PWD.
- III. Exploring options and researching best practices in diversity procurement programs offering incentives, discounts, resources, capacity and de-bundling methods.

IV. Developing and using various public information tools such as the quarterly newsletter, website, social networks, resource partner events, workshops and forums to identify current and prospective small business participants and increasing public awareness of contracting opportunities.

V. Coordinating databases to track project and contract information, activity and details from multiple sources, including OEO payment tracking system, ACIS, FAMIS, CAPIT, SPEED and ADPICS, for benchmarking and metrics reporting.

VI. Improving internal contract development processes to enhance participation.

VII. Training staff on the importance of supplier diversity and participation.

#### Method

This plan lays out the goals, objectives and actionable items related to each of the primary points, identifying prescribed timelines and key stakeholders.



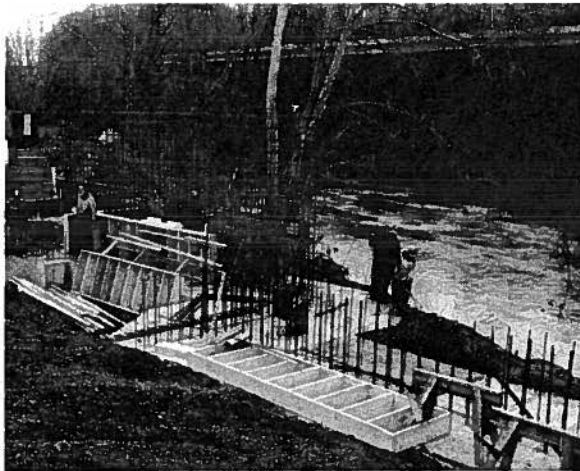


## Points of Action

**I. Establishing and maintaining partnerships to help identify appropriate prospective contracting businesses and build mutual awareness between PWD and these businesses.**

**Purpose**

Engaging with partner organizations allows PWD to leverage their expertise and networks in the small business space without the requirement of specific or significant PWD capital investment.



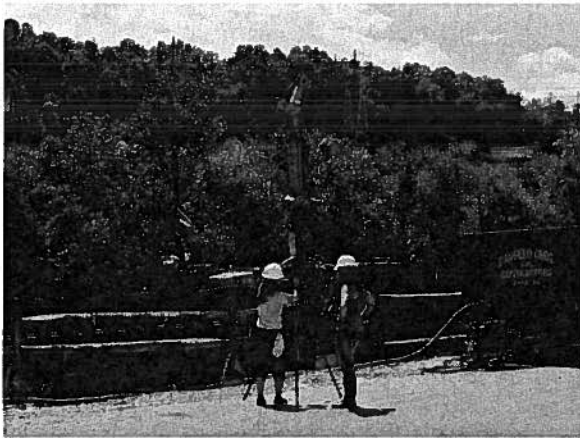
Action	PWD Team	Timeline	Notes	Stakeholders
a) Develop a Project Needs Matrix template as a primary information tool for interaction with partner organizations	J. Barroso, S. Furtek, C. Knapp, J. Brooks, C. Price	February 2014 for initial matrix assessment, ongoing updates	Communicate PWD training needs and partner with external providers to determine availability	Philaworks SBN ECA Del Tech
b) Identify organizations and single points of contact in the small business space for facilitation of plan-specific partnerships	J. Barroso, J. Dahme, C. Knapp	January 2014	Create contact matrix to link in resource guide	OEO Local SBA
c) Assess and select partners' existing workshops/ information sessions that PWD can leverage for information distribution	J. Barroso, C. Knapp	January 2014	Work with partner organizations to coordinate and/or to publish events in PWD's Take Part! Newsletter	OEO Resource Partners
d) Build a resource referral plan to help businesses access resources to enable them to do business with PWD	J. Barroso, C. Knapp, C. Price	August 2013		OBS OEO SBN
e) Partner with OEO and Procurement in "How to Do Business with the City" information sessions. These sessions are designed to inform vendors on how to bid on projects and/or respond to RFPs	S. Furtek, J. Barroso	January 2014	Request inclusion in sessions twice a per year and determine key staff to attend to provide upcoming project development	OEO Procurement



**II. Addressing barriers to participation by building on existing networks through OEO which mitigate factors currently deterring or prohibiting new or lower-capital businesses from successfully participating in public works projects with PWD.**

**Purpose**

The use of these networks and focus groups will create input and simultaneously build buy-in to the Participation Plan from partners and stakeholders. Their input will also help PWD prioritize efforts to create more meaningful participation opportunities.



Action	PWD Team	Timeline	Notes	Stakeholders
a) Commission a report from the Sustainable Business Network on barriers identified by the GSI Industry Partnership	J. Barroso, C. Knapp	August 2013	Coordinate with SBN to clarify deliverables in the report and set deadlines	SBN
b) Coordinate PWD-specific focus groups to identify barriers	J. Barroso, S. Furtek, J. Dahme, C. Knapp	October 2013	Focus groups will encompass: Group A - Large PWD subcontractors Group B - Small PWD subcontractors Group C - Small firms who are not PWD subcontractors	OEO Prime Contractors MWDSBEs
c) Explore and analyze options and solutions for addressing already established barriers to increase participation	J. Barroso, M. Hara, C. Knapp, C. Price	November 2013	Timing on various components may be different, depending on channels necessary for gathering info/making changes or updates	OEO Procurement Finance Law SBN
d) Explore barriers that affect contractors in the building trades through PLAs	H. Neukrug, J. Barroso, C. Price	March 2014	High level leaders will assist in facilitating this process	Mayor's Office OEO
e) Encourage partnerships/collaborations between larger contractors and MWDSBE subcontractors to strengthen workforce capacity	J. Barroso, C. Price	Ongoing	Gather information such as entrance tests, apprentice programs, open enrollment, and membership process	PALM Built Rite
f) Develop white paper on all barriers identified and Department's strategy to address findings	M. Hara, J. Barroso, C. Price	March 2014		SBN

### III. Exploring options and researching best practices in diversity procurement programs offering incentives, discounts, resources, capacity and de-bundling methods.

#### Purpose

Learning from other peer cities will allow PWD to enact best practices for proven success.



Action	PWD Team	Timeline	Notes	Stakeholders
a) Conduct research on best practices for increasing participation in peer cities	J. Barroso, C. Knapp, C. Price	October 2013	Parameters of research will consider cities that are of similar demographics	OEO
b) Explore availability of lines of credit for dealing with delayed public works contractor payments	J. Barroso, C. Price	March 2014	Coordinate efforts with PIDC or other small business lenders, to explore their requirements for contractors to obtain lines of credit, in addition to, options of surety bonding	PIDC SBN Foundations
c) Explore methods for increasing procurement capacity, deeper bid discounts for 1st time participants, and making adjustments to the letting process that would allow smaller firms to bid on smaller contracts	J. Barroso, J. Clare, S. Schwarz, S. Furtek, B. Mohl, B. Britt, C. Price	January 2014	Action items identified that would consider bid discounts may require a charter change because the bidding process is driven by legislation	Procurement Law Finance
d) Research bid procurement incentives that are national best practices regarding use of female, minority or disabled sub-contractors	J. Barroso, C. Price	January 2014		Procurement
e) Evaluate the possibility of recruiting businesses through a prequalification process and rotation of contractors	J. Barroso, S. Schwartz, S. Furtek, C. Price	February 2014	Coordinate with L&I and DPP representatives and Law to see how this can impact participation and the bidding process	License and Inspections Public Property Law Procurement



**IV. Developing and using various public information tools such as the quarterly newsletter, website, social networks, resource partner events, workshops and forums to identify current and prospective small business participants and increasing public awareness of contracting opportunities.**

**Purpose**

Public information tools will serve as a primary cost-effective and track-able vehicle for disseminating to targeted audiences on short and long-term trends in water infrastructure construction opportunities and requirements, as well as related training and education to facilitate participation readiness.

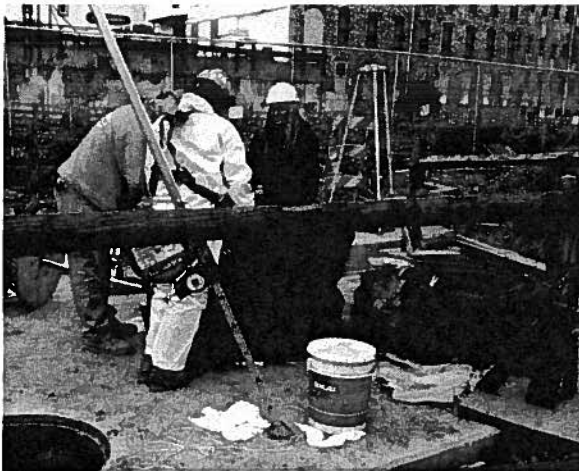


Action	PWD Team	Timeline	Notes	Stakeholders
a) Develop protocol and timelines for collection and submission of participation newsletter content, a regular schedule of publication, and distribution avenues	J. Barroso, B. Coyle, S. Furtek, C. Knapp, T. Ledesma Groll, P. Fugazzato, C. Price	December 2013		OBS OEO Resource Partners
b) Leverage partner efforts and work with resource partners to capture newsletter content standards or categories	J. Barroso, B. Coyle	Ongoing		SBN OEO Commerce Resource Partners
c) Work with legal staff to develop disclaimer/ safe harbor statement indicating that information included in PWD's participation newsletter or any other public information tool does not guarantee or improve chances of sub-contractor selection	J. Barroso, S. Schwarz, S. Furtek, M. Hara	Ongoing		
d) Participate in conferences, trade shows and networking events to identify innovative small disadvantaged businesses and share information on doing business with PWD	J. Barroso, T. Ledesma Groll	March 2014	Coordination with other partners needed to avoid duplication  PWD can share the types of innovative products that would be of use to us, such as monitoring technology	OEO Business chambers SBN Commerce EEB Hub Universities
e) Create webpage with participation information, updates, and calendar of events	J. Barroso, P. Fugazzotto, G. Brock	August 2013	Changes in online platforms will need to be considered	
f) Create social media content for Twitter, Facebook through existing accounts	J. Barroso, P. Fugazzotto	January 2014		
g) Measure impact of public information tools	J. Barroso, P. Fugazzotto	January 2014	Collect data re: distribution, trends such as visits to website, retweets, likes on FB, number of recipients, and event attendees; in addition to assess lessons learned and adjust process as needed	

**V. Coordinating databases to track project and contract information, activity and details from multiple sources, including OEO payment tracking system, ACIS, FAMIS, CAPIT, SPEED and ADPICS, for benchmarking and metrics reporting.**

**Purpose**

The reconciliation of data will provide multi-faceted, up-to-date and accurate information on contracts, qualified MWDSBE contractors and sub-contractors, and will provide PWD with a valuable repository of potential resources for meeting contractor participation needs, facilitating a pool of appropriately skilled, qualified, and diverse contractors. The availability of these mechanisms provides an essential function to respond to policy and regulatory mandates.



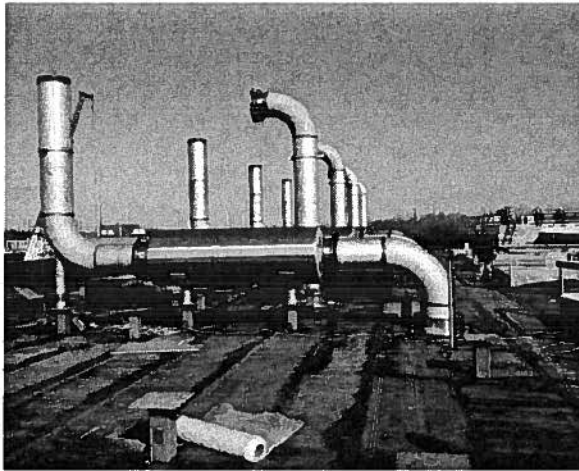
Action	PWD Team	Timeline	Notes	Stakeholders
a) Determine feasibility of database establishment (technical and operational capabilities) and establish primary IT contacts	J. Barroso, G. Brock, P. Huynh	April 2014	Current database applications are available for this purpose which is the OEO Registry and Contract Compliance System	OIT OEO
b) Determine database responsibilities; establish ownership reporting protocol including who should submit content to database owner and how and what information to include	J. Barroso, S. Furtek, J. Clare, C. Price	Ongoing	Data points: <ul style="list-style-type: none"> <li>• Numbers of current/potential participants</li> <li>• Newly participating contractors</li> <li>• Contract amounts</li> <li>• Specific skill sets/categories</li> <li>• Growth tracking w/in these categories</li> </ul>	
c) Use OEO online system (B2GNow) designed for primes to record subcontractor payments for reporting	J. Barroso, S. Furtek, C. Price	Ongoing		OEO
d) Use Labor Standards' certified payrolls online submission tool (LPC Tracker) for reporting	J. Barroso, S. Furtek, C. Price	March 2014		Labor Standards
e) Evaluate potential use of CAPIT or other systems to support data collection reporting participation	J. Barroso, Projects Control, IT	Ongoing		OIT



## VI. Improving contract development processes and policy to enhance participation.

### Purpose

In order to leverage the participation plan for business success, PWD will implement this initiative throughout the organization. PWD will drive participation through the integration of systems of contract development that proactively involve contract opportunity evaluation, staff development, and technology improvements.



Action	PWD Team	Timeline	Notes	Stakeholders
a) Develop an analytical report on existing policy and procedures of contract development and participation tracking	J. Barroso, J. Clare, S. Furtek, C. Price	February 2014	Document observations of internal workflow process and areas where improvements are needed	OEO IT
b) Modify reporting requirements for contractors to submit participation numbers that include deadlines and penalties for not meeting them	J. Barroso, S. Schwarz	February 2014		OEO Procurement
c) Coordinate with Public Works and Professional Services units to detect indicators of noncompliance	J. Barroso, S. Furtek	Ongoing		OEO



## VII. Training staff on the importance of supplier diversity and participation.

### Purpose

Training and staff inclusion will ensure that every PWD division understands the importance of participation and integrates efforts to meet and exceed participation goals into daily decision-making.



Action	PWD Team	Timeline	Notes	Stakeholders
a) Design and implement a training program for current staff and new hires on the importance of participation and the city's requirements in contracts	J. Barroso, G. Leatherman, A. Bakare, C. Harrison	August 2013	Initial Contract Management training held August 2013	OEO
b) Facilitate cross training with OEO staff and PWD contracts staff on OEO timelines and process	J. Barroso, A. Bakare	January 2014	Invite OEO staff to provide training segment on their process	OEO
c) Initiate a working group to discuss the barriers or obstacles to awarding a contract with requirements met, implement participation ranges, and determine the staff understanding of the goals and requirements of these mandates	J. Barroso, G. Leatherman, A. Bakare, C. Harrison	September 2013	Initial statement and questions has been submitted by contracts staff	Procurement OEO



# Take Part!



A PWD resource for business diversity on PWD projects



## A Message from Water Commissioner, Howard M. Neukrug, P.E., BCEE

In our work to be America's model 21st Century urban water utility, our dedicated team of nearly 2,000 men and women at the Philadelphia Water Department (PWD) are committed every day to meeting the complex responsibilities of our time and our environment.

As part of this promise, it's essential that our efforts support not only the health and safety of our customers, but that they support the health and vitality of the Greater Philadelphia economy.

That's why PWD maintains a forward thinking agenda in many of its innovative programs, and is dedicated to helping support the growth of local minority, women, disabled-owned (M/W/DSBE), green and small businesses, through improved communications and educational initiatives.

PWD has partnered with several local and national experts to identify and implement strategies for broadening participation of underrepresented businesses in the PWD's contracting.

We also continue to work closely with the City of Philadelphia's Office of Economic Opportunity (OEO), to set contract level goals and to ensure the availability of M/W/DSBEs to effectively meet project completion demands.

In just the last two years, projects like our Venice Island underground storage basin and the Northeast Biogas Cogeneration Facility, have created more than 100M in contracting opportunities for local minority, green and small businesses.

In addition, PWD is working to provide opportunities to help current and future business owners grow their skills and increase their capacity to become prime contractors on future public and private contracts.

As part of this work, PWD has begun implementing a robust Participation Plan, which outlines our strategy for creating meaningful economic opportunities for all Philadelphians, while meeting or exceeding all regulatory requirements regarding the employment of M/W/DSBE contractors.

The plan includes a focus on improved communications, like the current edition of our Take Part! online newsletter, informational sessions including the newly launched Contractor Quarterly Seminars and email blasts and other resources, which highlight short and long-term trends in water infrastructure construction, helping prospective contractors identify and be ready to bid competitively for upcoming opportunities.

As we continue innovating, we will continue to educate the business community on our work and help to support a thriving local marketplace. It's all part of PWD's commitment to the public, to the environment and to the Greater Philadelphia region, to serve as an enthusiastic partner, for now and the future.

## City of Philadelphia City-Wide Inclusion Goal Increase to 30%

The City of Philadelphia is raising the bar for participation even further. Beginning in July 2014, the start of Fiscal Year 2015, the City's Goal for participation will increase to 30%. This increase is a result of the success the City has had in the last three years, which has surpassed its original goal of 25%. You can read the City's press release [here](#).



An electronic version of this newsletter, with active links to resources, can be found at <http://www.phillywatersheds.org/take-part>

## Green Stormwater Infrastructure (GSI) Industry Partnership



### GSI PARTNERS

REIMAGINING STORMWATER

The Green Stormwater Infrastructure (GSI) Partners is a priority initiative of the Sustainable Business Network of Greater Philadelphia (SBN). The GSI Partners are a growing network of locally-owned and regionally-based firms whose services and products relate to GSI, and together are working to advance the local GSI industry, innovation, and the local economy as a strategy to amplify the economic, environmental, and social impact of PWD's innovative *Green City, Clean Waters* plan.

Recently, SBN-GSI Partners had the pleasure and privilege of briefing 15 of PWD's leaders on their Strategic Plan, as well as recommendations developed by the Local Community of Practice, a group of seven small, minority, and women business owners and organizational leaders dedicated to the growth of the local GSI industry. The outline of the GSI Partners' Strategic Plan can be found [here](#) or at [sbnphiladelphia.org](http://sbnphiladelphia.org), and the Local Community of Practice report can be found [here](#).

The GSI Partners currently have many ways to get involved and support their work including quarterly meetings and other events, working committees on Partner Engagement, Advocacy, Plan Review, and the Small Business Innovation Grant Program, continuing education grants. For more information on how to get involved, contact Anna Shipp at [anna@sbnphiladelphia.org](mailto:anna@sbnphiladelphia.org) or visit SBN's webpage: [www.sbnphiladelphia.org/initiatives/GSI\\_Partners/](http://www.sbnphiladelphia.org/initiatives/GSI_Partners/).

## PWD Contractor Seminar

The Philadelphia Water Department held the first in a series of construction seminars on January 26, 2014. The seminar was attended by 50 representatives from 28 different companies ranging from general contractors, designers, landscape architects, landscapers, etc. Topics at the January seminar covered:

- Green Stormwater Infrastructure (GSI) Tutorial – Review of completed GSI projects to illustrate design, intent and function, and construction challenges
- Construction work in the public right of way and on schools, parks and recreation centers
- Preview of the Green Streets Design Manual
- Quick overview of other issues such as site management, M/W/DSBE participation, procurement coordination and specification updates

The seminars are highly recommended to all contractors that bid on GSI projects. If you missed it, you can view the entire seminar online along with the seminar handouts and Powerpoint presentation at <http://vimeo.com/85727697>.

The next Contractor's Seminar is scheduled for Wednesday, March 26 at 8:00AM at our Fox Street Headquarters in the training room. The agenda for the upcoming seminar will include:

- Presentation on green infrastructure design on public spaces such as schools parks and recreation facilities.
- Contractor feedback on the design templates we shared for GSI on streets. Contractors are encouraged to bring marked up design details or notes that capture your feedback to help us better compile and inform our designs.

To register for the training, please contact Janira Barroso at [Janira.Barroso@phila.gov](mailto:Janira.Barroso@phila.gov).



### Stay Connected to Take Part!

Are you connected with us? Sign up to receive our quarterly newsletter click here. Check out PWD's Take Part! webpage <http://www.phillywatersheds.org/take-part>.

### Exciting News! About Partnerships

PWD is partnering with the U. S. Small Business Administration (SBA) to inform, educate, and connect local contractors with resources to help them prepare to do business with PWD. We're planning an upcoming workshop featuring information that is important to you. More details coming soon. Sign up for our email alerts to get all the info.

### We Want to Hear From You

PWD greatly appreciates your interest in doing business with us. We want to hear about the things that are important to you: raising capital, certification, bonding, networking, etc. Contact us at [pwdtakepart@gmail.com](mailto:pwdtakepart@gmail.com) to tell us about your interests.

### Proposed Upcoming Opportunities

#### PROPOSED UPCOMING PLANT LETTINGS

Rehab. of Plant Water System	Mechanical
Replacement of Clarifier Drives in Four Sediment Basins	Mechanical
Roof Replacement	General Construction

#### PROPOSED UPCOMING STREET LETTINGS

State Rd Cottman to Rhawn Water Main Replacement	Water Main Replacement
Bleigh Ave., E. of Oxford to Whitaker Water Main Replacement	Water Main Replacement
Florence/Beaumont/Pentridge/Saint Bernard/48th/50th Water & Sewer Replacement	Water & Sewer Replacement
Boston/Cumberland/Hagert/Jasper/Letterly Water Main Replacement	Water Main Replacement
Ritner / Moyamensing Water Main Replacement	Water Main Replacement
Cobbs Creek Intercepting Sewer Lining Phase 2 Sewer Lining Replacement	Sewer Lining Replacement
Hermitage/Silverwood/Smick	Water & Sewer Replacement
Corlies St/Dakota	Water & Sewer Replacement
Red Lion Rd/ Bustleton Ave	Water Main Replacement
Orthodox/Paul	Water Main Replacement
Warnock/10th	Water/Sewer/Lining
Woodward ST/Winchester Ave	Water Main Replacement



## Small Business Resources & Events

- The Small Business Administration is offering a series of webinars and seminars during the month of March for developing small businesses in the Philadelphia area. There are various topics to explore that may benefit your company. Registration is required. Contact George Murray for more information at (610) 382-3083 or visit <http://www.sba.gov/events>.
- The Office of Economic Opportunity will be hosting its quarterly "Doing Business in the City" presentation on March 26, 2014 at 2:30pm in the One Parkway Building, 1515 Arch Street, 18th floor, Philadelphia, PA. Explore the opportunity of building your business with City agencies and learn the steps for getting started and the resources that are available to support your enterprise. For more information, contact LaShawnda Tompkins at [lashawnda.tompkins@phila.gov](mailto:lashawnda.tompkins@phila.gov) or call 215.683.2057.
- SCORE Philadelphia is hosting a series of events with the SBA targeted to improve business marketing strategies, maximizing partnerships, and understanding joint ventures. For more information visit [www.scorephila.org](http://www.scorephila.org).
- The Philadelphia Industrial Development Corporation (PIDC) offers an array of financing products to provide small businesses with critical tools for growth. These products include traditional gap loans which, in partnership with banks, can aid with acquisition, construction, and equipment purchases; working capital to support growing businesses including both a term loan option for emerging businesses as well as a line of credit program focused on small, minority, women, and disabled owned businesses to fund outstanding receivables on executed contracts; and financing for companies that lack access to capital. Find out more at PIDC Loans. If you would like to speak with someone at PIDC about your small business financing needs, please contact Chamor Hollinger at [chollinger@pidc-pa.org](mailto:chollinger@pidc-pa.org) or call 215.496.8157.

## Contacts

### The Office of Business Services

215.683.2000

[www.phila.gov/commerce](http://www.phila.gov/commerce)

This office provides businesses with information on:

- Business start-up or expansion
- Help with license and permit matters
- Financial resources
- Preparing for City inspections

### City of Philadelphia Procurement Department

<http://mbec.phila.gov/procurement>

- This site lists contracts currently eligible for bid.
- Navigating the City contract process

### PWD Projects Control Unit

215.685.6337

<http://www.phila.gov/water>

This office can provide plans and specifications for PWD Public Works projects. There is a fee for these documents, ranging from \$10 to \$25 or more.

### Office of Labor Standards

215.686.3501

[www.phila.gov/commerce](http://www.phila.gov/commerce)

This office can provide information on prevailing wage requirements and other labor standards for all Public Works projects.

### The Office of Economic Opportunity Philadelphia Department of Commerce

215.683.2055

[www.phila.gov/oeo](http://www.phila.gov/oeo)

This office provides assistance to minority, woman and disabled-owned businesses with:

- Resources for obtaining MWDS-BE certification
- Registration with the City of Philadelphia
- Networking for business partnerships with larger companies
- Addressing prompt payment issues for current City contractors



## Disclaimer

PWD has provided this newsletter and its contents as an informational service only. Your receipt or review of this document does not construe any promise of special consideration, assistance or endorsement for successfully bidding on any Public Works contracts issued by the Department. PWD follows the fair bidding practices and protocol set forth by the Philadelphia Home Rule Charter.



## **MEMORANDUM**

**To: Commissioner Howard Neukrug, P.E., BCEE  
Mami Hara, Deputy Commissioner and Chief of Staff  
Debra McCarty, Deputy Commissioner, Operations  
Scott Schwarz, General Counsel**

**Cc: Christine Knapp, Director of Strategic Partnerships  
John Muldowney, Director of Treatment Operations  
Kate Guest, Drinking Water Treatment Manager  
Ji Jun, Assistant City Solicitor, Regulatory Affairs**

**From: Janira Barroso, Director of Participation**

**Date: February 28, 2014**

**RE: Outreach Status of Minority, Women, Disabled Business Enterprises (MWDSBEs)  
Water Chemical Treatment Suppliers and Contracts**

This memo is to summarize the actions taken to assess participation in the water treatment chemical supply contracts. This topic of discussion was made public by Steve Masters of Just Laws, LLC. On September 18, 2013, Masters provided testimony at a City Council Public Hearing for Commerce and Economic Development. In his testimony, Masters requested that the City explore employing diverse suppliers in the water chemical treatment industry; and ensure that fair procurement practices are being extended to MWDSBEs. A list of MWDSBE suppliers was also provided by Masters to OEO. The intent of this request is to increase the level of participation on chemical contracts.

PWD has formed a working group with OEO, Procurement, and Law. The first meeting occurred on November 21, 2013, and potential actions were discussed. Subsequent meetings occurred January 6, 2014 with Sadique Akbar of Councilman Goode's Office; and February 6, 2014 with Hope Caldwell from the Office of Integrity to address issues raised by Procurement.

### **Actions Taken:**

1. PWD met with OEO, Procurement, and Law in November to better understand the current supply chain (i.e. estimated annual quantity of each chemical, bulk vs. packaged products; manufacturers preferred vs. distributors; industry standards; seasonal ordering patterns; billing and payment practices; Dun and Bradstreet financial reports; etc.).

2. PWD reached out to all five suppliers recommended to us by OEO via phone and email. They are:
  - a. BKM Resources, Inc.
  - b. ChemCeed, LLC
  - c. GC3 Specialty Chemicals
  - d. Maryland Chemicals
  - e. TRICON Chemical Corporation
3. We have actively exchanged information with two of the vendors (BKM & TRICON). The remaining three vendors have not responded to email or phone inquiries.
4. PWD received responses from two of the recommended vendors and scheduled meetings in January:
  - a. TRICON – January 28, 2014 at 1pm
  - b. BKM – originally scheduled for January 28, 2014 at 10am (*at the request of BKM the meeting was canceled due to a family emergency; waiting to reschedule – PWD has reached out follow up on February 19, 2014 but to no avail because of the company's inability to set a date*)  
**(See Reference Document 1)**
5. PWD provided a written response with action items to the Office of Economic Opportunity on December 6, 2013 outlining our outreach efforts to diverse business suppliers. **(See Reference Document 2)**
6. PWD provided a brief summary statement on the water treatment chemical supplier matter to the Economic Opportunity Review Committee on December 9, 2013 when asked by committee members what our status on PWD outreach efforts was. The following statement was provided by Christopher Crockett, Deputy Commissioner of Planning and Environmental Services:

*"PWD is always interested in increasing the qualified bidder pool for treatment chemicals to encourage market competition and keep prices in check. We have always and are happy to meet with interested suppliers to outline our needs and expand our market knowledge. We currently have reached out to all five suppliers recommended to us by OEO and have received responses from two and have schedule meetings in January with both (TRICON and BKM)*

*We have provided a written response with action items to the Office of Economic Opportunity on our outreach efforts to diverse business suppliers. We will also continue to work with OEO and Procurement to encourage participation on these contracts."*
7. OEO provided a written response to Councilman Goode's Office on January 6, 2014 to a series of questions sent by Sadique Akbar. **(See Reference Document 3)**



8. PWD worked with OEO, Law, and Procurement to increase the qualified bidder pool for treatment chemicals to encourage market competition and keep prices in check with a follow up meeting that occurred on January 7, 2014. **(See Reference Document 4)**
9. PWD conducted a web search on the current contract vendors on the chemical bids to see any had supplier diversity statements published. **(See Reference Document 5)**
10. OEO, Procurement, and PWD sent a joint letter on February 26, 2014 to current vendors holding a chemical's contract to explore vendor supplier diversity programs. **(See Reference Document 6)**

#### **Outcomes**

1. The recommended suppliers are responding to OEO's request to register and four are now in the OEO Registry. Only one supplier remains unregistered (TRICON).
2. Two companies out of five, prompted by Procurement, have applied and been added to the Bidder's List (BKM and TRICON).
3. Two companies out of five have responded to the Water Department's outreach (emails and phone calls) and met with PWD on January 28, 2014 **(TRICON – See Reference Document 2)** and the second has yet to find availability to reschedule (BKM).

#### **Next Steps**

- Request written confirmation by Procurement on their plans not to re-issue bid with a cost analysis supporting their decision
  - The current contract period is 10/1/13 - 9/30/15 for contracts listed and chemical prices for FY14 & FY15 in **Reference Document 2**
  - The next bid opportunity will be in March for Activated Carbon for an award date in late September/early October 2014
- Outreach to Carus Corporation, this company may be a WBE potential; CEO and President is a woman
- Expand research for potential minority/women distributors for hazardous materials
- Explore methods to increase participation on chemical contracts
- Continue to meet with the working group (PWD, OEO, Procurement, and Law) to share best practices and findings from our efforts. Next meeting to be scheduled sometime in April.

Make-up of non-profit boards with PWD contracts larger than \$250,000

Contract ID	Vendor	Type	Start	End	Amount	Total	Total # of		# of POC	FY15 contract planned? Y/N
							Bd Mbrs	# of Women		
1420219	Energy Coordinating Agency of Phila Inc	General Consultant Services	10/1/2013	6/30/2014	497,309.00	119,048.57	19	6	3	Unsure
1420254	Energy Coordinating Agency of Phila Inc	General Consultant Services	10/1/2013	6/30/2014	550,000.00	216,255.73	19	6	3	Unsure
1320603	Partnership for the Delaware Estuary, Inc.	General Consultant Services	7/1/2013	6/30/2014	285,000.00	57,514.80	20	8	2	Y
1220477	Pennsylvania Horticultural Society	General Consultant Services	4/1/2013	3/31/2014	250,000.00	-	18	9	1	Y
1320754	Phila. Authority for Industrial Development	General Consultant Services	1/1/2013	12/31/2013	1,000,000.00	-	29	8	11	Y
9820727	Philadelphia Municipal Authority	General Consultant Services	7/10/1997	9/10/2017	125,000,000.00	27,869,613.54	5 (1 vacancy)	2	1	Y
1220470	Community Legal Services	General Consultant Services	2/15/2012	2/14/2013	325,000.00	279,858.15	26	11	11	Y
1020398	Energy Coordinating Agency of Phila Inc	General Consultant Services	7/1/2012	6/30/2013	1,331,100.00	1,156,126.55	19	6	3	Unsure
1020255	Fairmount Park Conservancy	General Consultant Services	7/1/2012	6/30/2013	560,000.00	555,304.84	24	9	4	N

## **Department Contract Renewal Process**

The department contract renewal process follows the City's guidelines

Contracts are considered for renewal through the same process the contract is originated

In connection with the preparation of the budget each class 250 contract is considered for renewal. If there is a continued need for the service and the four year renewal limit has not been exceeded a budget request is prepared by the contract/project manager estimating the level of effort and funding required for the subsequent fiscal year

The project manager sends the request to the division manager

The division manager review and approves, rejects or modifies the request and includes the request in the proposed divisional budget and transmits it to the budget officer

The request is reviewed and discussed at the department budget meeting.

The divisional budget requests and increase/decrease packages are compiled by the budget unit and reviewed in connection with the departments rate and budget plan

The water commissioner, in consultation with executive staff review, approves or modifies the departmental budget requests in connection with the department's overall spending , rate plan and strategic priorities

The budget officer sends the completed budget to the City Budget Office

The City budget office reviews, approves or modifies the budget request in connection with overall City budget priorities

The budget requests are combined and included in the Mayor's budget request to City Council.

City Council review's approves or modifies the budget request and holds hearings in connection with the budget requests

City Council develops a final budget and creates appropriations to authorize spending

After appropriations are available, the project manager solicits a proposal from the vendor and submits an amendment request to the division manager

The division manager reviews and approves , rejects or modifies the request and then submits the request to the department's contract manager

The contract manager logs the amendment request and submits it to the budget officer for review and departmental approval

The department's budget office and water dept management review and approve reject or modify the request

Once approved the amendment request is forwarded to the city's contract management (MDO) unit for approval

MDO sends the request to City Budget Office  
City Budget Office sends request to Law  
Law sends it to City Finance and Water  
Contract is then conformed with vendor

Contracts being considered for renewal will have to submit a proposal that includes scope of work

The department will negotiate any changes or increases to the contract  
Law will review proposal and draw up a new contract  
New contract is sent to City Budget Office  
Sent back to Law  
Law sends to Finance and Water

Renewals are considered through an analysis of the contract and the option for renewals are presented in various scenarios

Did the original contract encumber the total contract amount? (in this case outstanding contract value needs to be unencumbered and then re-encumbered)  
Were all services done within the current contract year?  
Has the contract met all of the objectives for the current contract year?  
Does the original contract scope need to be revised? (additions/deletions in the scope of services)

The analysis of the contract is most likely conducted in the late third or early fourth quarter of the fiscal year if a large amount of the contract has not been encumbered

Contract renewals are sent to OEO for review when:  
There is a change (increase/decrease) in the participation ranges from the originated contract  
There is a change in the scope of work that would affect participation  
There is a request to change a subcontractor or add a

Water Chemical Treatment Vendors  
Survey Findings

VENDOR NAME	Board of Directors	Leadership Team	Supplier Diversity Program?	FY 13/14 Contract Value 10/1/13-9/30/14	FY14/15 Contract Value 10/1/14-9/30/15	Products	Business Type	Contract Status	Potential Participation
BUCKMAN Inc.	25% women; 13% minority	unavailable	No	\$ 100,000	\$ 100,000	Dechlorination chemical tablets; Sodium Hypochlorite drums for rec department sites	Distributor	Active	0
CARUS CORPORATION	unavailable	President and CEO is a woman	No; however Carus Corporation has self identified itself as a WBE company and is interested in pursuing OEO Registration. Further, based on the guidelines of the EPA mandated Lead and Copper Rule, Sage 2 Disinfectant and Disinfection by product Rule as set forth by the USA EP and PA DEP, requirements frame the use of only pre-approved raw material specification and safe and secure supply of raw materials to insure an uninterrupted supply of product to the City of Philadelphia, Carus is limited in providing subcontracting opportunities.	\$ 732,216	\$ 2,019,967	Zinc orthophosphate and Permanganate	Manufacture and distribution	Active	\$ 2,019,967
GREER LIME CO	unavailable	unavailable	No; however has performed Best and Good Faith Efforts to assess the limited list of heavy duty haulers on OEO's registry; these vendors did not meet spec to perform on the bid.	\$ 105,230	\$ 964,469	Quicklime; Hydrated Lime; Calcium Oxide	Manufacture, internal handling & packaging	Active	0
KUEHNE CHEMICAL COMPANY	unavailable	unavailable	No; however Kuehne Chemical Co has self identified itself as a woman owned business. Kuehne has also expressed that they exercise Best and Good Faith Efforts to include M&WBEs in contracting opportunities when and wherever possible. They have also expressed diversity in their workforce and production/delivery teams.	\$ 6,550,540	\$ 5,864,200	Sodium Hypochlorite	Manufacture, & Distribution	Active	\$ 5,864,200
MOSAIC CROP NUTRITION	9% women; 0% minority	13% women; 0% minority	Has a Code of Conduct and Ethics Standard in Conducting Business with Suppliers in Fair and Transparent Dealings; Promotes Fair Employment Practices and Diversity; The supply type distributed to the City of Philadelphia is ship via railcar and then transported by specialized tank trucks capable of hauling 45,000 pounds with Hazardous material certification of registration that is current combined with \$5M minimum insurance.	\$ 1,066,435	\$ 917,842	Fluorosilicic Acid	Manufacture	Active	0
CABOT NORIT AMERICAS INC	14% women; 21% minority	0% women; 18% minority	No	NA; Calgon was Vendor	\$ 2,743,640	Powdered Activated Carbon;	Manufacture and internal bulk delivery	Active	0
POLYDYNE INC	unavailable	unavailable	No, manufactures and mixes polymer raw materials acquired through Dow and Exxon-Mobil. Polydyne has made Best and Good Faith efforts to find M/WBE carriers equipped to transport polymers but to no avail in the Eastern part of the US. They do utilize M&WBEs on other contracts throughout the US specifically in the Southwest, Central and West of the country.	\$ 181,725	\$ 281,725	Polymer; acrylamide monomer	Manufacture	Active	0
PVS TECHNOLOGIES	unavailable	woman asst Vice President	No, however, there is utilization of one MBE (Ferrous Metal Processing) and two WBEs (Garito Industrial Supply and Xcel Processing) and will be formalizing a plan in 2014;	NA; Kemira was Vendor	\$ 6,807,289	ferric chloride	Manufacture and distributor	Active	\$ 31,000

Water Chemical Treatment Vendors  
Survey Findings

VENDOR NAME	Board of Directors	Leadership Team	Supplier Diversity Program?	FY 13/14 Contract Value 10/1/13-9/30/14	FY14/15 Contract Value 10/1/14-9/30/15	Products	Business Type	Contract Status	Potential Participation
SHANNON CHEMICAL CORPORATION	unavailable	unavailable	No, but Shannon has identified participation with a WBE as a chemical supplier. They are PH2OS Solutions.	\$ 1,677,901	\$ 283,191	Zinc orthophosphate & sodium phosphate	Manufacture and distribution	Currently Active only for sodium phosphate	\$ 141,596
UNIVAR USA INC.	0% women; 0% minority	0% women; 0% minority	No; based on the guidelines and requirements frame the use of only pre-approved raw material specification and safe and secure supply of raw materials to insure an uninterrupted supply of product to the City of Philadelphia, Univar is limited in providing subcontracting opportunities.	\$ 1,595,147	\$ 1,779,592	Sulfuric acid; Ammonium Hydroxide	Distributor	Active	0
				\$	21,761,915	Total Contract			\$ 21,761,915
									\$ 8,056,763

Make-up of non-profit boards with FWD contracts larger than \$250,000

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# Financial



## Financial Information

- Top Talking Points

- During FY 2013, PWD continued its record of exceeding its financial projections and demonstrating fiscal responsibility.
- Revenues. Total operating revenues increased \$23,600,000 primarily due to a 5.8% water and sewer rate increase effective on July 1, 2012. Total non-operating revenues increased \$1,500,000 due to an increase in miscellaneous revenues.
- Expenses. Total operating expenses increased \$24,300,000 due to a \$12,800,000 increase in the personal services, including fringe benefits, combined with an increase of \$7,700,000 in the purchase of contracted services, material, and supplies, an increase of \$2,000,000 in contributions, indemnities and taxes, and an increase of \$1,700,000 in charges due to the General Fund.
- In Fiscal Year 2013, a withdrawal of \$4,666,000 was made from the Rate Stabilization Fund. Deposits of \$19,380,000 to the Capital Account and \$22,833,000 to the Residual Fund were made from the Water Fund Account. These capital and residual fund deposits will be used to provide funding for capital projects in lieu of additional borrowing.
- The balances as of June 30, 2013 in the RSF and Residual Fund total \$161,463,768 and \$906,558 respectively.

- Budget Review

- Water Department Operating Budget- \$354.7 million, which is a \$33.7 million increase over our FY14 estimated obligations and accounts for the increased costs of doing business in nearly every area of our operation

### Water Department

#### BUDGET SUMMARY AND OTHER BUDGET DRIVERS

##### Financial Summary by Class

	Fiscal 2013 Actual Obligations	Fiscal 2014 Original Appropriations	Fiscal 2014 Estimated Obligations	Fiscal 2015 Proposed Appropriations	Difference FY14 - FY15
Class 100 - Employee Compensation	\$85,257,781	\$93,863,950	\$89,035,750	\$93,863,950	\$4,828,200
Class 200 - Purchase of Services	\$116,003,428	\$136,195,600	\$128,128,300	\$146,093,400	\$17,965,100
Class 300 - Materials and Supplies	\$41,242,018	\$44,017,500	\$43,199,600	\$45,096,500	\$1,896,900
Class 400 - Equipment	\$1,893,948	\$3,637,500	\$2,809,100	\$2,666,850	(\$142,250)
Class 500 - Contributions	\$0	\$100,000	\$0	\$100,000	\$100,000
Class 700 - Debt Service					
Class 800 - Payment to Other Funds	\$53,006,195	\$58,456,300	\$57,864,100	\$66,965,000	\$9,100,900
Class 900 - Advances/Misc. Payments					
<b>TOTAL</b>	<b>\$297,403,370</b>	<b>\$336,270,850</b>	<b>\$321,036,850</b>	<b>\$354,785,700</b>	<b>\$33,748,850</b>

- Water Fund Operating Budget- \$727.7 million, a \$39.9 million increase over FY14
  1. The Water Fund FY15 includes not only the operating budget of the Water Department (\$354.7 million) but other significant costs, such as the operating budgets of the Water Revenue Bureau, the Office of Innovation and Technology (OIT), debt service, employee fringe benefits, and other central agency support services.
  2. Major FY15 Water Fund Budget changes are listed below:
    - Increased cost of debt service \$16.6 million
    - Increased OIT Funding of \$2.2 million
    - Increased health care costs of \$2.5 million
    - Decreased projected pensions costs of (\$8.8 million) due to the elimination of the need to fund the 2010 pension "holiday".
    - Decreased the projected amount for labor settlement (\$5.6 million)

- Cost Increases and Expense Reduction Measures

- Like all water, wastewater and stormwater utilities, PWD is challenged by rising costs in a number of areas. PWD must plan to manage in a financial environment of rising costs, particularly:
  1. Increasing commodity costs, including energy and chemicals,
  2. Implementation of new environmental initiatives
  3. Expansion of infrastructure renewal and replacement,
  4. Requirements for salary settlements, pension funding and fringe benefit costs.
- A number of related yet competing fiscal challenges will continue to require close scrutiny by the PWD:
  1. Industry wide decline in retail water consumption and wholesale accounts
  2. Increased demand for services in an era of aging facilities and new extreme weather challenges
  3. Increasing commodity costs, including energy and chemicals
  4. Requirements for pension funding and fringe benefit costs
  5. Stagnation of Median Household Income and Increased Levels of Poverty
  6. Financial impacts of discount programs to educational and charitable organization
- PWD has undertaken several measures to reduce operational expenses, including:
  1. Increasing the automation and convenience of our metering and billing systems
  2. Reducing energy costs by generating electricity at our resource recovery plants
  3. Finding cost-effective ways to meet federal and state regulatory requirements that also improve Philadelphia's waterways and revitalize the city
  4. Partnering with other City agencies to improve efficiency

- Rates

- Talking points on new water rate setting board
  1. Philadelphia voters approved a charter change in November of 2012, put forth by City Council, to create an independent water-rate setting board. This charter change was approved by the Mayor on January 20, 2014. The new independent water rate-making body will be established and charged with fixing and regulating rates for water, sewer and storm water charges. PWD, City Council and members of the water rate board will develop a process that retains or improves upon the A-ratings bond rating agencies and ensures the utility is providing top-quality service at competitive rates.
  2. What will the new process be?
    - The Mayor will appoint the 5 members
    - PWD will submit to Council a comprehensive financial stability plan every four years, which must be updated prior to proposing revisions in rates and charges
    - PWD will give written notice to Council and the rate-setting board at least 30 days in advance of the filing of notice of any proposed change in rates or charges or of any proposed revision in service rates.
    - The board will establish open and transparent processes and procedures for public input and comment on proposed water rates and changes, including public hearings.

- The rate-setting board must issue a written report that approves, modifies or rejects the proposed rates and charges within 90 days from the filing.
- Last rate case
  1. In 2012, Water rates were approved for a three year period (FY2013-2015). The last scheduled increase under that rate order occurs on July 1, 2014, when typical rates will increase by 5%. Current projections in the five year plan indicate rate increases in the 5 to 6% range annually for FY 2016 to 2020
  2. Summary of rate settlement
    - The 2013 rate increases were agreed upon by PWD and the public advocate (CLS) via the following process
      - Public meetings and hearings in July and August of 2012, presided over by Michael Bowman, the Hearing Officer appointed by the Mayor and City Council to oversee the rate case
      - PWD and the Public advocate negotiated a recommended settlement in August 2012
      - Hearing Officer made a recommendation to Water Commissioner endorsing the proposed settlement
      - Commissioner Neukrug reviewed the Hearing Officer's report and agreed with the Hearing Officer's recommendations.
      - New rates went into effect on January 1, 2013 and subsequently on July 1, 2013 (and again on July 1, 2014)
- Anticipated need for next rate case
  1. PWD currently retains the services of Black & Veatch as its rate consultant ("Rate Consultant") to prepare five year projected revenue and revenue requirements forecast, among other duties. The Rate Consultant's projections are based on historical spending pattern trends to project actual obligations.
  2. The Rate Consultant's recent projections, which are included in the Water section of the City's Five year plan, assume annual rate increases beginning on July 1, 2015. Current projections in the five year plan indicate rate increases in the 5 to 6% range annually for FY 2016 to 2020. PWD has not yet begun a detailed cost of service study to determine exactly when and by how much rates will be required to be increased.
- Comparison to suburbs and other regions
  1. PWD's rates are less than half of those charged by some neighboring investor-owned utilities
  2. National Comparison

### *National Comparison*

Companies	Combined Household Water, Wastewater, and Stormwater Charges
Phoenix	23.16
Chicago	29.16
San Antonio	41.90
Dallas	48.13
Los Angeles	52.99
New York	55.63
Baltimore	58.51
<b>Philadelphia</b>	<b>64.24</b>
Boston	64.25
San Jose	69.70
Houston	70.59
Washington, DC	70.70
San Diego	94.15

### 3. Regional Comparison

#### *Regional Comparison*

Companies	Water Charge	Sewer Charge	Stormwater Charge
Aqua Pennsylvania	\$59.90	N/A	N/A
Pennsylvania American Water +	\$54.60	N/A	N/A
New Jersey American Water+	\$37.26	N/A	N/A
North Penn Water Authority+	\$23.25	N/A	N/A
North Wales Water Authority+	\$20.16	N/A	N/A
Doylestown Township	\$29.02	\$45.21	N/A
Lower Gwynedd Municipal Auth.**	N/A	\$29.23	N/A
CCMUA (Camden County)	\$37.26	\$35.67	N/A
City of Trenton, New Jersey	\$28.11	\$25.69	N/A
Philadelphia Water Department	\$28.71	\$22.07	\$13.45

- Collections and delinquencies
  - Summary of bill collections

	FY2011	FY2012	FY2013
Paid on time (30 day)	68%	70%	67%
Paid within 4 months (120 days)	93%	93%	88%
Paid within one year (12months)	95%	94%	90%

- Bills paid over 15-year collection period
  1. 96.8% of all bills are paid over the 15-year collection period
  2. Receivables review (Source- WRB December 2013 Account Receivables Report)
    - \$334,393,780 in total WRB receivables
    - \$239,334,766 of these are delinquent 30 days or more (71%)
  3. Summary of delinquent accounts

- The number of delinquent accounts has more than doubled since June 2008

Accounts Delinquent	Jun-08	Jun-11	Jun-12	Jun-13	Dec-13
3 to 12 months delinquent	82,066	164,599	206,945	203,207	213,385
More the 12 months delinquent	50,594	91,537	120,583	161,217	174,346
Total Accounts Delinquent> 3 billing cycles	132,660	256,136	327,528	364,424	387,731

- **Strategic Plan and Financial Stability Plan**
  - Bill No. 130251-A02 directs PWD to develop and submit to Council every four years a comprehensive Financial Stability Plan
  - FSP establishes the Financial Criteria by which Rates and Charges are Set
    1. The FSP details the financial metrics by which rates and charges should be set in order for PWD to meet the on-going operating, debt-service and City fund charges of the utility.
  - FSP supports PWD Best Utility Management Practices for Fiscal Planning
    1. Critical to the sound management of this utility, PWD is in a continuous review and revision program to plan strategically to meet its short-, medium- and long-term capital and operating priorities
    2. Examples of inter-related planning documents include
      - 2013 “25-year Capital Improvement Plan ” (revised every 5 years)
      - 2012 Water Rate Determination (to be supplemented/superseded by next rate case)
      - 2014 Strategic Plan (revised every 3 years)
      - 2014 Financial Stability Plan (revised annually)
      - 2014 Impacts of Pending Federal, State, Local Regulation /Legislation (revised annually)
      - 2015 “6- year Capital Improvement Plan” (revised annually)
      - 50-year Facility System Forecasting (pending)
    3. FSP Provides a Framework for Continued Access to Affordable Capital Financing
      - PWD recognizes that access to the market and competitive water system water ratings to similar sized and positioned utilities is critical to the long-term affordability of replacing or rehabilitating our aging water and wastewater systems.
    4. FSP Addresses increasing capital needs for Infrastructure:
      - There will be continued upward pressure on water revenues to fund the significant Water System capital investments for both on-going programs, new and potential additional programs:
        - Long-term Control Plan for CSOs (new program)

- Municipal Separate Storm Sewer Systems ("MS4s") (potential additional program)
- Increase renewal / replacement of water and sewer pipes (ongoing)
- Increase renewal / replacement of aging facilities (ongoing)
- New requirements to manage extreme weather (new program)
- Upgrading drinking water treatment and distribution systems (ongoing)

5. FSP Acknowledge other significant cost pressures:

- A number of related yet competing fiscal challenges will continue to require close scrutiny by the PWD:
  - Industry wide decline in retail water consumption and wholesale accounts
  - Increased demand for services in an era of aging facilities and new extreme weather challenges
  - Increasing commodity costs, including energy and chemicals
  - Requirements for pension funding and fringe benefit costs
  - Stagnation of Median Household Income and Increased Levels of Poverty
  - Financial impacts of discount programs to educational and charitable organization

- Efficiencies

- Operational Customer Service Initiative

1. The goals of the study are to: evaluate various customer service and field activities for opportunities to optimize the utility's work processes as they impact the delivery of services to our customers; improve the level of service to our customers to enhance customer/utility partnership; and minimize adverse impacts to our customers resulting from our capital improvement plan.
2. The study focus will include the following units:
  - WRB Call Center and customer walk-in center, PWD Call Center
  - PWD Field Operational Units including: Customer Service, Distribution, Emergency, Sewer Maintenance, Inlet Cleaning, Meter Shop, Leak Detection, Shutoffs and Restores
  - PWD Construction – Street side (water main, sewer, and green infrastructure installation)
3. For A, B, and C above, the consultant will:
  - Review and evaluate current policies, procedures, and practices in order to improve customer service and customer interactions and present recommendations for improvement.
  - Review and evaluate the current work processes and standards of operation to determine whether they are appropriate to meet desired levels of service and make recommendations for improvement.
  - Identify any resources or technologies that could be utilized to improve customer service and customer communications.

- The consultant may also be asked to evaluate related Departmental core business processes as needed.
  - The consultant will be expected to cooperate with project managers or consultants working on other Departmental or City projects, at the Project Manager's direction.
- Management Audit of WRB
  1. As part of the Rate Settlement and the Public Advocate's withdrawal of the 2008 Rate Challenge, the Water Department also agreed to conduct a management audit and issued a request for proposals for a limited scope management audit consistent with the agreed upon parameters set forth below
  2. The Water Department agreed that the purposes of such Management Audit, as reflected in the RFP, would be, at a minimum:
    - to evaluate the organizational structure, management/employment practices, operating policies and procedures, billing and collection practices, and other internal workings and practices against industry benchmarks to determine and recommend areas for improvement;
    - to examine operational and financial recordkeeping systems;
    - to identify improvements which could lead to better data management, reporting and consistency as well as provide reliable information on which to base future customer rates;
    - to examine and recommend ways to obtain further economies, efficiencies or improvements in operations to result in cost savings to the Utility and its customers;
    - and to produce a final report, containing findings, recommendations and an implementation plan to address the outcomes of the Management Audit.
  3. Review of Commodity Costs
    - PWD electricity and natural gas costs exceed \$20 million in operating expenses
    - Due to the volatility of these markets and costs PWD embarked on a formal energy program to buy electricity and natural gas cheaper from markets, use our energy more efficiently, and make our own energy whenever possible and cost effective.
    - In FY13, This program has helped us reduce electrical loads to achieve \$290,000 in performance payments, saved \$4 million on natural gas by using our biogas, saved \$23,000 using solar power, obtained a \$400,000 sewer geothermal system via partner grants, and generated \$196,000 in air de-icing fluid tipping fee revenues.
    - All of these efforts that save money and increase our resilience, including the biogas cogeneration facility, led to a more than 20% decrease in greenhouse gas emissions for PWD.
    - We continue as part of our daily operation to aggressively review and identify any and all opportunities to reduce our costs while never sacrificing the overall quality and reliability of our services.
- Water Loss



1. For FY13 average annual billed consumption was equivalent to 152.1 MGD which is a record low billed total in the City's history. This continues a trend of declining billings that has occurred for many years.
2. The FY13 value of Non-revenue Water, or NRW, (unbilled authorized consumption + apparent losses + real losses) is 31,499 million gallons, or a daily average of 86.3 MGD, an increase of 1.7 MGD from FY2012.
3. The average daily billed consumption reported by the Water Revenue Bureau (WRB) continues to decline for several reasons. Reduced population and water conserving behavior of customers are factors in this decline, however these are not exclusive impacts on the reduced billing.
4. During FY13 the PWD and WRB continued a number of successful loss reduction activities including the Revenue Protection Program and analysis of large customer meters to address apparent losses, and use of the Sahara® inline transmission main leak detection service to control real losses.

Fiscal Year 2013 Financial Data	
Apparent Losses per MG-Small Meter Accounts (5/8" & 3/4")	\$7,711
Apparent Losses per MG-Large Meter Accounts (1" and larger)	\$6,680
Apparent Losses per MG for City Property Accounts	\$6,680
Apparent Losses per MG - Overall Average Customer Rate	\$7,313
Real Losses - Marginal Cost per MG	\$346.46
Real Loss Indemnity costs - added to total of Real Losses	\$515,954
Water Supply Operating Cost	\$249,101,975
Fiscal Year 2013 Infrastructure Data	
Number of Large Meter Accounts, 1-inch and larger	12,737
Number of Small Meter Accounts, 5/8 & 3/4 inch (also includes some large meter accounts)	460,790
Number of actual connections in Non-billed account population	53,678
Miles of transmission and distribution pipeline	3,028.00
Miles of piping serving as fire hydrant laterals and large customer connections	150
Ave. length of service connection: curbstop to customer meter, ft.	12
Average pressure across the water distribution system, psi	65
Notes	
<p>**The breakdown of leakage categories is approximate and should not be interpreted literally as most of these components are based on estimates rather than measured from minimum hour flow analysis. It is believed, however, that the overall estimate of leakage is reasonably representative of aggregate system conditions.</p>	

- o Council specific questions



1. Why don't we sell PWD (or pieces of it) while we're selling PGW? (Clarke)
  - The existing bond ordinance permits the transfer of PWD to an authority.
  - PWD has 1.9 Billion in outstanding bonds. A private entity would be subject to a rigorous review by bond council to determine if bonds would remain non-taxable or would need to be "refunded".
  - There are many efficiencies achieved by having water, waste water and stormwater all handled by a single entity.
  - PWD rates are half those of regional private entities (see rate comparison)
  - Water Only Sale:
    - The water utility of PWD is the most attractive to buyers
    - Because of the existing revenue pledge, it is likely that the proceeds from the sale would have to remain within the utility.
  - Wastewater/Stormwater Only Sale:
    - The wastewater/stormwater side of business is much less attractive since it contains a lot of liabilities and federal requirements.
2. What are we doing to keep rates low? (Clarke, Blackwell, Goode, others)
  - Strategic and Financial Plans
  - Audits
  - Energy projects
  - Work Order System improvements
3. What is the impact of the DC 47 deal? What would impact of DC 33 deal be?
  - \$2000 bonus
    - DC 47- \$800,000
    - DC 33 (if applied)- \$3.4 million
    - Non-reps (if applied)- \$400,000
  - 3.5% increment
    - DC 47- \$700,00
    - DC 33 \$2.8 million
    - Non reps- \$350,000
  - Savings related to additional .5% pension payment
    - DC 47- \$100,000
    - DC 33 - \$400,000
    - Non-reps- \$50,000
  - FY14 cost of additional health payments
    - DC 47- \$200,000
    - DC 33- \$800,00
    - Non-reps- \$100,000
  - PWD share of \$5 million back payment for health
    - \$750,000
    - Share of similar payment for DC 33- \$5 million
  - Value of overtime savings and additional overtime costs
    - Not material
  - All in costs if projected over all employees

- \$15-16 million range by FY16, roughly equivalent to 3% rate increase
- Reference documents
  1. Impact of DC 47 and assumed 33 contracts
  2. PWD Budget summary
  3. Projected Revenue and Revenue Requirements

**Water Department**

**Comparison By Class, FY2014 Estimated Obligations versus FY2015 Budget**

	6 - HR/Admin	7 - Finance	8 - Planning & Engineering	9 - Operations	40 - Public Affairs	42 - Planning & Environmental Services	Total
<i>Total FY2015 Budget</i>	5,511,100	97,294,150	1,889,100	202,927,894	11,437,400	35,726,035	354,785,679
<i>FY2014 Estimated Obligations</i>	2,892,698	82,847,163	1,683,811	191,574,328	10,360,497	31,684,709	321,043,206
<i>Major Class Differential</i>							
100	\$503,850	\$313,863	\$57,189	\$3,128,950	\$70,203	\$754,191	\$4,828,246
200	\$1,282,700	\$5,620,574	\$155,700	\$6,806,172	\$966,100	\$3,133,785	\$17,965,031
300	\$373,452	(\$201,950)	\$40,700	\$1,385,544	\$37,100	\$261,100	\$1,895,946
400	\$358,400	(\$386,400)	(\$48,300)	\$32,900	\$3,500	(\$107,750)	(\$147,650)
800	\$100,000	\$9,100,900	\$0	\$0	\$0	\$0	\$9,200,900

**Summary of Increase Over \$1MM in Any Class**

100			Transfer of 19 people from WRB \$1.1MM, Hiring of Critical staff	
200/300	Transfer in Admin	SMIP (\$5.2), Rate Case (\$2.5), Less Transfers of Admin to Div. 6	Majority for electricity (\$2.7MM), gas (\$2.1MM) & materials / supplies (\$1.3MM)	\$3MM Increase (Transfer in \$1.4MM Contract for GSI Inspections Plus \$1.2MM Increase for GSI Inspections)
900 Change				
General Fund		\$756,900		
Capital Fund		\$504,000		
Residual		\$7,840,000		

TABLE 1

**PROJECTED REVENUE AND REVENUE REQUIREMENTS**  
(in thousands of dollars)

Line No.	Description	2014	2015	2016	2017	2018	2019	2020
<b>OPERATING REVENUE</b>								
1	Water Service - Existing Rates	254,334	254,655	251,700	249,840	247,965	239,860	237,985
2	Wastewater Service - Existing Rates	365,035	365,744	366,444	365,038	363,621	362,205	360,628
3	Total Service Revenue - Existing Rates	619,369	620,399	618,144	614,878	611,586	602,065	598,613
<b>Additional Service Revenue Required</b>								
	Percent Increase		Months Effective					
4	FY 2015	4.48%	12	27,794	27,693	27,547	26,973	26,818
5	FY 2016	4.50%	12	29,063	28,909	28,754	28,307	28,144
6	FY 2017	4.50%	12		30,210	30,048	29,581	29,411
7	FY 2018	4.50%	12			31,400	30,912	30,734
8	FY 2019	4.40%	12				31,585	31,404
9	FY 2020	4.40%	12					32,785
10	Total Additional Service Revenue Required	0	27,794	56,756	86,666	117,601	147,358	179,296
11	Total Water & Wastewater Service Revenue	619,369	648,193	674,900	701,544	729,187	749,423	777,909
12	Transfer From/(To) Rate Stabilization Fund	7,820	(3,905)	2,505	(9,240)	5,905	(30,800)	(33,720)
<b>Other Income (a)</b>								
13	Other Operating Revenue	20,658	20,619	20,549	20,497	20,447	20,321	20,267
14	Construction Fund Interest Income	1,269	1,552	1,447	1,600	1,634	1,588	1,588
15	Debt Reserve Fund Interest Income	0	0	0	0	0	0	0
16	Operating Fund Interest Income	405	414	426	430	447	434	442
17	Rate Stabilization Interest Income	788	778	781	798	807	869	1,030
18	Total Revenues	650,309	667,651	700,608	715,629	758,427	741,835	767,516
<b>OPERATING EXPENSES</b>								
19	Water & Wastewater Operations	330,975	333,944	345,832	357,678	370,016	382,871	396,273
20	Direct Interdepartmental Charges	71,913	71,373	73,433	75,237	77,085	78,982	80,928
21	Total Operating Expenses	402,888	405,317	419,265	432,915	447,101	461,853	477,201
22	NET REVENUES AFTER OPERATIONS	247,421	262,334	281,343	282,714	311,326	279,982	290,315
<b>DEBT SERVICE</b>								
<b>Senior Debt Service</b>								
<b>Revenue Bonds</b>								
23	Outstanding Bonds	187,838	184,512	191,468	169,036	170,361	121,038	83,458
24	Pennvest Parity Bonds	11,926	12,320	12,320	12,320	12,904	13,096	13,050
25	Projected Future Bonds	3,036	16,442	23,097	44,811	63,818	86,322	130,300
26	Total Senior Debt Service	202,800	213,274	226,885	226,167	247,083	220,456	226,808
27	TOTAL SENIOR DEBT SERVICE COVERAGE (L22/L26)	1.22 x	1.23 x	1.24 x	1.25 x	1.26 x	1.27 x	1.28 x
<b>Subordinate Debt Service</b>								
28	Outstanding General Obligation Bonds	0	0	0	0	0	0	0
29	Pennvest Subordinate Bonds	0	0	0	0	0	0	0
30	Total Subordinate Debt Service	0	0	0	0	0	0	0
31	Total Debt Service on Bonds	202,800	213,274	226,885	226,167	247,083	220,456	226,808
32	CAPITAL ACCOUNT DEPOSIT	20,193	20,697	21,215	21,746	22,289	22,847	23,418
33	TOTAL COVERAGE (L22/(L31+L32))	1.10 x	1.12 x	1.13 x	1.14 x	1.15 x	1.15 x	1.16 x
<b>RESIDUAL FUND</b>								
34	Beginning of Year Balance	1,242	15,170	15,538	15,281	15,082	15,036	15,215
35	Interest Income	0	6	0	0	0	0	0
<b>Plus:</b>								
36	End of Year Revenue Fund Balance	24,428	28,363	33,243	34,801	41,954	36,679	40,089
37	Deposit for Transfer to City General Fund (b)	1,163	1,194	1,235	1,309	1,346	1,346	1,346
<b>Less:</b>								
38	Transfer to Construction Fund	10,500	28,000	33,500	35,000	42,000	36,500	40,000
39	Transfer to City General Fund	1,163	1,194	1,235	1,309	1,346	1,346	1,346
40	Transfer to Debt Service Reserve Fund	0	0	0	0	0	0	0
41	End of Year Balance	15,170	15,538	15,281	15,082	15,036	15,215	15,304
<b>RATE STABILIZATION FUND</b>								
42	Beginning of Year Balance	161,463	153,643	157,548	155,043	164,283	158,378	189,178
43	Deposit From/(To) Revenue Fund	(7,820)	3,905	(2,505)	9,240	(5,905)	30,800	33,720
44	End of Year Balance	153,643	157,548	155,043	164,283	158,378	189,178	222,898

## Notes:

(a) Includes other operating and nonoperating 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 37 to satisfy the requirements for the Transfer to the City General Fund.

# Infrastructure

## Infrastructure

- Top Talking Points
  - Aging infrastructure and strains on system- looking forward to address capital needs. Need for investment because of aging of system- major focus for years to come
- Water Main Breaks
  - Overall investment
    - Since 1980, half a billion has been spent to replace 18% of the system
    - PWD aims to replace 22 miles of water mains each year at a cost of \$1.3 million per mile
    - PWD has dedicated \$204 million to improving water conveyance over the next 6 years
    - Need to balance investments to prevent breaks and keep rates low
  - Prevention
    - Inspect 1/3 of mains each year for defects and stress
    - Cathodic Protection Program in place since 1950's
    - Corrosion testing and rehabilitation
  - General facts
    - Average age of mains in Philadelphia is 68 years, normal life expectancy is 100-120 years
    - PWD's current 15 year average is 220 breaks per 1000 miles of main, lower than the national average of 270 breaks per 1000 miles
  - Specific breaks to address
    - PWD experienced three large main breaks (48") to date in FY14. The average main break rate for pipes this size is 2 per year with a range of 0 to 6 breaks per year. Large pipes are not as susceptible to stress from changes in the weather and aging as their pipe walls are thicker than the smaller mains.
      - Frankford and Torresdale
        - This 48-inch main broke on December 23, 2013, causing low water pressure in the northern river wards of the city, in addition to sections of north and lower north Philadelphia. PWD's response to the break was swift as water pressure was restored within a few hours of the break.
        - Many businesses experienced some degree of flooding and damage and the department's customer service team in addition to partner agencies such as L&I, provided claim forms and guidance to restore utilities, address damages and ensure that claims were properly filed.
        - Since January, all water main repair and replacement work have been completed. The broken main and an adjacent main that was damaged have been replaced. Verizon also has repaired their impacted ductbank. The section of the intersection that was washed out has been backfilled and full street restoration is slated for early spring.
- Cause?

- Baker Centre

- One of four transmission mains located with a Water Department right of way in the parking lot of Baker's Centre broke early Saturday morning on January 11, 2014. PWD crews responded within minutes and once the main was successfully shut down, crews began clean-up efforts and worked with the centre's management company who brought in their own clean-up crews for the businesses that were impacted by water entering their stores. PWD had claims adjusters on site that morning who should have met with every business on site.
- In mid-February, the water main was repaired and sections were replaced and pressure tested. The wash out caused by the break has been partially filled in, and the contractor on site is currently working on the sewer in the area. Once that is complete, the remainder of the backfill operation will take place, and a plan for repairing the roadway into the shopping center will be in place. This work is in its final stages, however an official date for re-opening the roadway cannot be given until all of the sewer work and backfilling has finished. There is also some electrical work that needs to take place, and that will be scheduled through the management team at Bakers Centre. An update will be available in a couple of weeks.

- Cause?

- 21st and Bainbridge

- Break
  - On July 23, 2012, at approximately 9:30 PM, PWD was alerted to a water main break. This was a transmission main, supplying water to sections of South Philadelphia and Center City. PWD responded within minutes, along with several other City Departments, including Fire, Police, PGW, PECO, Streets, L&I, as well as the Red Cross and The Office of Emergency Management. The site was secured and the main properly shut down at approximately 1:30 AM.
  - This water main break resulted in the need for several utilities to do work once PWD was finished. Verizon, PGW and PECO work was required
  - October 23, 2012 - all work completed and the intersection was reopened.
  - Customer damage claims from this project hit the city's CAP and are currently in the hands of the Court
- Current work
  - PWD Capital Project #40553 – This project has been in planning since 2007. Not a result of the break!
  - The project will replace water and/or sewer mains along 22<sup>nd</sup> St. from South to Bainbridge, and 27<sup>th</sup> St. from South to

Bainbridge. PWD is also replacing the sewer lines only on Kater Street from 21<sup>st</sup> to Grays Ferry Ave.

- This project started on January 2, 2014 and will continue for approximately 6 months. The project was scheduled to begin last spring/summer, but other utilities had work that needed to be completed before PWD could begin.
- The 2200 block of Kater St. has been completed (minus final paving and tree planting,) and work is currently taking place on 22<sup>nd</sup> St. Work should be moving to the 2100 block of Kater St. next, followed by 27<sup>th</sup> St. last.

- Private Sewers and Laterals

- Estimated about 72 miles of private sewers and 110 miles of water-only customers throughout the City
  - 1. Cost to replace this infrastructure with public would cost ~\$370 million
- Current practice addresses only those who want to move off of private systems rather than forcing those that are happy with their private system to spend money
- When contacted, we work with neighbors to dye test for accuracy and walk them through process of either fixing the private sewer, connecting to an existing adjacent public sewer, or requesting a public sewer be constructed
- We are conducting research on protection programs that could cover private sewers and laterals

- Hydrants

- Protecting public is part of our mission, work along with Fire to make sure hydrants are in good working order. Inventory is 26,080 hydrants
- Goal is to repair 500 hydrants per month (5,250 annually), many of which are damaged due to unauthorized use
- We work with Fire to conduct inspections every year. We also respond to 2 alarm and above fires so we can assist in providing water
- Each hydrant costs \$2000
  - 1. Old high pressure hydrants (?)

- Dam removal

- Pleased to work with CM O'Neill's office and Parks and Rec to support applications to grants to help pay for dam removal.
- PWD has committed to providing all engineering and design expertise to the effort

- Questions from Council:

1. Liability cap (Johnson)
  - Refer to Risk Management
2. Disclosure of private sewers (Squilla)
3. Repair America movement to invest in infrastructure (Johnson)
4. Inlet functionality (Oh)
5. Time to respond to breaks (Squilla)
  - PWD crews are available 24/7 to respond to breaks. First step is to isolate the break site and stop damage created by flowing water. Once this step is



complete they begin repair work as soon as possible, which can take up to 8 hours for normal breaks. Our work is intended to minimize the length of disruptions while maintaining safety.

6. How to predict breaks (Johnson)

○ Reference Documents

1. Private sewer fact sheet
2. Water main break fact sheet
3. City of Philadelphia Claims Form FAQ
4. Hydrant message points
5. PennyPack Dam removal letter of support



## **Information on Private Sewers**

### **December 2012**

#### **Background on Private Sewers**

- What are private sewers?
  - A private sewer is a single pipe shared by more than one home that connects into the City's public sewer system. Private sewers are not a part of the City's 3,100 mile maintained sewer system for a number of reasons, which can include all or one of the following:
    - The material, construction method and/or size of the pipe does not meet the City's standards.
    - The sewer is in a location, not publicly-owned (e.g., a rear alley) that would make it difficult for the Water Department's Sewer Maintenance staff to maintain and repair.
    - City Council did not approve an Ordinance for the Right-of-Way and construction of a public sewer at this location
- How did they get built?
  - Often these sewers were built by private developers who chose to not work with the Water Department or to build to our specifications.
- How many are in the City?
  - The Water Department does not know exactly how many private sewers exist throughout Philadelphia, as these private pipes are not part of the City's infrastructure. (From our research, we estimate that there are approximately 72 miles of private sewers throughout the City). When the Department does identify a private sewer, it is normally the result of complaints or requests for assistance by the residents who share the sewer.

#### **Estimate of PWD Cost for Public Sewer Construction**

The estimated cost to construct 182 miles of sewer - 110 miles to service "water only" customers and 72 miles to service private sewer customers - is approximately \$370 million. This is based on a cursory

evaluation and if it were to be further contemplated a more thorough evaluation should be performed. The \$370 million capital expenditure would result in a \$44 million in annual rate requirements. In rough terms this would require a rate increase of 7.25% or \$4.30 per typical customer, per monthly bill. On several recent sewer expansion projects the approximate payback period for the Department was in excess of 400 years; well beyond the expected life of the installed sewer.

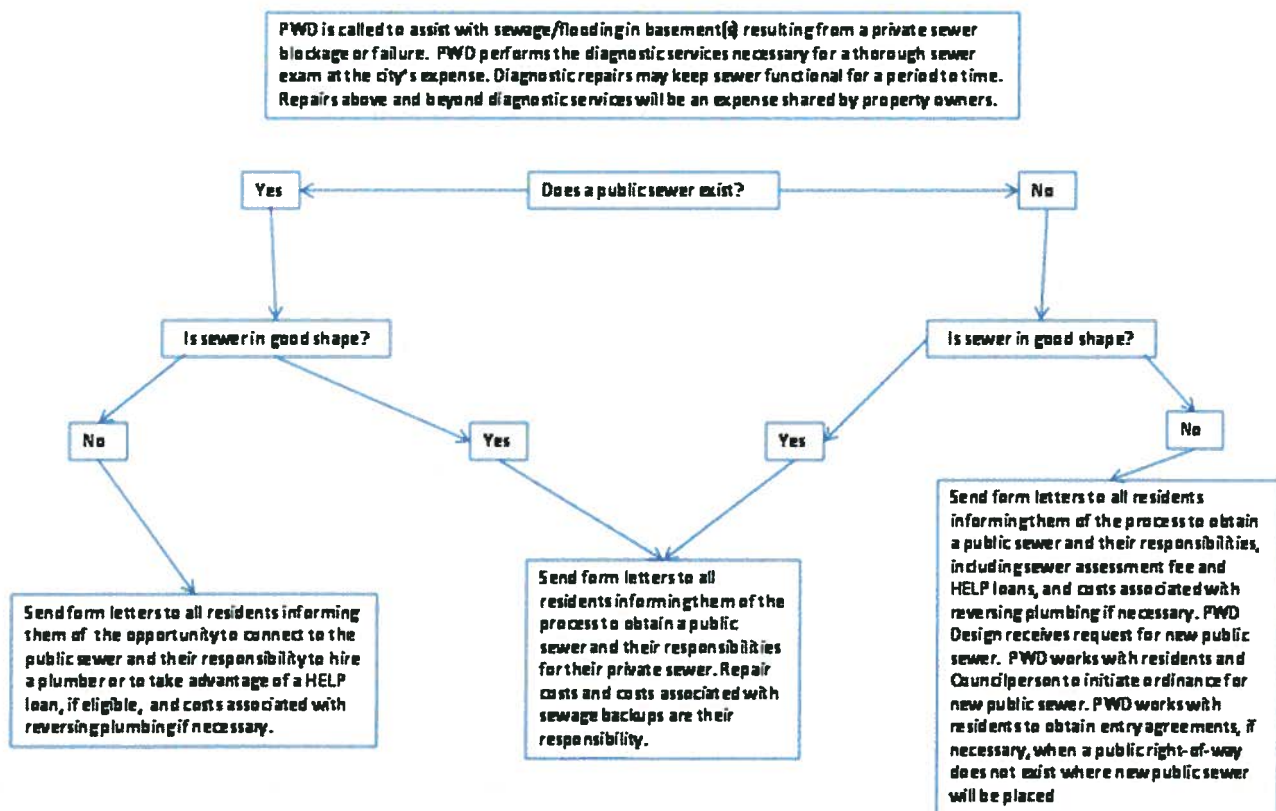
### PWD Current Practice in Addressing Private Sewer Problems

The Water Department's approach has been to be responsive to private sewer situations as they arise. This has a few benefits:

- It targets those individuals that are experiencing a problem, while not forcing those without an issue to spend significant money. The property owners with failing systems are motivated to spend the money and less likely to resent the expenditure.
- It controls the amount of money that the Water Department spends on these types of sewer extension projects because the failure rate is relatively modest.
- It keeps the sewer portion of the bill affordable.

Once a private sewer is confirmed, PWD uses the following decision tree to determine the course of action:

### Private Sewer Flow Chart



## **Process for Connecting to the Public Sewer**

The residents who share use of the private sewer need to work with their Councilperson's office to initiate an ordinance for the installation of a public sewer. Normally, a signed petition by the residents will start this process. Once the ordinance is passed, the Water Department will design a new public sewer and work with residents to satisfy the City's requirements for the installation of a public sewer. City Council approval is needed to obtain property agreements if the public sewer will be installed on private land. Once agreements have been obtained from the affected residents, the Water Department will select a contractor through the City's low-bid procurement process to install the sewer. A Water Department engineer and inspector are assigned to oversee the installation work. This entire process can take up to five to seven years.

Residents are billed a "sewer assessment" fee for the installation and connection to the new public sewer. Sewer assessment fees are charged at \$9.00 per foot of the property frontage<sup>1</sup>. For example, if your property were 15 feet wide facing the street, the sewer assessment fee would be \$135. Typically, there also may be additional costs required for each property owner associated with re-routing internal plumbing connections and installing a new sewer lateral. These added costs can be several thousand dollars. Since the installation of public sewers is associated with a significant cost to the customer, many if not most customers do not want to confront those costs until they are forced by necessity due to the failure of their private sewer. There are occasions where the Water Department can provide financial assistance, except for the costs internal rerouting of plumbing.

## **Resources Available to Residents**

- PWD Diagnostic Services
- Homeowner's Emergency Loan Program (HELP)- Available to owner-occupied residential properties who are customers in good standing, this 5 year interest-free loan can be used for water service line or sewer lateral repairs, including the cost to connect to a public sewer (from the sewer to the house).

## **To Report Private Sewer Concerns**

Residents who believe they may have a private sewer and are experiencing a problem associated with it are encouraged to report it to PWD by calling 215-685-6300.

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<sup>1</sup> Philadelphia Code §13-404(1)(a).

# BENEATH OUR FEET

## Facts about Philadelphia's Water Delivery System

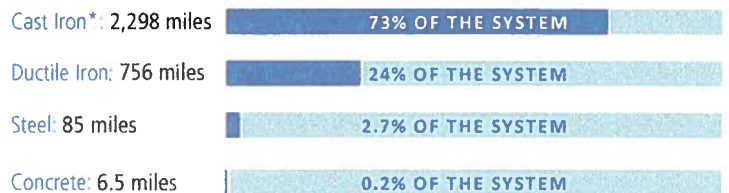
### The Basics

- On average, Philadelphia's water distribution system supplies 250 million gallons per day (MGD) to 1.6 million people.
- Philadelphia gets its water supply from the Schuylkill River and the Delaware River.
- After water is treated by one of the three water treatment plants, it travels through a series of pumping stations, reservoirs, and underground water mains before arriving at the customer's tap.
- Three different types of pipes exist belowground to transport water from treatment plants to a customer's property:
  - Transmission mains: water mains with a diameter of 16 inches or larger, used to move large amounts of water across the city between pump stations and reservoirs;
  - Distribution mains: smaller than 16 inches and used to deliver water from transmission mains to customer service connections; and
  - Service connections: individual connections owned by the property owner that are tapped into the distribution mains which bring water into a house or building
- PWD prioritizes water main replacement with balancing the goal to obtain the full, useful life of the water main. This strategic replacement plan allows us to put resources where they will have the biggest impact rather than using global replacement parameters such as age alone. It has been PWD's experience that the oldest mains are not necessarily the mains with the greatest break frequency. There are many factors that cause a main to break such as soil conditions, depth, traffic, and corrosion effects.

### What Are Customers Responsible for Underground?

The Philadelphia Water Department relies on its customers to care for and maintain the service connection and internal household plumbing (view below diagram). PWD operates and maintains all of the remaining infrastructure — the vast network of water distribution pipes, valves and hydrants throughout the city, which leads up to the point of the service connection. There are almost 3,200 miles of underground water mains in Philadelphia, comprised of approximately 400 miles of transmission main and 2,800 miles of smaller, distribution mains. PWD maintains over 83,800 valves and 27,700 hydrants. PWD utilizes a detailed Geographic Information System (GIS) to keep track of these assets. This system allows PWD to know the exact location of the underground infrastructure as well as critical attributes about each component such as size, length, material, installation year, and maintenance history.

### Summary of Pipe Materials



\*The water industry standard until the mid 1960s when ductile iron was introduced.

### PWD QUICK FACT:

The average age of Philadelphia's water mains is 68 years. The normal expected life of a water main is 100 to 120 years, but mains may last longer or fail earlier depending on local conditions.

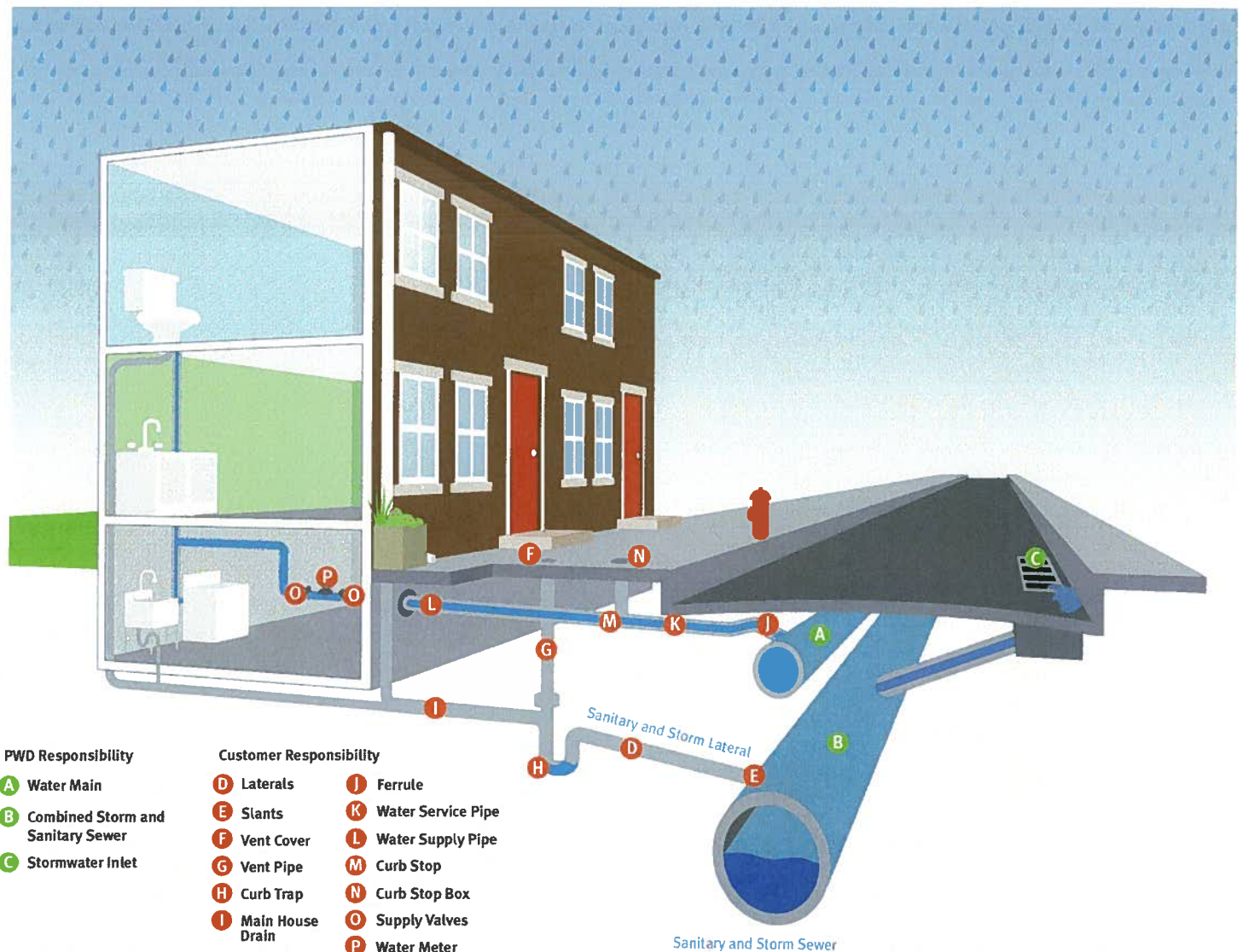
# BENEATH OUR FEET

## What are Customers Responsible for Underground?

Once drinking water leaves the PWD water main in the street, it becomes the customer's responsibility. This means that customers must repair faulty plumbing that connects our water main to their home as well as the plumbing inside the home.

Customers must also maintain household waste pipes under the sidewalk leading from the home to PWD's sewers underground. The following are components of the drainage systems that are the sole responsibility of the property owner.

### Combined Sewer System

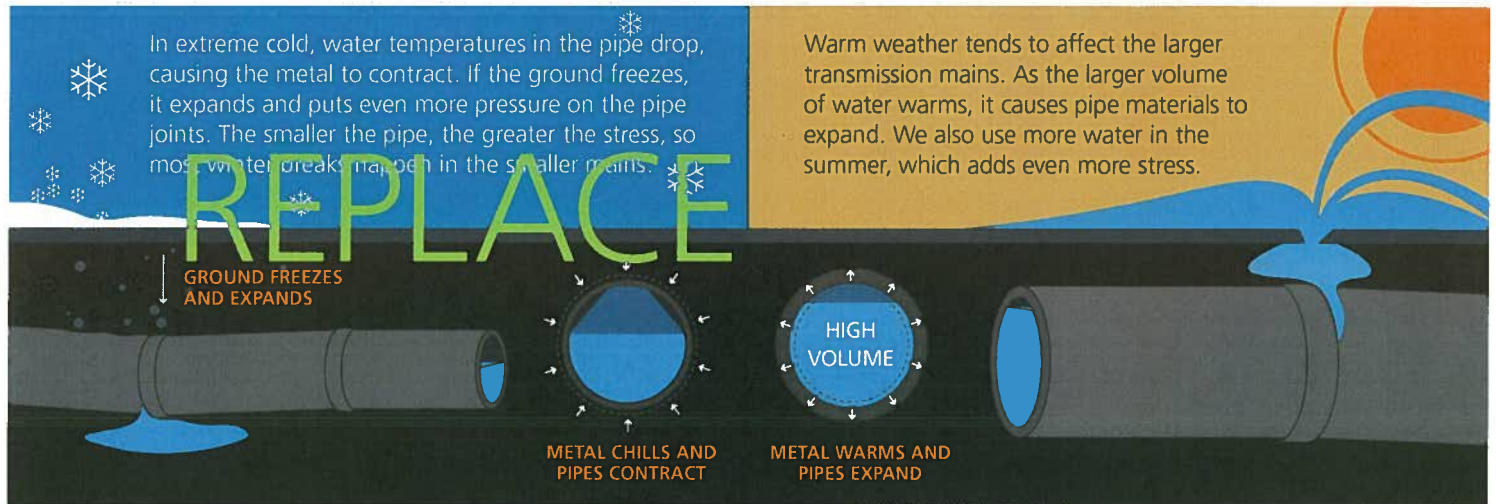


This diagram illustrates service connections in a combined sewer system. Sixty percent of the City of Philadelphia, or 64 square miles, is served by a combined sewer system.



# BENEATH OUR FEET

## Why Mains Break



Water mains fail when the stresses placed upon them are greater than the strength of the pipe. Sometimes pipes get weaker with time due to internal or external corrosion. Healthy pipes can even break! External forces on a water main may increase over time due to traffic loading, temperature changes, or other underground utility work that impacts the water main either immediately from direct contact or over time from movement or bearing on the main. The imbalance of stresses to the strength of a pipe may evidence itself in various ways such as joint leaks, pipe breaks, or service connections detached from a main. While PWD closely monitors the water inside the pipes to minimize corrosion, soil conditions outside of the pipe may weaken it over time. Soil supporting the main can also be washed away by ground water, leaving unsupported areas that are more susceptible to failure.

Of all the breaks that occur on water distribution mains in Philadelphia each year, half occur during extremely cold winter weather. This is because the water temperature in the main, as well as the ambient air temperature, drops dramatically and causes the cast iron mains (which are 73 percent the system) to contract. This increases the material's susceptibility to fracture. In addition, when the ground freezes and expands it exerts additional underground stress on the main.

Transmission mains are large, heavy walled pipes that are often located deeper in the ground and are not impacted as much by the cold weather. On average, Philadelphia experiences fewer than 5 transmission main breaks a year.

## Philadelphia's Records

Philadelphia has been monitoring main breaks for decades. The number of main breaks occurring each year can often be correlated with the severity of the winter weather; milder winters mean fewer breaks. Our lower rate is due to a water main replacement program begun thirty years ago.

# OF BREAKS	MILES INSPECTED
<b>220</b>	<b>1,000</b>
per 1,000 miles of main	
PWD's current 15 year moving average which is fewer than the national average (270 per 1,000 miles)	On average, we inspect a third of all our water mains each year for defects and stress.



# BENEATH OUR FEET

## Main Breaks

### Philadelphia's Main Break Prevention Programs

PWD has several ongoing programs to prevent breaks:

- **Main Replacement Program:** Using a scoring system to prioritize replacement and to provide a systematic approach to the management of assets, PWD is piloting a computerized system for evaluating each main for the risk and consequences of a failure. Generally, the older the main and the more frequently it has experienced breaks, the higher the priority for its replacement. Currently, PWD's goal is to replace 22 miles of high-priority water mains every year at a cost of approximately \$1.3 million per mile. The aim of this program is to maintain a high level of water service and system reliability while still achieving the full useful life of every water main.
- **Cathodic Protection Program:** Implemented in the 1950s to guard against exterior corrosion from soil conditions and stray electric current that may cause weak spots in the water mains. During main replacement or repair, inspectors determine if the conditions require cathodic protection for the new main. A simple method of protection connects the protected metal of the pipe to a more easily corroded "sacrificial metal" to act as the anode. The sacrificial metal then corrodes instead of the protected metal. The conditions of the surrounding soil help to determine the type of cathodic protection used.
- **Leak Detection:** Analysis focuses on non-visible leaks on both transmission and distribution mains. Acoustic devices are used to analyze one third of the city water mains each year. The deeper, larger transmission mains are investigated by a specialized leak detection company.
- **Corrosion Testing and Rehabilitation Program:** Preventing breaks in large, cast iron transmission mains through flow tests performed on transmission lines to identify interior corrosion. If necessary, the interior of the corroded transmission lines are cleaned and lined with cement. This cleaning and relining program can reduce leaks and extend the useful life of transmission mains.

### Customer Concerns During a Water Main Break

Water main breaks may disrupt service and cause damage to personal property as well as sidewalks and streets. Resulting traffic disruptions can impact business and residents. PWD has a program in place that assesses personal property damage due to water main breaks.

Rusty water (colored brown, orange or yellow) can occur following water main breaks as well as during the use of hydrants and valves to control the breaks; rusty water is mostly iron from the pipe. **Customers should be cautioned not to draw this water into their homes and businesses until PWD can flush the mains in the area.** Although rusty water is not harmful, it does not meet aesthetic standards. **Customers are also advised to flush their home plumbing system by running the water in a basement utility sink or the next plumbing fixture closest to the ground. If the faucet has an aerator, it should be removed and cleaned.**



# BENEATH OUR FEET

## How does PWD respond during main break events?

PWD's crews are available to respond to water main breaks 24 hours a day / 7 days a week. Their first goal is to isolate the break site, prevent soil from entering the system, and stop the damage created by the flowing water. This is a time-consuming process. Once this step is accomplished, they set about to repair the break as soon as possible, which can take up to 8 hours on average for 6-8" mains.

PWD performs the repairs to its system and contractors are sometimes used to install new mains or replace large sections of older mains. In addition to making necessary repairs, the crew will clean and disinfect the pipe. After the repair has been completed, the main will be flushed with fresh water before it is put back into service.

PWD's main break repair procedures are intended to minimize the length of disrupted service while maintaining safety for PWD's field crew, customers, and affected traffic.



## Water Main Replacement Statistics

### REPLACEMENT GOAL

**22**  
miles per year

PWD's goal is to replace 22 miles of water main per year or 0.8% of our distribution system annually or a 125 year life cycle. The national average replacement rate is 0.5% or a 200 year life cycle.

### INVESTED DOLLARS

**HALF A BILLION**

Since 1980 we've spent a half a billion dollars to replace 18% of our system.

Replacing 10% of our system will cost about half a billion dollars in today's dollars.

### DEDICATING DOLLARS

**\$204 million**

PWD already has dedicated \$204 million to improving our water conveyance system over the next 6 years (FY15-FY20).

### MILES REPLACED

**342 miles**  
of water main replaced

The Water Department has replaced 309 miles of water mains in the last 19 years. This translates into a 152 year life cycle. Our current goal is 22 miles/year or a 125 year life cycle

### Distribution & Transmission Inspection Notes

- Every three years the entire 3,200 miles of water mains are inspected with acoustic methods

## Assistance

## Customer and Business Assistance

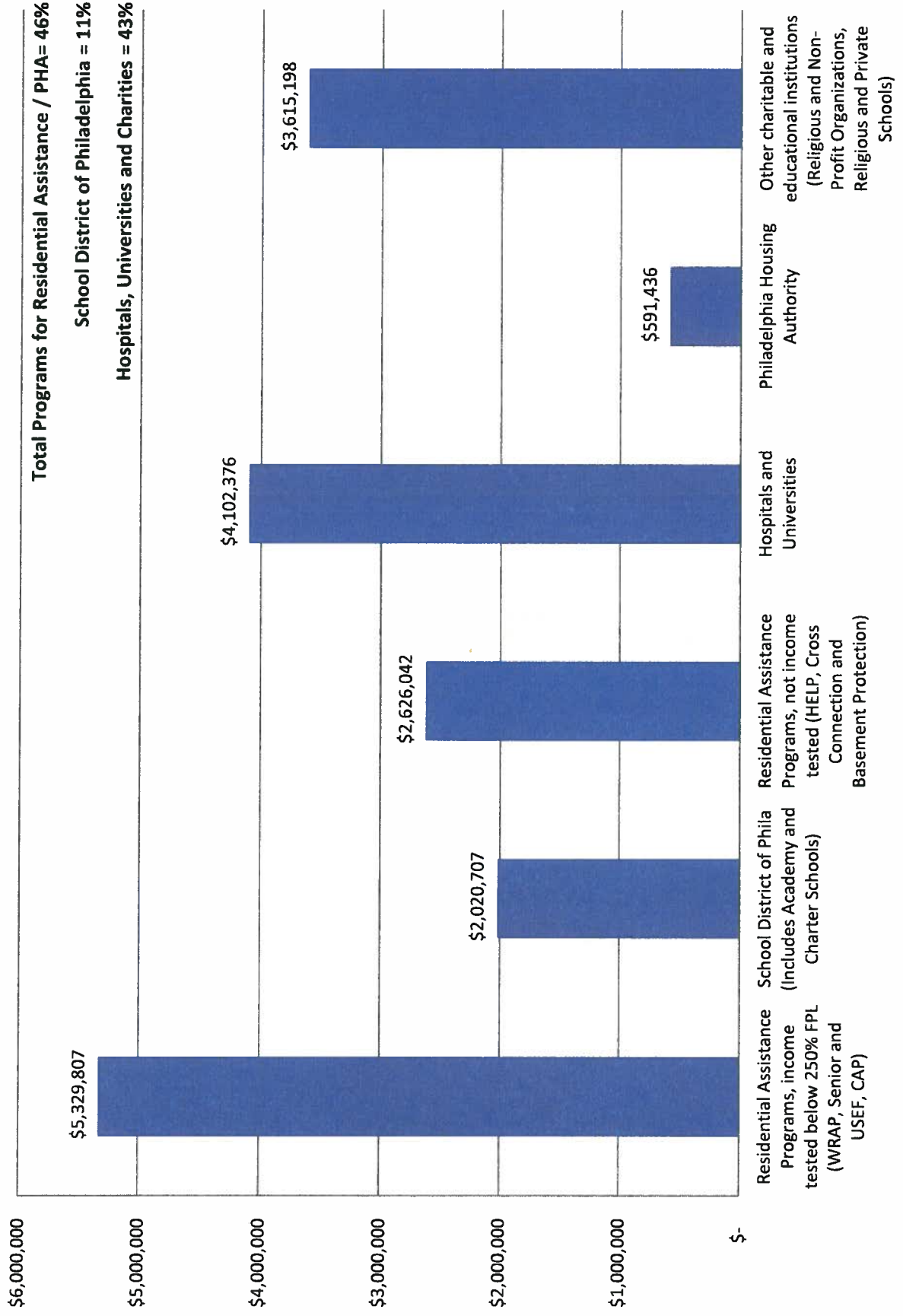
- Top Talking Points
- Relationship with WRB- PWD and WRB have been working closely over the past few years to improve customer service and communications. Managers from both departments meet on a monthly basis to identify policies and work processes that adversely impact our customers, in addition to implementing technologies to improve our customer business process. These include:
  - Customer Service- The addition of cloud technology to the PWD and WRB call centers in 2013 has resulted in significant increase in the number of calls taken each day. Both centers now have the capacity handle and track all calls, and the addition of a customer call back system ensures that every customer gets the chance to speak directly with a representative on the same day. Additionally PWD and WRB customer service are working on offering self-service options including automated account balance information and enhancements to online payment options through an updated website. The City's Revenue Department is now evaluating the use of this technology for their phone bank.
  - WRB Strategic Review of Customer Service Functions- In March 2014, PWD and WRB initiated an audit to analyze WRB operational/financial practices and procedures and to make recommendations with regard to (1) creating an overall high level of customer service; (2) assuring maximum receipt of revenues; (3) assuring timely, accurate and reliable financial and management information; and (4) evaluating whether to improve or replace the existing billing operating system. This work will continue into FY15.
  - Mediation with CLS- As a settlement term to the last rates process, PWD and WRB agreed to work with CLS to streamline its business processes and improve customer communications for WRB's assistance programs (Water Revenue Bureau Assistance Program – WRAP), payment agreements, informal appeals and tenants' rights as customers. This work is ongoing and should be completed by the fall.
- Assistance programs
  - Total of \$18,285,566 in FY13 Assistance programs, not counting CAP or SMIP
    - Residential income tested (WRAP, Senior and USEF, CAP)- \$5.329 million
    - School District of Philadelphia- \$2.02 million
    - Residential not income tested (HELP, Cross-Connection, Basement Protection- \$2.62 million
    - Hospitals and Universities- \$4.10 million
    - Philadelphia Housing Authority- \$541,436
    - Other charitable and educational institutions (religious and non-profit and private schools- \$3.61 million
- Zero-usage accounts
  - Background
    - With implementation of AMR in the late 90s, zero usage was tracked by PWD's Water1 billing system
    - Annual numbers ranged in the few thousands but were managed by PWD

- Call volumes were controlled as vacancies or suspected theft of service were investigated by PWD prior to letters being sent to customers
  - Implementation of new billing system – Basis2 – resulted in the need to recreate competing priority reports
  - Itron contract for battery change outs in FY12 resulted in new meter readings for thousands of customers
  - WRB sent over 16,000 letters to “zero read” customers between June 2012 to October 2013
- Today's numbers
  - Approximately 36,000 zero usage accounts
  - 16,465 meter appointments have been made
  - 5,209 tampered meters were identified
  - 2,166 properties were visited
  - 7,644 properties were visited and notification let a property (no one home)
  - 644 properties were confirmed vacant
  - 11,331 properties outstanding
  - Breakdown: 1/3 vacant, 1/3 theft of service, 1/3 equipment failures
  - Approx. 7,000 customers will/have received “catch up” bills (1/3 of customers with equipment failures)
  - At \$30/month (unbilled water/sewer usage) – outstanding collections = approximately \$2.5 million (estimating majority of accounts are one year in usage arrears)
- What we're doing
  - Instituted a “shared responsibility” policy in October 2012 which the customer pays 50% of their unbilled usage older than one year
  - Sent letters to over 16,000 customers informing them we need to check their meters
  - Hired additional meter inspectors that will also work on Saturdays to visit customer properties to resolve billing issues around meters
  - Commitment to have all zero usage account customers contacted in FY14
  - WRB Metering and Re-inspections crews transferred to PWD Meter Unit to increase inspections and investigation efficiencies
- Business Impacts
  - Stormwater Fees
  - Stormwater Regulations
    - Banking and Trading
    - Development Services Committee- PWD's key stakeholder group for advice and guidance on issues of concern for developers. Committee has been in place for approximately two years. The Committee is working closely with PWD to make the plan review process more business friendly by clarifying uncertainties about our requirements, reducing costly delays, and making the permitting process more predictable.
    - PWD holds walk-in hours every Tuesday from 11am-1pm at our offices. No appointment is necessary and the building community is encouraged to stop in for all types of inquiries regarding the Stormwater Plan Review program and process, or to

address any specific questions about a project or approaches. PWD is also available to schedule meetings upon request.

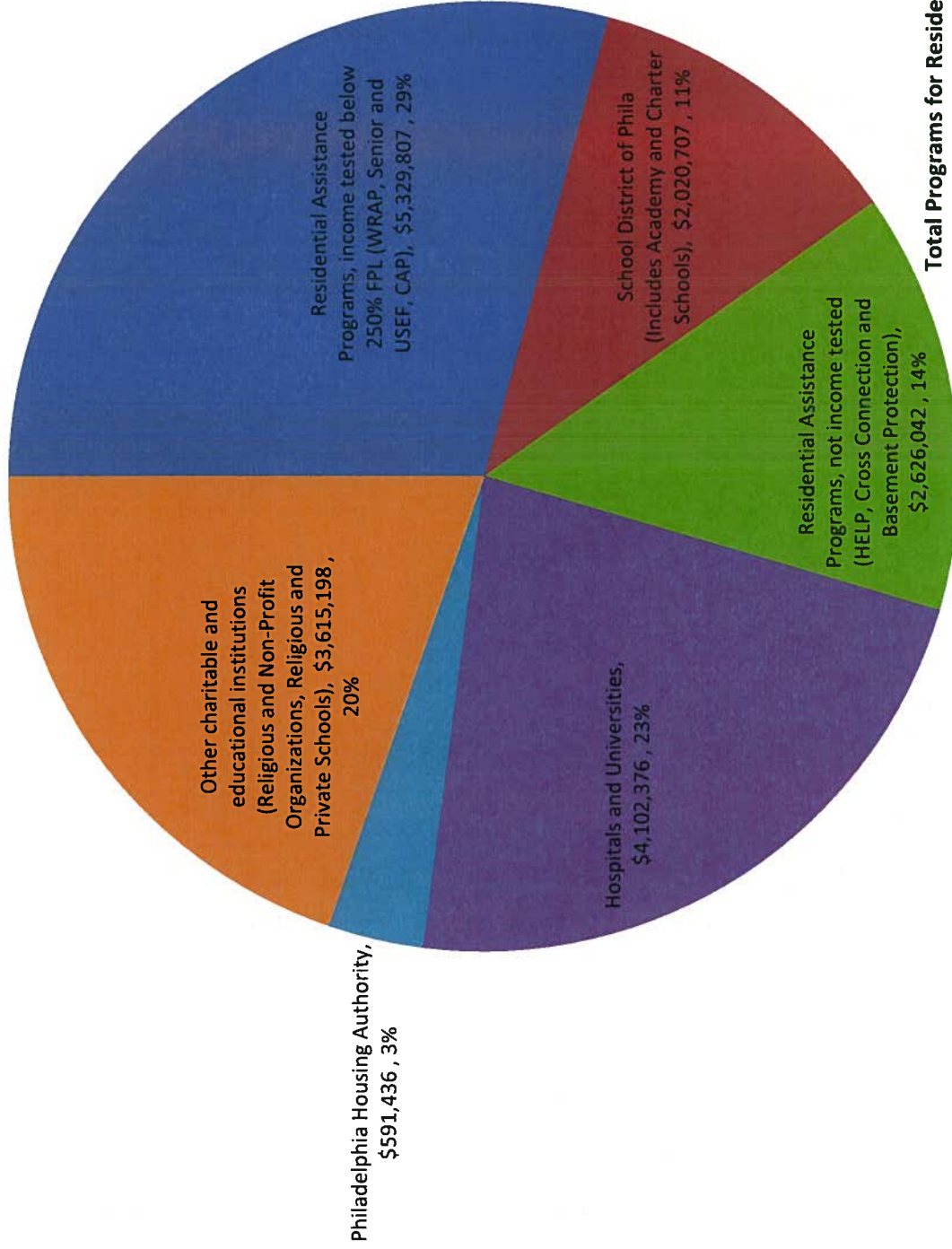
- Business assistance
  - SMIP- Competitive grant program that provides incentives to property owners to implement stormwater management practices, run through PIDC
    - 79 applications received and 25 approved over past 2 cycles, allocating close to \$10 million for 17 projects that have created 77 greened acres
    - Third round just closed, will award another \$5 million, awardees to be announced in June
    - FY15 increases the amount to \$10 million
    - Cardone Industries and Newman Paper good examples
  - CAP- Enables customers to mitigate the annual increase of their stormwater charge
    - 549 properties enrolled in CAP, 285 of which are industrial
- Disruption of business due to PWD work
  - Community Relations informs the public about construction projects and serves as point of contact for questions- may use letters or Swiftreach
  - BRT Business Response Program provides short-term assistance program in partnership with Commerce Dept. to help ensure that business in an area affected by a PWD project is, to the extent possible, not interrupted
    - Funds are designed to provide marketing and promotional support
  - Business First goal
- Public education and awareness
  - PWD has been a leader in environmental education for 20 years
  - Tools include printed materials, web and social media, news and media, community meetings and public events, tours, signage and more
  - Fairmount Waterworks Interpretive Center- premier urban watershed education destination
- Council questions
  - Utility worker scam prevention (Jones)
    - Be Sure Before You Open the Door campaign- The Police Department is the lead on this project, working with city's utilities to develop an information campaign targeted at seniors. Goal is to launch the campaign via a press conference this spring. Waiting on the PD for a schedule.
  - Specific development projects (Blackwell, Sanchez)
  - Why don't we take over WRB (Squilla, Henon)
  - Banking and trading (Henon)
  - Availability of SMIP (Sanchez, Brown)
  - Removal of high pressure hydrants (Sanchez)
- Reference Documents
  - Be Sure imposter campaign material
  - Business Response Program Application
  - Stormwater Regulations and the Development Services Committee
  - Development Community Support for Meeting the Stormwater Regulations
  - Stormwater Plan Review High Profile/Priority Project Inventory

## FY13 Assistance Program Total - \$ 18,285,566





## FY13 Assistance Program Total - \$ 18,285,566



Total Programs for Residential Assistance / PHA= 46%

School District of Philadelphia = 11%

Hospitals, Universities and Charities = 43%

**CUSTOMER\_NAME****TOTAL BILLING TOTAL CONSUMPTION**

TJU JEFF HALL	\$1,126,664.24	262,546
INST FOR CANCER RESEARCH	\$198,084.17	\$43,266.00
INST FOR CANCER RESEARCH	\$178,000.35	42,673
INST FOR CANCER RESEARCH	\$20,083.82	593
LA SALLE UNIVERSITY	\$183,740.59	\$31,546.00
LA SALLE UNIVERSITY	\$81,969.23	17,377
LA SALLE UNIVERSITY	\$42,033.97	6,757
LA SALLE UNIVERSITY	\$35,458.37	5,224
LA SALLE UNIVERSITY	\$24,279.02	2,188
WISTAR INST ANATOMY BIOLOGY	\$60,694.93	12,813
PHILA COLLEGE OF OSTEOP	\$40,104.11	11,321
NEUMANN NORTH LP	\$35,049.05	8,964
UNIVERSITY SCIENCES PHILA	\$79,508.72	\$16,216.00
PHILA COLLEGE OF PHARMACY	\$29,468.59	7,850
PHILA COLLEGE OF PHARMACY	\$27,001.35	3,586
UNIVERSITY SCIENCES PHILA	\$23,038.78	4,780
HOLY FAMILY UNIVERSITY	\$21,519.91	3,021
ST JOSEPH'S UNIVERSITY	\$20,611.75	3,086
UNIVERSITY OF PENNA	\$18,096.56	162

**DISCOUNT AMOUNT**

\$369,493.05

\$66,028.28

\$59,333.54

\$6,694.74

\$61,205.39

\$27,323.16

\$14,011.42

\$11,777.70

\$8,093.11

\$20,160.16

\$13,368.14

\$11,663.65

\$26,234.32

\$9,735.64

\$8,930.12

\$7,568.56

\$7,173.41

\$6,870.55

\$5,867.33

**GCCW**

## Green City Clean Waters

- Top Talking Points
  - Greened Acres built to date
    - 482 combined public and private GA, 136 were PWD-initiated
    - 638 projects representing 1,466 acres of private development have been approved city-wide since 2006. 84 acres were approved in the past calendar year
    - Now have enough projects ID'd to exceed the 5-year target of 744 Gas
    - About 17 acres are associated with water/sewer projects
    - Up to \$40 million of capital funds and up to \$10 million of operating funds are expected to be spent constructing Gas in FY15

	In Construction	Constructed and Verified	Total
Private Development	154	192 (NOTE: does not include the 188 "not yet verified")	346
PWD-Initiated	54	82	136

- Triple-bottom line benefits
  - Engagement of business community in implementation
- Partnerships with other city and government agencies
  - Parks
    - Green 2015- With Trust for Public Land to green and improve amenities at schools and recreation centers
    - Neighborhood Parks- with Fairmount Park Conservancy and the Pennsylvania Horticultural Society to improve neighborhood parks through the city
    - Others- Coordinating on other improvements at park and rec sites
  - Streets
    - Green Streets Design Manual issued in February and created in partnership with Streets and other city agencies. Provides design standards and template to help build high-quality green street projects
    - Private Alleyways- pilot to determine whether private alleyways could be used to manage stormwater, allowing PWD to potentially fund their repaving
  - Planning
    - Stormwater Planning Districts- comprehensive planning process to implement green infrastructure at the neighborhood scale, focused on areas where concentrated and interconnected GSI investments can be made
    - PCPC district planning- PWD reviews and provides comments on district-wide plans to identify opportunities for GSI
  - School District
    - Green 2015- see above (Example, William Dick school)
    - Philadelphia Green Schools Alliance- Emerging partnership to green schoolyards in partnership with non-profit
    - Example- Nebinger

- DPP, PRA
  - Vacant Land Initiative- DPP has offered up some vacant lots that are highly unlikely to be put on the market to be used for GSI purposes
- Costs to implement vs. gray solution
  - A fully gray solution that required the building of large tanks and tunnels could have run between \$8-10 billion dollars, all of which would be spent on one large contract for underground work
  - The green approach will cost \$2 billion, which will be spent on hundreds of above-ground projects implemented by many contractors that will start improving neighborhoods and making an impact on CSO reduction immediately
- Questions from Council
  - Why green over gray- is it more expensive (Clarke)
  - Rain barrel education and distribution (Reynolds Brown)
  - PWD regs application to PPR sites (Sanchez)

# Energy



## Energy

- Top Talking Points
  - Energy program has helped PWD become utility of the future by engaging in portfolio energy management where energy is wisely purchased, efficiently used and alternatively sources
  - PWD is working to transform our water pollution control plans into resource recovery facilities by recovering as much energy from waste as it takes to treat it.
- Total PWD FY13 Energy Consumption

Energy Type	Annual Average Usage	Million BTU	% of all Energy Consumed	Cost	Cost %
Electricity	275,000,000 kWh	936,737	67.1%	\$19,000,000	77.8%
Natural Gas	3,200,000 CCF	332,689	23.8%	\$2,500,000	10.1%
Fuel – Gasoline	475,000 Gal	59,360	4.3%	\$1,400,000	5.8%
Fuel – Diesel	484,000 Gal	67,084	4.8%	\$1,550,000	6.3%
Totals:		1,395,000		\$24,450,000	

- Buying Energy
  - Energy market prices are extremely volatile, but the Energy Program helps to shield PWD from this price volatility. Eighty percent of our electricity is purchased in advance at a fixed price, and twenty percent is bought on the spot market.
    - In 2013, the wholesale market cost for electricity was \$0.039/kWh. In January 2014, the cost sharply increased to \$0.12/kWh.
    - In 2013, the average price for natural gas totaled about \$5/Dekatherm, and it rose to \$26/Dekatherm in January 2014.
- The City's Energy Manager purchases energy for the entire city (general, aviation and water funds). The PWD load profile, of using more power during off-peak night-time hours, helps counter balance the General Fund profile of using more power during the on-peak daytime hours. This combined City profile is very stable and attractive to energy suppliers, and results in a lower electric cost for the entire city. Also, PWD's costs are reduced by an additional \$0.015/kWh, (about \$4 million) because of this profile. The following table outlines electricity consumption data for the various funds.
- Using Energy
  - PWD's management strategy takes a unique approach by requiring facility managers to take responsibility for their energy costs. This method rests energy use and fiscal accountability with one person and results in cost optimization, and efficient energy management.
  - PWD specifies energy-efficient pumps for both new construction and for replacement projects; and in general requires energy-efficient equipment throughout its system.
  - Through the City's Demand Response program, in FY 2013 PWD reduced its demand by an average of 3,347 kW over two events and received \$290,680 in performance payments.
  - Biogas produced and utilized at Northeast (NE) and Southwest (SW) Water Pollution Control Plants (WPCP) in FY 2013 saved PWD approximately \$4 million that would have otherwise been spent on natural gas. In fact, PWD's Biosolids Recycling Center (Synagro) uses digester gas to fuel its dryers, offsetting consumption by up to 40%.
- Making Energy
  - Biogas Co-generation facility at the NE WPCP captures biogas generated from the existing sewage treatment process and uses it to produce heat and electricity. The captured biogas is

consumed by the co-generation engines to meet all of the process heat needs and 85% of the electrical requirements for plant operations (enough electricity to power 4,000 Pennsylvania homes annually).

- During the recent market price upsurge related to the polar vortex, the facility displaced enough energy to save the City approximately \$621,000.
  - The solar array at the SE WPCP offset 333,500 kWh, equating to about \$23,000 in electricity bill savings in FY13
  - A Sewage Geothermal installation at the SE WPCP extracts thermal energy from the wastewater arriving at SE and uses this energy to heat the plant's compressor building and gallery space.
  - Philadelphia International Airport sends used Aircraft De-icing Fluid (ADF) to the SW WPCP. ADF feeds the SW WPCP anaerobic digesters, and increases the production of energy-rich methane gas that PWD can use to offset natural gas consumption. The tipping fees PWD received from accepting ADF in FY13 totaled \$196,000.
- Goals for FY14
  - Identify and implement initiatives to conserve energy
  - Align feasible projects and initiatives with capital planning and financing to appropriately prioritize and position for implementation
- Questions from Council
  - How are we assisting with benchmarking law compliance? (Reynolds Brown)
    1. PWD complies with the City's building benchmarking ordinance in two ways. PWD has been providing water consumption data to customers as they request it which enables them to benchmark their buildings. PWD's Energy Team also benchmarked the following facilities in EPA's Portfolio Manager tool which fell under the ordinance requirements (50,000 sf): Baxter Water Treatment Plant (WTP), Belmont WTP, Northeast Water Pollution Control Plant (WPCP), Queen Lane WTP, Sewer Maintenance HQ, Southeast WPCP, and Southwest WPCP.
    2. Three of PWD's facilities were eligible for Portfolio Manager's 1-100 score, and they received the following scores:
      - Northeast WPCP: 92
      - Southeast WPCP: 99
      - Southwest WPCP: 97
  - Green Energy Management (Johnson)
    1. PWD's Energy Program Manager participated in a meeting with Green Energy Management (GEM) on November 21, 2013, to discuss the idea of developing a sustainable aviation fuel project. GEM planned to partner with Solena Fuels which has a technology that is able to convert municipal solid waste, tires, and biosolids (carbon based waste) into aviation fuel. GEM's proposal was based on the proximity of a Water Department controlled space to the Philadelphia International Airport and the large amount of medical waste in the Philadelphia region.
    2. The proposed facility would process 1,800 tons of waste per day and would require 40 acres of land. It would produce 40 million gallons of fuel: 20 million gallons of Diesel and 20 million gallons of Naphtha. GEM wanted to collect medical waste within an 800

mile radius. The plant would receive waste 6 days per week but operate 7 days per week. The traffic load would be about 100 trucks per day (20 tons per day). Medical waste was of particular interest as it is expensive to dispose of and the fuel process would render it safe as the remaining material (slag) is vitrified. AMS permits would be required, but the emissions would be clean and the emission stacks would only be 70' tall. The system uses electricity but since it creates its own electricity (Solena uses GE turbines) net electrical use is low.

- Food waste digestion (Kenney)

1. Based on feedback from PWD's Energy Leadership Team (Members of Executive Staff), a matrix of case studies capturing information on other food waste co-digestion programs was completed to provide implementation insight for PWD. There are other municipal utilities and various private concerns that engage in the co-digestion of food waste. The yet unpublished results of the WERF net neutrality study indicate that the effective use of anaerobic digestion and the development of a co-digestion program are essential steps in become energy neutral.
2. An additional cost analysis of a standalone food waste receiving facility is being conducted. Once a better idea of the food waste receiving facility cost is established, a conversation will be initiated to consider issuing an RFP to conduct a food waste co-digestion program. The optimal use of the commensurate biogas is being evaluated separately.

# Workforce

## Workforce

- Top Talking Points
- Diversity
  - Overall Staff Workforce Diversity and Trend
  - Diversity in leadership, senior leadership, executive leadership and overall leadership and trends
    - Executive Staff

	Male	Female
<i>Total</i>	9	7
<i>% of Total</i>	56%	44%
<i>African-American</i>		
<i>Total</i>	0	1
<i>% of Total</i>	0%	6%
<i>White</i>		
<i>Total</i>	8	4
<i>% of Total</i>	50%	25%
<i>Hispanic</i>		
<i>Total</i>	0	1
<i>% of Total</i>	0%	6%
<i>Asian</i>		
<i>Total</i>	1	1
<i>% of Total</i>	6%	6%
<i>Other</i>		
<i>Total</i>	0	0
<i>% of Total</i>	%	%
<i>Bi-lingual</i>		
<i>Total</i>	0	2
<i>% of Total</i>	%	13%

- Full time Staff

	Male	Female
<i>Total</i>	1428	339
<i>% of Total</i>	81%	19%
<i>African-American</i>		
<i>Total</i>	723	185
<i>% of Total</i>	41%	10%
<i>White</i>		
<i>Total</i>	593	115
<i>% of Total</i>	34%	7%
<i>Hispanic</i>		
<i>Total</i>	30	7
<i>% of Total</i>	2%	0.4%
<i>Asian</i>		
<i>Total</i>	52	22
<i>% of Total</i>	3%	1%
<i>Other</i>		
<i>Total</i>	30	10
<i>% of Total</i>	2%	1%
<i>Bi-lingual</i>		
<i>Total</i>	#	#
<i>% of Total</i>	%	%

- Diversity of new hires
  - Operating
    - Male- 102 (82%)
    - Female- 23 (18%)
    - African American Males- 51 (41%)
    - African American Females- 9 (7%)
    - White Males- 47 (38%)
    - White Females- 12 (10%)
    - Hispanic Males- 0
    - Hispanic Females- 0
    - Asian Males- 4 (3%)
    - Asian Females- 1 (1%)
    - Other Males- 0
    - Other Females- 1 (1%)
  - Capital
    - Male- 11 (73%)
    - Female- 4 (27%)
    - African American Males- 2 (13%)
    - African American Females- 1 (7%)
    - White Males- 9 (60%)
    - White Females- 2 (13%)
    - Hispanic Males- 0
    - Hispanic Females- 0
    - Asian Males- 0
    - Asian Females- 1 (7%)
    - Other-
  - Any information on hiring of ex-offenders
- Diversity of those in DROP – Total in DROP 192
  - Male- 157 (82%)
  - Female- 35 (18%)
  - African American Males- 81 (42%)
  - African American Females- 21 (11%)
  - White Males- 66 (34%)
  - White Females- 10 (5%)
  - Hispanic Males- 1 (1%)
  - Hispanic Females- 0
  - Asian Males- 4 (2%)
  - Asian Females- 1 (1%)
  - Other Males- 5 (3%)
  - Other Females- 3 (2%)
- Job opportunities
  - PowerCorpsPHL

- Engaging at-risk youth in 6-month cycles of on-the-job training to help them prepare for careers
  - PWD engaged about 10 youth in the first round and are actively trying to hire 3 of them. Will be increasing the number of youth to potentially 15 in the 2<sup>nd</sup> round
- Co-ops
  - PWD host 45 Drexel students for 6-month periods and they represent a diverse range of races and ethnicities. Approximately half return for a second coop, and half ultimately become PWD employees
- Interns
  - This year PWD will have 8 summer interns
- Apprenticeship Program
  - PWD is restarting our High School Apprenticeship program by piloting a small program that started in January and will end in May. We partnered with the School District's Office of Career & Technical Education and Edison High School to facilitate recruitment. The program will provide on-the-job training that applies classroom-learned skills to a real-world environment and allows the student to develop professional networks and create post-graduation employment opportunities.
- PWD training programs and employee engagement
  - Developed 3 phases of leadership development training program for all supervisors/managers and trained 300 employees.
  - Re-trained all our customer information/service personnel for quality service to the public
  - Provided counseling for employees on education and career advancement within the organization.
  - Provided training opportunities for certified water/wastewater operators based on PADEP requirements
  - Support employee's knowledge improvement and professional development through webinars conferences and tuition assistant program
  - Water Treatment Plant Operator Career Advancement program graduated 23 PWD employees that will create additional opportunities and benefits in their career path
- Vacancies
  - PWD is budgeted for approximately 1900 positions comprising 277 job titles—the most of any city department.
  - **How many jobs were filled in the last year?**
  - On any given date there are approximately 150 -200 vacancies, or about a 10% rate. This is a reduction from the approximately 270 vacancies that existed during last year's budget cycle.
  - These vacancies, in part, are the result of the movement (promotional and lateral) of staff both internally and to other Departments that is the natural result of the Civil Service system.
  - The remaining balance of vacancies is the result of employee attrition and retirement and in some instances an impediment to the efficient management and operation of the system.
  - During the past year numerous initiatives have been undertaken to further reduce the overall vacancy level. These include the addition of new PWD Personnel staff, better I.T. data



management capabilities and improved civil service test scheduling to ensure the availability of qualified candidates for all open positions.

- It is expected that during the next year the overall vacancy rate will be further reduced to around 7% which is sustainable budgetarily and operationally.
- Our staff continues to grow and fill vacant positions to respond to needs related to planning implementation and maintenance of our Consent Order, Storm Flood Relief project planning, expediting of development plan reviews, succession and legal obligations. The augmentation of business support, Office of Economic Opportunity (OEO) coordination and participation data tracking, workforce diversity and training coordination, and improved internal control function have also contributed to these increases.
- Succession Planning
  - 192 employees in DROP
  - We have begun to evaluate our risk in terms of DROP eligible employees and have hired a consultant to assist with succession planning
  - Knowledge retention effort to develop and institutionalize documentation and retention of policies, practices, standard operating procedures and other operational and management information- facilitated by Sharepoint
- Worker's Comp
  - FY13?
  - Previous 12 months saw 249 new claims and dept incur costs of \$995,134
- Hiring of ex-offenders
  - We have had good success in hiring ex-offenders and creating meaningful job opportunities but we always take the public's safety into consideration and make smart decisions about the types of jobs that are appropriate for employees with specific criminal backgrounds
- Overtime
  - PWD works to stay in budget as much as possible, including regulating overtime through our Overtime policy in accordance with the Managing Director's Directive
  - PWD laborers assist the Streets Dep. With snow removal, and so there was a good deal of overtime this year. Streets will underfund PWD for those overtime costs, but until then, the expenses show up in PWD's budget
- Questions from Council
  - Language diversity of front-line staff for communicating with customers (Sanchez)
    - PWD does not track language proficiency, but we do use Language Line for customer service inquiries and we use MDO's translation services for written communications
    - Thanks to CW Sanchez for co-signing letters that we've sent to affected constituents in her district
    - We would be willing to start tracking language diversity of new hires. Would be hard to gather for existing staff since over half of our staff do not have email on the job
  - Disparity in female compensation (Brown)
- Reference Documents
  - Job Opportunities for Young People
  - Overtime Policy
  - Overtime Report



## **Human Resources Policy and Procedure OVERTIME**

### **POLICY:**

This policy is issued in accordance with the Managing Director's Directive (02-08) on Overtime, which mandates monitoring and containment of overtime costs. Pursuant to the Managing Director's Directive, discretionary overtime must be assigned and authorized by management. All overtime work must be approved in advance, except in the case of emergency or in the interests of public health and safety.

Non-exempt employees under the Fair Labor Standards Act are eligible for overtime for all hours worked in excess of 40 in any work week. The Civil Service Regulations allow for work to be compensated after eight (8) hours of work. (For overtime purposes, paid leave time is not counted against the daily eight hours' or weekly forty hours' requirement for overtime compensation. No non-worked lunch, sick, holiday or vacation time is included in calculating overtime.) Overtime is voluntary except in instances where public health and safety is a factor. All overtime must be pre-approved by the supervisor and manager, except in emergency situations.

Only work that cannot be accomplished during regularly-scheduled work hours will be approved for overtime. Overtime requests by employees below the unit manager level must be approved in advance by the employee's immediate supervisor, and counter-approved by the appropriate manager. If an employee requests leave time for several hours, but the workload demands that eight hours' work be accomplished, supervisors may approve, in that instance, a flexible schedule for the day to accommodate the requested time off without incurring overtime liability. Overtime is not permitted on the same day that an employee uses paid leave time, unless there are extenuating circumstances and the request has been approved by a Deputy Commissioner.

Overtime is paid at the rate of one-and-one-half times (1-½x) the employee's regular hourly rate of pay, after eight hours of regular work hours or the sixth day worked for non-shift workers, or the first scheduled day off for shift workers. Overtime is paid at double time for the seventh day worked for non-shift workers or the second scheduled day off for shift workers. For employees whose pay range is between EP 14 and EP 21, however, the overtime rate is capped at the highest step of pay range EP 14. Employees whose annual pay rate is more than the maximum rate of EP 21 are not eligible for cash overtime.

In accordance with Civil Service Regulations and collective bargaining agreements, overtime compensation will be offered from established lists based on job classification and City longevity (seniority). In accordance with collective bargaining agreements, mandatory overtime is to be assigned to the least senior person in the job classification needed by the unit to work overtime. Voluntary overtime is to be offered to the most senior person in the job classification in the unit requiring overtime. The next instance of overtime in the same unit is to be offered to the next most senior employee, and so on down the list.

### **Procedure:**

#### **Supervisor**

## Philadelphia Water Department

PG 4

## OVERTIME REPORT

Pay Ending 06/30/13

365 DAYS PASSED 14 IN THIS PAY

UNIT TITLE	***** YEAR TO DATE *****				***** CURRENT PERIOD *****			
	BUDGET	TARGET	ACTUAL	DIFF	TARGET	ACTUAL	DIFF	# OF EMP
PERSONNEL	25,000.	25,000.	19,563.	5,437.	5,673	236.	5,437.	13
SAFETY	5,000.	5,000.	19.	4,981.	4,980	0.	4,980.	4
TRAINING	4,000.	4,000.	13,057.	-9,057.	-9,057	0.	-9,057.	4
*HUMAN RESOURCES*	34,000.	34,000.	32,640.	1,360.	1,596	236.	1,360.	21
**HUMAN RESOURCES DIVISION**	34,000.	34,000.	32,640.	1,360.	1,596	236.	1,360.	21
PUBLIC REL./EDUC/GOVT.	92,000.	92,000.	103,040.	-11,040.	-7,825	3,215.	-11,040.	21
CUSTOMER INFORMATION	43,000.	43,000.	46,516.	-3,516.	-2,191	1,325.	-3,516.	18
*PUBLIC AFFAIRS*	135,000.	135,000.	149,557.	-14,557.	-10,016	4,540.	-14,556.	39
**PUBLIC AFFAIRS**	135,000.	135,000.	149,557.	-14,557.	-10,016	4,540.	-14,556.	39
FINANCE & RATES	4,000.	4,000.	3,243.	757.	756	0.	756.	6
ACCOUNTING	90,000.	90,000.	38,043.	51,957.	54,748	2,791.	51,957.	23
GENERAL SUPPORT & EXEC.	3,000.	3,000.	19,779.	-16,779.	-16,779	0.	-16,779.	15
ADMINISTRATIVE SERVICES	18,600.	18,600.	5,813.	12,787.	12,873	87.	12,786.	6
FACILITIES MANAGEMENT	317,700.	317,700.	347,051.	-29,351.	-12,070	17,281.	-29,351.	76
MACHINE SHOP	10,000.	10,000.	1,324.	8,676.	8,675	0.	8,675.	8
SECURITY	339,700.	339,700.	269,169.	70,531.	82,967	12,436.	70,531.	18
*FINANCE & ADMIN DIVISION*	783,000.	783,000.	684,425.	98,575.	131,171	32,596.	98,575.	152
**FINANCE & ADMIN DIVISION**	783,000.	783,000.	684,425.	98,575.	131,171	32,596.	98,575.	152
SYSTEMS MGT SUPPORT	0.	0.	0.	0.	0	0.	0.	0
USER SUPPORT	0.	0.	0.	0.	0	0.	0.	0
BILLING SUPPORT	0.	0.	0.	0.	0	0.	0.	0
ADMIN.SUPPORT SERV.	0.	0.	0.	0.	0	0.	0.	0
*INFO SCIENCE & TECH*	0.	0.	0.	0.	0	0.	0.	0
**I.S.&T. DIVISION**	0.	0.	0.	0.	0	0.	0.	0
DESIGN	11,000.	11,000.	0.	11,000.	11,000	0.	11,000.	7
ONE CALL UNIT	20,000.	20,000.	667.	19,333.	19,332	0.	19,332.	12
*ENGINEERING*	31,000.	31,000.	667.	30,333.	30,332	0.	30,332.	19
**PLANNING AND ENGINEERING**	31,000.	31,000.	667.	30,333.	30,332	0.	30,332.	19

Philadelphia Water Department  
OVERTIME REPORT  
Pay Ending 06/30/13

PG 5

365 DAYS PASSED 14 IN THIS PAY

\*\*\*\*\* YEAR TO DATE \*\*\*\*\*

\*\*\*\*\* CURRENT PERIOD \*\*\*\*\*

UNIT TITLE	BUDGET	TARGET	ACTUAL	DIFF	TARGET	ACTUAL	DIFF	# OF EMP
WW LABS / CENTRAL LAB.	236,000.	236,000.	219,884.	16,116.	21,757	5,642.	16,115.	101
PLAN & RESEARCH	12,000.	12,000.	10.	11,990.	11,989	0.	11,989.	29
OFFICE OF WATERSHEDS	9,000.	9,000.	3,114.	5,886.	6,227	342.	5,885.	45
*PLANNING & ENV SERVICE	257,000.	257,000.	223,009.	33,991.	39,975	5,985.	33,990.	175
**PLANNING & ENV DIVISION	257,000.	257,000.	223,009.	33,991.	39,975	5,985.	33,990.	175
NORTHEAST WPCP	905,000.	905,000.	817,785.	87,215.	118,432	31,218.	87,214.	112
SOUTHWEST WPCP	885,000.	885,000.	876,070.	8,930.	46,582	37,653.	8,929.	112
SOUTHEAST WPCP	580,900.	580,900.	480,722.	100,178.	118,816	18,639.	100,177.	60
*WASTEWATER TREATMENT*	2,370,900.	2,370,900.	2,174,579.	196,321.	283,831	87,510.	196,321.	284
BAXTER PLANT	421,000.	421,000.	435,062.	-14,062.	-2,288	11,773.	-14,061.	53
QUEEN LAKE PLANT	436,000.	436,000.	425,484.	10,516.	21,587	11,071.	10,516.	49
BELMONT PLANT	437,500.	437,500.	374,153.	63,347.	78,158	14,812.	63,346.	48
*WATER TREATMENT	1,294,500.	1,294,500.	1,234,699.	59,801.	97,457	37,657.	59,800.	150
INDUSTRIAL WASTE	143,000.	143,000.	124,755.	18,245.	19,819	1,574.	18,245.	16
TREATMENT HEADQUARTERS	5,000.	5,000.	3,455.	1,545.	1,544	0.	1,544.	7
*TREATMENT SUPPORT*	148,000.	148,000.	128,210.	19,790.	21,364	1,574.	19,790.	23
CONVEYANCE HEADQUARTERS	8,000.	8,000.	1,939.	6,061.	6,060	0.	6,060.	4
LOAD CONTROL	143,000.	143,000.	148,399.	-5,399.	-3,143	2,256.	-5,399.	24
DISTRIBUTION	3,515,050.	3,515,050.	3,404,430.	110,620.	162,612	51,992.	110,620.	251
PUMPING	330,000.	330,000.	319,197.	10,803.	21,585	10,782.	10,803.	49
*WATER CONVEYANCE*	3,996,050.	3,996,050.	3,873,967.	122,083.	187,114	65,031.	122,083.	328
SEWER MAINTENANCE	1,564,550.	1,564,550.	1,361,853.	202,697.	278,831	76,135.	202,696.	182
INLET CLEANING	695,000.	695,000.	634,222.	60,778.	88,946	28,169.	60,777.	91
FLOW CONTROL	463,000.	463,000.	385,014.	77,986.	98,608	20,622.	77,986.	66
COLL. SYSTEM SUPP.	10,000.	10,000.	3,598.	6,402.	6,765	363.	6,402.	7
*COLLECTOR SYSTEM*	2,732,550.	2,732,550.	2,384,689.	347,861.	473,152	125,291.	347,861.	346
CUSTOMER SERVICE	264,500.	264,500.	199,761.	64,739.	69,882	5,143.	64,739.	24
METER SHOP	323,000.	323,000.	293,953.	29,047.	38,638	9,592.	29,046.	39
DELINQUENT & RESTORATION SVC	753,000.	753,000.	685,992.	67,008.	97,515	30,507.	67,008.	45
MATERIALS MANAGEMENT	105,000.	105,000.	110,349.	-5,349.	-3,616	1,733.	-5,349.	39
OPERATIONS ADMINISTRATION	25,000.	25,000.	26,011.	-1,011.	-1,011	0.	-1,011.	12
PLUMBING REPAIRS PROGRAM	60,000.	60,000.	49,677.	10,323.	11,389	1,066.	10,323.	8
*OPERATIONS SUPPORT*	1,530,500.	1,530,500.	1,365,745.	164,755.	212,798	48,044.	164,754.	167
**OPERATIONS DIVISION**	12,072,500.	12,072,500.	11,161,892.	910,608.	1,275,718	365,110.	910,608.	1298
***WATER FUND***	13,312,500.	13,312,500.	12,252,191.	1,060,309.	1,468,778	408,469.	1,060,309.	1704

Philadelphia Water Department  
OVERTIME REPORT  
Pay Ending 06/30/13

PQ 5

365 DAYS PASSED 14 IN THIS PAY

UNIT TITLE	***** YEAR TO DATE *****				***** CURRENT PERIOD *****			
	BUDGET	TARGET	ACTUAL	DIFF	TARGET	ACTUAL	DIFF	# OF EMP
ACCOUNTING (R&R)	0.	0.	524.	-524.	-240	283.	-523.	6
MATERIAL TESTING (R&R)	100,000.	100,000.	11,478.	88,522.	88,655	134.	88,521.	8
*R & R TOTAL*	100,000.	100,000.	12,002.	87,998.	88,415	418.	87,997.	14
DESIGN	25,000.	25,000.	20,797.	4,203.	4,509	306.	4,203.	54
CONSTRUCTION	350,000.	350,000.	259,214.	90,786.	97,089	6,304.	90,785.	99
PROJECTS CONTROL	18,000.	18,000.	83.	17,917.	17,916	0.	17,916.	8
SURVEY	100,000.	100,000.	83,546.	16,454.	18,614	2,160.	16,454.	43
PLANNING & RESEARCH (R&R)	10,000.	10,000.	0.	10,000.	10,000	0.	10,000.	5
WATERSHEDS	0.	0.	0.	0.	0	0.	0.	0
*ENGINEERING ADMINISTRATION*	503,000.	503,000.	363,641.	139,359.	148,130	8,771.	139,359.	209
**CAPITAL PROJECTS**	603,000.	603,000.	375,644.	227,356.	236,545	9,189.	227,356.	223
*** CAPITAL FUND ***	603,000.	603,000.	375,644.	227,356.	236,545	9,189.	227,356.	223
****DEPARTMENT TOTAL****	13,915,500.	13,915,500.	12,627,836.	1,287,664.	1,705,323	417,659.	1,287,664.	1927

Philadelphia Water Department  
OVERTIME REPORT  
Pay Ending 12/29/13

PG 4

182 DAYS PASSED 14 IN THIS PAY

	***** YEAR TO DATE *****				***** CURRENT PERIOD *****			
UNIT TITLE	BUDGET	TARGET	ACTUAL	DIFF	TARGET	ACTUAL	DIFF	# OF EMP
PERSONNEL	25,000.	12,465.	4,412.	8,053.	1,466	50.	1,416.	14
SAFETY	5,000.	2,493.	326.	2,167.	332	0.	332.	4
TRAINING	4,000.	1,994.	2,794.	-800.	102	232.	-130.	3
*HUMAN RESOURCES*	34,000.	16,953.	7,533.	9,420.	1,900	283.	1,617.	21
**HUMAN RESOURCES DIVISION**	34,000.	16,953.	7,533.	9,420.	1,900	283.	1,617.	21
PUBLIC REL./EDUC/GOVT.	102,000.	50,860.	40,526.	10,334.	4,590	3,124.	1,466.	21
CUSTOMER INFORMATION	43,000.	21,441.	9,180.	12,261.	2,455	735.	1,720.	17
*PUBLIC AFFAIRS*	145,000.	72,301.	49,706.	22,595.	7,046	3,859.	3,187.	38
**PUBLIC AFFAIRS**	145,000.	72,301.	49,706.	22,595.	7,046	3,859.	3,187.	38
FINANCE & RATES	4,000.	1,994.	0.	1,994.	284	0.	284.	8
ACCOUNTING	90,000.	44,876.	25,746.	19,130.	4,653	1,233.	3,420.	22
GENERAL SUPPORT & EXEC.	10,000.	4,986.	3,509.	1,477.	461	0.	461.	18
ADMINISTRATIVE SERVICES	5,000.	2,493.	2,290.	203.	195	37.	158.	7
FACILITIES MANAGEMENT	317,700.	158,414.	179,161.	-20,747.	10,579	10,327.	252.	74
MACHINE SHOP	10,000.	4,986.	900.	4,086.	680	478.	202.	7
SECURITY	339,700.	169,384.	161,755.	7,629.	13,428	11,007.	2,421.	19
*FINANCE & ADMIN DIVISION*	776,400.	387,136.	373,363.	13,773.	30,282	23,084.	7,198.	155
**FINANCE & ADMIN DIVISION**	776,400.	387,136.	373,363.	13,773.	30,282	23,084.	7,198.	155
SYSTEMS MGT SUPPORT	0.	0.	0.	0.	0	0.	0.	0
USER SUPPORT	0.	0.	0.	0.	0	0.	0.	0
BILLING SUPPORT	0.	0.	0.	0.	0	0.	0.	0
ADMIN.SUPPORT SERV.	0.	0.	0.	0.	0	0.	0.	0
*INFO SCIENCE & TECH*	0.	0.	0.	0.	0	0.	0.	0
**I.S.&T. DIVISION**	0.	0.	0.	0.	0	0.	0.	0
DESIGN	3,000.	1,495.	0.	1,495.	213	0.	213.	7
ONE CALL UNIT	10,000.	4,986.	10.	4,976.	709	0.	709.	11
*ENGINEERING*	13,000.	6,482.	10.	6,472.	923	0.	923.	18
**PLANNING AND ENGINEERING**	13,000.	6,482.	10.	6,472.	923	0.	923.	18

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PG 5

182 DAYS PASSED 14 IN THIS PAY

	***** YEAR TO DATE *****				***** CURRENT PERIOD *****			
UNIT TITLE	BUDGET	TARGET	ACTUAL	DIFF	TARGET	ACTUAL	DIFF	# OF EMP
WW LABS / CENTRAL LAB.	266,000.	132,635.	104,738.	27,897.	12,028	7,999.	4,029.	100
PLAN & RESEARCH	1,000.	498.	472.	26.	37	0.	37.	31
OFFICE OF WATERSHEDS	7,000.	3,490.	1,511.	1,959.	389	9.	380.	42
*PLANNING & ENV SERVICE	274,000.	136,624.	106,742.	29,882.	12,455	8,009.	4,446.	173
**PLANNING & ENV DIVISION	274,000.	136,624.	106,742.	29,882.	12,455	8,009.	4,446.	173
NORTHEAST WPCP	905,000.	451,260.	396,866.	54,394.	38,084	27,773.	10,311.	111
SOUTHWEST WPCP	885,000.	441,287.	426,800.	14,487.	34,278	24,148.	10,130.	117
SOUTHEAST WPCP	580,900.	289,654.	273,588.	16,066.	22,964	15,826.	7,138.	60
*WASTEWATER TREATMENT*	2,370,900.	1,182,202.	1,097,254.	84,948.	95,327	67,747.	27,580.	288
BAXTER PLANT	421,000.	209,923.	230,625.	-20,702.	14,448	12,941.	1,507.	51
QUEEN LANE PLANT	437,000.	217,901.	205,764.	12,137.	17,382	13,356.	4,026.	48
BELMONT PLANT	437,500.	218,150.	206,108.	12,042.	17,377	13,141.	4,236.	50
*WATER TREATMENT	1,295,500.	645,975.	642,498.	3,477.	49,209	39,439.	9,770.	149
INDUSTRIAL WASTE	143,000.	71,304.	43,450.	27,854.	7,226	2,131.	5,095.	17
TREATMENT HEADQUARTERS	5,000.	2,493.	346.	2,147.	336	86.	250.	8
*TREATMENT SUPPORT*	148,000.	73,797.	43,796.	30,001.	7,562	2,218.	5,344.	25
CONVEYANCE HEADQUARTERS	3,000.	1,495.	2,801.	-1,306.	31	244.	-213.	4
LOAD CONTROL	143,000.	71,304.	70,600.	704.	5,390	3,448.	1,942.	24
DISTRIBUTION	3,515,050.	1,752,709.	1,419,463.	333,246.	161,937	183,103.	-21,166.	248
PUMPING	330,000.	164,547.	154,012.	10,535.	13,301	11,188.	2,113.	44
*WATER CONVEYANCE*	3,991,050.	1,990,057.	1,646,877.	343,180.	180,660	197,985.	-17,325.	320
SEWER MAINTENANCE	1,564,550.	780,131.	650,446.	129,685.	68,100	44,162.	23,938.	183
INLET CLEANING	695,000.	346,547.	235,763.	110,784.	33,982	18,941.	15,041.	93
FLOW CONTROL	463,000.	230,865.	209,350.	21,515.	19,304	17,993.	1,311.	67
COLL. SYSTEM SUPP.	20,000.	9,972.	5,967.	4,005.	1,016	265.	751.	9
*COLLECTOR SYSTEM*	2,742,550.	1,367,518.	1,101,527.	265,991.	122,402	81,362.	41,040.	352
CUSTOMER SERVICE	272,000.	135,627.	79,722.	55,905.	14,159	6,970.	7,189.	26
METER SHOP	321,000.	160,060.	151,207.	8,853.	12,650	8,214.	4,436.	43
DELINQUENT & RESTORATION SVC	753,000.	375,468.	456,311.	-80,843.	22,914	25,750.	-2,836.	45
MATERIALS MANAGEMENT	106,000.	52,854.	54,176.	-1,322.	4,161	6,737.	-2,576.	37
OPERATIONS ADMINISTRATION	25,000.	12,465.	2,451.	10,014.	1,604	26.	1,578.	11
PLUMBING REPAIRS PROGRAM	80,000.	39,890.	32,935.	6,955.	3,545	2,831.	714.	10
*OPERATIONS SUPPORT*	1,557,000.	776,367.	776,804.	-437.	59,036	50,531.	8,505.	172
**OPERATIONS DIVISION**	12,105,000.	6,035,917.	5,308,759.	727,158.	514,199	439,286.	74,913.	1306
***WATER FUND***	13,347,400.	6,655,415.	5,846,117.	809,298.	566,808	474,522.	92,286.	1711



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PG 6

182 DAYS PASSED 14 IN THIS PAY

	***** YEAR TO DATE *****				***** CURRENT PERIOD *****			
UNIT TITLE	BUDGET	TARGET	ACTUAL	DIFF	TARGET	ACTUAL	DIFF	# OF EMP
ACCOUNTING (R&R)	0.	0.	0.	0.	0	0.	0.	3
MATERIAL TESTING (R&R)	100,000.	49,863.	4,896.	44,967.	6,758	0.	6,758.	9
*R & R TOTAL*	100,000.	49,863.	4,896.	44,967.	6,758	0.	6,758.	12
DESIGN	25,000.	12,465.	788.	11,677.	1,733	178.	1,555.	53
CONSTRUCTION	350,000.	174,520.	145,467.	29,053.	14,970	6,126.	8,844.	98
PROJECTS CONTROL	15,000.	7,479.	130.	7,349.	1,056	0.	1,056.	6
SURVEY	100,000.	49,863.	21,822.	28,041.	5,626	989.	4,637.	39
PLANNING & RESEARCH (R&R)	10,000.	4,986.	0.	4,986.	710	0.	710.	6
WATERSHEDS	0.	0.	0.	0.	0	0.	0.	0
*ENGINEERING ADMINISTRATION*	500,000.	249,315.	168,209.	81,106.	24,097	7,294.	16,803.	202
**CAPITAL PROJECTS**	600,000.	299,178.	173,106.	126,072.	30,856	7,294.	23,562.	214
*** CAPITAL FUND ***	600,000.	299,178.	173,106.	126,072.	30,856	7,294.	23,562.	214
****DEPARTMENT TOTAL****	13,947,400.	6,954,593.	6,019,223.	935,370.	597,664	481,816.	115,848.	1925

# Capital Projects

## Capital Projects

- Top Talking Points
  - Motto: Right Project at the Right Time
  - \$30 billion replacement value for whole system
  - Ramping up infrastructure reinvestment. The FY 2015 proposed capital budget is \$260 million, and the proposed 6-year program is \$1.76 billion. The \$260M is nearly double the capital budget of 5 years ago. The FY 2015 budget breaks down as follows:
    - \$125M Improvements to Facilities
    - \$36M Improvements to the Water Conveyance System
    - \$30M Improvements to Collector Systems
    - \$40M Combined Sewer Overflow Program
    - \$29M Engineering & Material Support
  - Master capital planning process has begun for water and wastewater systems for beyond 2040
  - Significantly improving infrastructure would require additional capital and associated rate increases
- System facts
  - 3174 miles of water conveyance system (2771 miles of distribution system & 403 miles of transmission system)
  - 73 years old – average age of system
  - 693 miles or 22% of water system over 100 years old
  - 243 miles or 8% of water system over 120 years old
  - 3719 miles of sewers
  - Sewer reconstruction or rehabilitation of 8 miles/ year over the last 19 years
  - PWD spent \$2.2B over the last 20 years on infrastructure an average \$109M/Year
  - Currently PWD is spending \$13M/month or \$600K a day on its capital re-investment
- Projects in Construction
  - Venice Island - \$47 million overflow basin project placed into service, significantly reducing the amount of wet weather overflows to the Schuylkill
  - Venice Island – Lock Street Bridge was issued a Notice to Proceed and construction should be starting soon. (\$2.5M)
  - One phase of the Northern Liberties Flood Relief Project was issued a Notice to Proceed in February 2014. (\$20M)
  - Rehabilitation of the Belmont Raw Water Basin in construction. (\$19.5M)
  - NEWPCP Bypass Conduit issued a Notice to Proceed in December 2013. (\$16M)
- Upcoming projects Existing/upcoming projects of interest
  - New Gravity Thickeners at NEWPCP scheduled to be bid in FY 2014. (\$36M)
  - Construction of Baxter Clear Water Basin scheduled to be bid in FY 2015. (\$50M)
  - East Park Reservoir – (2) 30 MG tanks scheduled to be bid in FY 2015. (\$70M)
- Coordination with other departments
- Cost benefit analysis
  - All projects are carefully planned and vetted to examine alternatives to provide the least cost, best performance, greatest benefit and least impacts

- Projects are evaluated for cost benefit using the appropriate metrics of Net Present Value, Life Cycle Costs, Return on Investment, and a Triple bottom line comparison of financial, social, and environmental costs.
- Reference documents
  - Capital Projects Investment one-pagers
  - East Park fact sheet

# Water Quality

## Drinking Water Quality/Contaminants

- Top Talking Points
- Testing
  - The Bureau of Laboratory Services includes a State-accredited environmental testing laboratory, a materials engineering and testing laboratory, drinking water quality surveillance and regulatory compliance, cross connection control, source water surveillance, watershed ecological health assessments, customer inquiry response, and involvement in national standard setting, regulatory revisions, research and best industry practices.
  - As a laboratory, BLS conducts more than 200,000 analytical tests a year at its central laboratory and over 18,000 tests per year at its three wastewater treatment labs.
- Lead and copper
  - Beginning in 1992, PWD has conducted ten rounds of in-home sampling for compliance with the Lead and Copper Rule (LCR). During the first round of sampling PWD was above the action level (AL) for lead, defined as less than or equal to 0.015 mg/L in 90% of the home tap samples. Compliance with the AL for copper is defined as less than or equal to 1.3 mg/L in 90% of the home tap samples. Following that initial round, PWD made various changes in its corrosion control strategy, based on in-house research and industry knowledge. In subsequent rounds, Philadelphia complied with the action levels for both lead and copper. Following the initial sampling period, the PaDEP allowed PWD to go to reduced monitoring. Currently, PWD conducts LCR monitoring every three years. PWD did not exceed the AL for copper in any of the ten rounds of sampling and the latest round of testing produced relatively low lead results again. The next sampling period for the LCR is June to September 2014.
  - BLS is assisting PWD's Commissioner in an EPA lead and copper regulatory review to determine how to best update and revise the LCR.
- Unregulated Contaminant Monitoring Regulation (UCMR)
  - EPA's UCMR-3 was published in May, 2012. Every five years, EPA is required to collect national occurrence data for unregulated contaminants from a list of up to 30 unregulated contaminants. Previously, PWD complied with UCMRs 1 & 2. BLS began UCMR-3 monitoring in May 2013, and has completed all its sampling for this recent round. Drinking water samples were collected and analyzed for 27 potential new chemical contaminants. In compliance with the regulation, BLS will review and report all results to the U.S. EPA. The results will also be published in PWD's annual Consumer Confidence Report.
- Pharmaceuticals and EDCs
  - BLS has been cooperating in national studies to better understand the occurrence of pharmaceutical and personal care products in its source waters. Last year, national experts were brought in to review our situation and advise us on next steps. PWD is developing a sound strategy that is in agreement with national best practices. At this time, there is no reason to be alarmed but surveillance is needed to monitor for changes over time.
- Iodine 131
  - Sampling is not required under the SDWA; however, PWD cooperated with the EPA since 1979 on a voluntary basis to provide quarterly samples of river water and drinking water for analysis of various radiological elements. <sup>131</sup>I is a radioactive form of iodine that is a byproduct of

nuclear energy production and is widely used in the medical field for the diagnosis and treatment of thyroid disease.

- Following the nuclear accidents in Japan in 2011, the EPA and the PaDEP increased monitoring of radionuclides, including  $^{131}\text{I}$ , in both surface water and finished drinking water in Pennsylvania. The initial monitoring results from both agencies prompted PWD to conduct an unprecedented  $^{131}\text{I}$  sampling program to characterize and better understand  $^{131}\text{I}$  concentrations in Philadelphia's source water and drinking water. PWD partnered with PaDEP and EPA to undertake and coordinate a one year cross-agency sampling effort and to develop a comprehensive radiological monitoring and communication strategy. During the year-long  $^{131}\text{I}$  sampling program, which began April 12, 2011, PWD collected and analyzed over 500 samples of source water and drinking water. Results show  $^{131}\text{I}$  levels in drinking water averaged less than 1.0 pCi/l, well below the federal Maximum Contaminant Level (MCL) of 3 pCi/L. All source water results indicate that there are detectable levels of  $^{131}\text{I}$  in Philadelphia's source waters; however, these concentrations are well below MCL set by the EPA and pose no risk to public health. International and national studies of  $^{131}\text{I}$  in the environment have documented the impact of  $^{131}\text{I}$  thyroid disorder treatments, in which a large portion of the  $^{131}\text{I}$  medicinal dose is excreted by the patient into the sewer systems and is eventually discharged into surface waters via wastewater treatment plants. PWD and PaDEP source water data collected during the one-year sampling period confirms wastewater plant effluent as a pathway for  $^{131}\text{I}$ . PWD, PaDEP and EPA are in agreement that  $^{131}\text{I}$  is not just a local/regional issue. Trace amounts are present in waterways around the world and in Philadelphia's rivers; however, as stated above, PWD drinking water  $^{131}\text{I}$  levels are well below EPA limits and pose no risk to public health.
- Contaminant Warning System (CWS)
  - The EPA, under its Water Security Initiative program, awarded a grant to PWD to develop and install a CWS Demonstration Pilot for detecting and mitigating possible contamination of the City's drinking water distribution system. PWD's project included total costs of \$11,870,544. PWD received its full federal funding of \$9,500,000. The City's share comprised approximately \$2,386,000. More than 80% of the City's share was comprised of services-in-kind which were comprised of salaries and benefits for existing City employees assigned to the project. This CWS project was completed in May 2013. The technologies, tools and plan developed under the CWS are now being implemented as part of PWD's routine operations and emergency response capabilities. These include: improved response to potential water contamination; a network of online water quality monitoring stations located throughout the City; an improved customer complaint response network with CityWorks work order management system; enhanced analytical capabilities such as a liquid chromatograph tied to tandem mass spectrometers that can analyze a sample of water for hundreds of contaminants; and a dashboard that integrates all this information and more onto a GIS platform for real time tracking of system information. BLS regulatory showcases this work to national and international professionals and regulators.
- Early Warning System (EWS)



- Integrated monitoring, notification, and communication system designed to provide advance warning of surface water contamination events in the Schuylkill and lower Delaware River watersheds. PWD began development of the EWS in 2002 with funding provided by the PADEP and EPA; the EWS was deployed as a fully functional system in 2004. The system covers the entire Schuylkill River watershed as well as the lower Delaware River Basin from Wilmington, DE, to the Delaware Water Gap, near Dingman's Ferry, PA.
- Fluoride
  - Philadelphia has been placing fluoride in its drinking water since 1952 – for over 50 years
  - A Philadelphia Health Code from 1951 directs the fluoridation of Philadelphia's drinking water suppl. The amount was lowered in 2011 from 1.0 ppm to 0.7 ppm by recommendation of the EPA and in concert with the Health Department
  - Fluoridation of public water was one of the 20<sup>th</sup> century's leading advances in oral health protection
- Comparison to other cities/regions
- Risks
  - Marcellus Shale/Fracking
    - No current drilling in the Delaware River Basin given a temporary moratorium on drilling while the DRBC drafts regulations, which is expected in the next couple of years
    - In the meantime, PWD has increased the number of parameters and frequency of monitoring in the drinking water supply to include known constituents of wastewater generated by the drilling process.
    - PWD has been working with upstream partners to develop comprehensive water quality monitoring in the upper reaches of the drinking water supply where drilling is expected to take place in the future, and PWD has been working to expand the capabilities of the Delaware Valley Early Warning System and increase the number of subscribers throughout the Delaware River Basin in preparations for future drilling.
  - West Virginia scenario
    - PWD has multiple emergency response capabilities designed to minimize the likelihood of such a severe outcome. Existing capabilities would allow PWD to:
      - Minimize the amount of time between the observance of a spill and the notification of downstream intakes
      - Automatically detect water quality changes
      - Utilize the hydraulic model of the distribution system
      - Receive customer feedback and communicate directly with them
- Questions from Council
  - Risk from CSX Bridge train derailment (Johnson)
    - See EWS and CWS
- Reference documents
  1. Drinking Water Quality Report

# Flooding

## Storm Flood Relief

- Top Talking Points
  - Urgency of situation is affecting many other agencies that play a role and more collaboration is needed- L&I, Planning, OEM, Streets, Health, Mayor's Office, along with state and federal agencies and our elected officials
  - Working with PADEP and upstream communities to reduce runoff from those communities that contributes to flooding in Philadelphia
- Prevention
  - GCCW- reduce runoff through depaving, rain barrels, trees, stormwater regs, crediting/billing SMIP, etc
  - Catch runoff and divert/manage via green infrastructure
  - Improve storage and capacity or sanitary sewer separation
  - Basement Protection Program- aimed at protecting customer's properties from flooding during intense rain storms.
    - Since 2005, PWD has spent \$1.7 million to install basement back-up protection devices at 455 homes in the city.
    - Installation of backwater valve installations on your basement plumbing fixtures or on your main house drain, depending upon the optimal installation at your particular property. A PWD inspector and a contracted plumber will be assigned to your property to perform the following inspections:
    - PWD will pay for all work related to the installation of backwater valves and rain leader modifications. We will also ask you to sign a release form which confirms your willingness to maintain the backwater valves once they are installed.
  - Educate homeowners and public on things they can do
  - Enact regulations, ordinances, and policies that would address and prevent below grade living spaces in vulnerable areas
    - PWD supported the riparian buffer ordinance that will protect properties from flooding
  - Examine the approaches to property buyouts and recreation of floodplain parks in chronically vulnerable areas
- Location specific plans
  - Eastwick (Johnson)
    - PWD has spent \$200,000 working with the U.S. Army Corps to conduct a feasibility study for placing a levee or floodwall to protect the residents of Eastwick. While this occurred PWD also launched a top to bottom review of its infrastructure in Eastwick, surveyed neighbors flooding complaints, monitored its system, engaged residents, and recommitted our staff to ensuring that prior to forecasts of large storms that inlets are not clogged. We also worked with neighbors to address neighbor on neighbor flooding issues with L&I.
  - Germantown (Bass)
    - A much larger study for a potential 300+ million dollar flood improvement initiative is underway or Germantown. We intend to reach out to the community about in the future.

- Northern Liberties (Squilla, Clarke)
  - A six phase project is under construction on Germantown Ave in Northern Liberties to help reduce flooding in the Olde Kensington, Northern Liberties, and Fishtown sections of the City
- South Philly/ Washington Square West (Squilla)
  - In South Philly a variety of infrastructure improvements are being planned including early projects at Moore Street (confirm) and ???. A much larger study for a potential 200+ million dollar flood improvement initiative is underway for South Philadelphia. We intend to reach out to the community about in the future.
- Port Richmond (Henon)
  - The Delaware River extreme tides coupled with an intense local storm created basement flooding last year in Port Richmond. We are beginning studies to determine if there are infrastructure options to prevent or minimize impacts.
- Climate Change and Resiliency
  - Impacts
    - Climate change will cause changes in every aspect of PWD's operations
    - Modeling shows us that 1 meter of Sea Level Rise may require pumping at some outfalls
    - Increased intensity and frequency of storms may exacerbate existing flooding concerns
    - Water supply quality and quantity may potentially degrade; NYC reservoir levels and Delaware/Schuylkill river flows may change
    - Heat island effect impacts potentially intensified with warmer summers (VA to GA climate predicted).
    - Energy use will potentially increase with warmer summers requiring more energy use for A/C.
  - What PWD is doing
    - Green City, Clean Waters will help City to adapt to climate change
    - Participating in City's Greenworks Plan, including energy work
    - Cooperating with other city, state and federal agencies
- FEMA mapping
- Reference documents
  - PWD Basement Protection Program
  - Northern Liberties Storm Flood Relief Planning
  - Germantown Storm Flood Relief Planning
  - South Philadelphia Storm Flood Relief Planning

Other

## Living Wage

- What do we do to track contractor compliance?
- What are the current limitations in tracking contractor compliance?
- What are we doing to address these limitations?

### Other questions:

- Idling
  - The Clean Air Council has reached out to PWD to discuss how to reduce unnecessary idling using citizen monitoring and reporting. PWD is always interested in ways to be more efficient and to save money, so we are looking forward to discussing strategies to reduce any idling that may not be necessary for PWD functions.
- Weccacoe
  - PWD is part of the partnership that is looking to renovate Weccacoe Playground. Our role would be to install a rain garden on the portion that is not above the cemetery
  - PWD is committed to reviewing and coming up with a plan to address the aging water main located on Queen St near the historical cemetery. We are conducting reviews and will report to the Mayor's Office by the end of April on our recommended plan of action
- Building issues (Henon)
  - Administration is working with DPP to respond on behalf of all Departments
  - Where is the department located?
    - Primarily at 1101 Market St
    - PWD occupies approximately 600 other buildings throughout the city, many located within the 12 major sites like treatment facilities that can be as large as 50 acres
  - Is the building leased?
    - We lease 4 floors of the building
  - # of employees in the building?
    - 522
  - What is the square ft. of employee space?
    - 86,000 (162 sq. ft./employee)
  - What the square ft. of storage space?
    - Raw footage includes all common areas, conference rooms, rest rooms and storage areas
  - What are the utilities paid by the department? What are the costs attached to those utilities?
    - All utilities in 1101 Market are covered by the lease with the exception of electricity, which is an itemized add-on paid with the lease payment.
    - Electric usage 1/1/13-2/1/14 totaled \$140,280
  - How does the department purchase materials? Is it in bulk?
- DC 33 Contracts (CP Clarke)
  - If asked about impact on our budget, refer to Rebecca
  - If asked about sick time not counting towards overtime, just state that we abide by City policy and if the policy changes, we'll comply with that- refer to Rebecca if need be