

BEFORE THE
PHILADELPHIA WATER, SEWER AND STORMWATER RATE BOARD

Re Application of the Philadelphia Water Department for Increased Rates and Related Charges	Fiscal Years 2017 - 2018
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DIRECT TESTIMONY OF JON DAVIS

Q. PLEASE STATE YOUR NAME AND BUSINESS AFFILIATION.

A. My name is Jon Pilkenton Davis. I am a Vice President with Raftelis Financial Consultants, 227 West Trade Street, Suite 1400, Charlotte, North Carolina.

Q. PLEASE PROVIDE SOME BACKGROUND ON RAFTELIS FINANCIAL CONSULTANTS.

A. Raftelis Financial Consultants (RFC) is a subchapter S Corporation incorporated in the State of North Carolina. RFC was established in 1993 by George A. Raftelis to provide national financial and management consulting services of the highest quality to public and private sector clients, but primarily in the municipal water, sewer, and storm water utility sectors. Since that time RFC has grown to be one of the largest such firm in the nation employing over 50 financial and management consulting professionals and assisting over 500 utilities. RFC is a registered municipal advisor with the Municipal Securities Rulemaking Board and the Securities and Exchange Commission.

Q. WHAT IS THE NATURE OF YOUR PROJECT RESPONSIBILITIES?

A. I have been with RFC for over fifteen years. I currently serve as a Vice President with the firm managing and directing client engagements.

Q. WOULD YOU PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE?

A. I am a graduate of Wake Forest University with a Bachelor of Science Degree in Physics and Mathematics. I am also a graduate of the McColl School of Business at Queens College with a Master of Business Administration Degree.

In 1993, I joined Lance, Incorporated based in Charlotte, North Carolina. While at Lance, I served as an Environmental Engineer, a Capital Projects Manager, and a Financial Analyst.

In 2000, I joined RFC where I have been involved in numerous financial and management consulting engagements for water, sewer, and storm water utilities. I have served in increasing levels of responsibility within the firm moving from Consultant to Manager to my current position of Vice President. I have assisted many water, sewer, and storm water clients on financial and management issues in addition to Philadelphia Water. My clients have included the City of Baltimore (MD), DC Water, Washington Suburban Sanitary Commission (MD), the City of Richmond (VA), the City of Redding (PA), Columbus (GA) Water Works, Charlotte Water (NC), the City of Virginia Beach (VA), the City of Buffalo (NY), Erie County (NY) Sewer Districts, the City of San Diego (CA), the City of Phoenix (AZ), the City and County of Honolulu (HI), and others.

I am a member of the Water Environment Federation where I serve on the Utility Management Committee as Chair of the Finance and Administration Subcommittee. I also serve as utility

management liaison to the Technical Practices Committee. I am past-chair of the Utility Management Conference co-sponsored by the Water Environment Federation and American Water Works Association. I am also a member of the American Water Works Association.

In 2014, I co-authored a chapter in *Water and Wastewater Finance and Pricing, Fourth Edition* (Raftelis) titled "Financial Capability and Affordability". I also co-authored an article titled "Is our Water Affordable" for the July 2014 edition of the American Water Works Association Journal.

Exhibit JD-1 provides more detail on some of my past experience.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY TODAY?

A. RFC has worked with the Philadelphia Water Department (Department), the Water Revenue Bureau (WRB), and the Philadelphia Revenue Department to develop a Customer Affordability Program that addresses service affordability concerns for economically disadvantaged water, sewer, and storm water customers within the City's retail customer base. This new Customer Affordability Program will have costs that impact revenue needs for the entire utility. As such, the costs must be projected and incorporated into the Philadelphia Water Cost of Service Study (COS Study) which develops recommendations for water, sewer, and storm water rates and charges. My testimony will document the process by which we projected the Customer Assistance Program costs for inclusion in the COS Study.

Q. WOULD YOU PROVIDE SOME BACKGROUND ON THE CURRENT EFFORT TO ADDRESS CUSTOMER AFFORDABILITY WITHIN PHILADELPHIA WATER?

A. Historically, Philadelphia has employed the Water Revenue Assistance Program (WRAP) to suspend collections efforts on qualifying customers and prevent disconnection of service. WRAP provides several levels of assistance:

1. Payment plans of up to 60 months are offered to customers making more than 250% of Federal Poverty Level (FPL) income who can demonstrate acute financial hardship.
2. "10/5 Plans" require 10% down payment and 5% per month for 20 months for customers at or below 250% of FPL.
3. "Disposable Income" plans extend payment terms to 60 months.
4. Finally, "Water Revenue Bureau Conference Committee" (WRB-CC) plans may defer payments for current and delinquent charges.

WRAP was designed to provide delinquency relief for qualifying customers while minimizing rate impacts on the customer base as a whole. One perceived shortcoming of WRAP has been that customers must be delinquent in order to receive assistance under the program.

In 2014, the Philadelphia City Council tasked City staff with developing a new program that incorporated current charges and delinquent balance payments into a comprehensive effort to achieve affordable bills for economically disadvantaged customers. The Council delegated responsibility for establishing the new program to the Water, Sewer, and Stormwater Rate Board (Water Rate Board) since it involves setting rates, and rate discounts, for qualifying customers.

Q. CAN YOU SUMMARIZE YOUR FIRM'S EXPERIENCE IN DEVELOPING AND ANALYZING CUSTOMER AFFORDABILITY PROGRAMS?

A. In the past few years with RFC, I have worked with developing new Customer Affordability Programs for Richmond (VA) Department of Public Works, Washington Suburban Sanitary Commission (MD), and the City and County of Honolulu (HI) Department of Environmental Services. In addition, I have worked with existing Customer Affordability Programs for DC Water and the Columbus (GA) Water Works.

Q. WOULD YOU BRIEFLY EXPLAIN HOW THE CITY ARRIVED AT THE RECOMMENDATIONS FOR THE STRUCTURE OF A CUSTOMER AFFORDABILITY PROGRAM FOR PHILADELPHIA WATER?

A. The City recommendations were crafted to effectively balance three objectives essential to the success of the program: 1) the program must provide meaningful assistance to low income customers struggling to afford water, sewer, and stormwater service; 2) the program costs should be rigorously and conservatively developed so as not to be overly burdensome for City rate payers or detrimental to the financial stability of the utility; and, 3) the program must not present unreasonable implementation challenges for City systems and resources. In an effort to balance these three objectives, the City recommended a tiered approach that provides an appropriate discount to qualifying customers based on their income. The program also makes allowances for delinquency payments that fall within accepted affordability thresholds and suspends collections efforts on program participants.

Q. WOULD YOU BRIEFLY EXPLAIN HOW YOU ESTIMATED PROGRAM COSTS AND HOW THEY ARE FACTORED INTO THE COST OF SERVICE STUDY USED TO DEVELOP RATES?

A. Projected costs for the new affordability program fall into four areas. Fixed costs are related to upfront Information Technology (IT) costs to implement the program as well as ongoing annual administration costs in the Water Revenue Bureau for customer qualification and IT support. Ongoing costs are partially offset by the fact that City Grants related to the existing WRAP will be discontinued under the new program. Delinquency costs are related to the limitations on the ability to collect on delinquent balances for customers enrolled in the new program. Finally, and most importantly, lost revenue costs are related to the annual value of discounts given to customers enrolled in the affordability program.

Q. CAN YOU EXPLAIN THE DEVELOPMENT OF YOUR FIXED COST ESTIMATES AND TIMING OF WHEN THEY WOULD IMPACT COST OF SERVICE?

A. Fixed costs are divided into two components. Upfront IT costs are required to design, test, and implement the new program within the Basis2 Customer Information System. Upfront costs will begin immediately and remain through program implementation. Ongoing costs will begin at program implementation and continue on an annual basis. Ongoing IT support is required to maintain the Basis2 system in optimal working condition and facilitate the process of billing customers and applying payments. Ongoing program administration costs in WRB allow for the essential qualification and requalification of customers into the program.

Upfront and ongoing costs were developed in conjunction with City Revenue, Water Revenue Bureau (WRB), and Prophesy who will be responsible for program implementation and administration. Upfront costs are projected at approximately \$1.1 million to cover five person years of effort. Ongoing costs are projected at approximately \$2.8 million annually to cover two full-time equivalent positions (FTEs) for IT support and 22 WRB positions for program administration. Ongoing costs are partially offset by

elimination of the City Grant associated with the existing WRAP which is projected at approximately \$2.7 million annually.

Net fixed costs for the new program have been included in the Cost of Service (COS) Study for rate calculation purposes.

Q. CAN YOU EXPLAIN THE DEVELOPMENT OF YOUR DELINQUENCY COST ESTIMATES AND HOW THEY WOULD IMPACT COST OF SERVICE?

A. Delinquency costs result from an impaired ability to collect on delinquent balances for customers enrolled in the new program. Enrolled customers will be required to continue making payments related to past-due balances. These payments, in combination with discounted current charges, will fit under the affordability threshold established for each income tier in the program. It is difficult to project the collections factor on delinquent balances for customers enrolled in the new program or how that collections factor may differ from how those same customers currently remit payment.

The City recognizes a blended collection factor in the COS Study to reconcile differences between billings and cash collections. Changes to the collection factor resulting from delinquency payment patterns under the new affordability program should result in de minimus changes to the blended collections factor. Therefore, there are no incremental explicit impacts assumed for the COS Study and rate development.

Q. CAN YOU EXPLAIN THE DEVELOPMENT OF YOUR LOST REVENUE COST ESTIMATES AND TIMING OF WHEN THEY WOULD IMPACT COST OF SERVICE?

A. In order to project the lost revenue attributable to discounts under the Customer Affordability Program, we must first stratify Philadelphia Water residential customer accounts by income as determined by Federal Poverty Level (FPL). This can be accomplished through use of U.S. Census data and Public-Use Microdata Samples (PUMS). Census data provides household income stratification within the City of Philadelphia, the retail service area for Philadelphia Water. PUMS American Community Survey provides more in-depth survey responses for a representative sample of City households. This data allows a mapping of City households (approximately 580,000) to residential water customers (approximately 427,000) by income level. Income levels are divided into FPL tiers: Tier 1 – 0-50% of FPL; Tier 2 – 51-100% of FPL; Tier 3 – 101-151% of FPL; and, Tier 4 – 151-250% of FPL. PUMS also provides the basis of calculating the median income level for each FPL tier. Customer information by tier is summarized in the table below.

Table 1: Customer Information by Income Tier

Tier	Income (FPL)	Tier Income Threshold		Median Income	Census Households	Water Accounts
		Beginning	End			
1	0-50% of FPL	\$ -	\$ 9,130	\$ 5,000	73,662	4,393
2	51-100% of FPL	9,130	18,260	13,800	81,782	20,554
3	101-150% of FPL	18,260	27,389	22,800	64,382	31,209
4	151-250% of FPL	27,389	45,649		109,043	110,173
	>250% of FPL	greater than \$45,649			251,147	260,671
Total					580,017	427,000

Using self-reported census survey data to stratify accounts by income does not yield perfect results. It does, however, provide good working projections for cost estimation purposes.

The next step in determination of lost revenue is to apply the blended average tier discount to each income tier assuming all accounts within the tier are at the median income for the tier and have average residential consumption of 6Ccf per month. Total potential lost revenue by tier is summarized in the table below.

Table 2: Discount by Income Tier

Tier	Income (FPL)	Average Discount	Lost Revenue
1	0-50% of FPL	95%	\$ 3,143,870
2	51-100% of FPL	57%	10,498,445
3	101-150% of FPL	25%	9,157,927
4	151-250% of FPL	None	
	>250% of FPL	None	
Total			\$ 22,800,242

Total potential lost revenue assumes 100% of customers who qualify for the program will apply and be accepted. Experience with other utilities shows that the “subscription rate” for similar programs is less than 100%. The subscription rate varies based on the level of the discount, communication of plan details, and area socio-economic factors. The City has chosen to adjust for subscription rate through a Monte Carlo simulation. The Monte Carlo simulation sets variability profiles for the subscription rate within each income tier. The simulation then runs multiple trials and plots the lost revenue forecast for each trial. The result is a distribution of possible lost revenue outcomes based on variability in subscription rate.

If the City underestimates lost revenue associated with the new affordability program, it runs the risk of failing to meet bond covenants and defaulting on its bonds. If the City overestimates lost revenue, it inflates the revenue requirement in the COS Study and increases rates more than would be necessary. Given that the affordability program is new and no historical data exists for the subscription rate, it is essential to be conservative with these estimates. The City chose to project lost revenue expenses at a level that would cover 80% of forecast outcomes in the Monte Carlo simulation. Lost revenue of about \$16.3 million per year, associated with this 80% confidence level, were used in the COS Study for rate development.

Q. WILL ALL PROGRAM CUSTOMERS IN THE THREE INCOME SHOWN IN EXHIBIT 2 RECEIVE THE SAME BILL DISCOUNT?

A. No. The discounts shown in Exhibit 2 represent a blended discount for that income tier. Final Affordability Program legislation requires that each income tier be divided into three usage levels – low, medium, and high. Customers’ historical usage will be evaluated to place them into the appropriate usage level with their income tier. Their discount will be set to ensure affordability criteria are met for the income tier and usage level. Low, medium and high usage level cutoffs and associated discounts are shown in the table below,

Table 3: Usage Levels by Income Tier

Income Tier	Usage Level	Usage Level Bounds	Discount Percentage	Minimum Bill Amount (per month)
Tier 1: 0-50% of FPL	Low	0 to 2 Ccf	91%	\$ 12.00
	Medium	2+ to 8 Ccf	95%	\$ 12.00
	High	8+ and above Ccf	97%	\$ 12.00
Tier 2: 51-100% of FPL	Low	0 to 2 Ccf	20%	\$ 12.00
	Medium	2+ to 8 Ccf	57%	\$ 12.00
	High	8+ and above Ccf	75%	\$ 12.00
Tier 3: 101-150% of FPL	Low	0 to 2 Ccf	0%	\$ 12.00
	Medium	2+ to 8 Ccf	25%	\$ 12.00
	High	8+ and above Ccf	56%	\$ 12.00

In addition, the City has proposed employing a minimum bill amount. The minimum bill is based on guidance provided by the Pennsylvania PUC and would override the discount if the customer’s discounted bill fell below the minimum bill level. The Public Advocate accepted this condition in its IWRAP Program Outline dated October 26, 2015.

Q. YOU HAVE INDICATED A NEED FOR PHILADELPHIA WATER TO BE CONSERVATIVE WITH RESPECT TO PROGRAM COSTS. CAN YOU EXPLAIN WHY CONSERVATISM IS WARRANTED AND HOW IT IS REFLECTED IN YOUR PROGRAM COST ESTIMATES?

A. Given the Customer Affordability Program is new to Philadelphia Water, we do not know the extent to which customers will subscribe. In addition to the size of the discount, the convenience of the application process, and the cost of water, sewer, and storm water services will play a role in the subscription rate. If customers over subscribe to the new program, that is to say more customers are admitted than were budgeted for, Philadelphia Water may experience a revenue shortfall. Modest revenue shortfalls may be covered by transfers from the Rate Stabilization Fund (RSF). However, bond covenants restrict large RSF transfers to cover operations. Therefore, over subscription to the new affordability program could drive Philadelphia Water into a technical default of bond covenants. We recognized that it was impractical to project program costs based on a 100% subscription rate as that would increase costs spread to all customers through higher rates. We also recognized the hazard of projecting low subscription and risking technical bond default. We have recommended employing an 80% confidence interval – projecting costs that would, at least, meet subscription variability 80% of the time. Should actual subscription be higher, the revenue could be covered by a manageable transfer from RSF.

Q. DOES THIS COMPLETE YOUR DIRECT TESTIMONY?

A. Yes, it does.

Exhibit JD-1: Resume for Jon Davis

Raftelis Financial Consultants, Inc.

Vice President

Technical Specialties

Utility cost of service and rate structure studies
Development impact fee studies
Affordability program development
Long-range financial planning and feasibility studies
Cost analysis and cost allocation

Professional History

Raftelis Financial Consultants, Inc.: Vice President (2013-present); Senior Manager (2009-2012); Manager (2005–2009); Senior Consultant (2000–2004)
Lance, Incorporated: Director of Energy & Environment, Projects Manager, Financial Analyst (1992-2000)

Education

Master of Business Administration - Queens College (1998)
Bachelor of Science, Physics and Mathematics - Wake Forest University (1990)

Professional Memberships

American Water Works Association: Virginia Section; Chesapeake Section; Pennsylvania Section; North Carolina Section
Water Environment Federation: Utility Management Committee; Finance & Administration Subcommittee Chair; WEFTEC Conference Planning Committee; Utility Management Conference Planning Committee; Technical Practices Committee

Profile

Mr. Davis joined RFC in 2000 and currently serves the firm as a Vice President. Since joining RFC, Mr. Davis has extensive experience in financial forecasting and modeling and has led projects to apply advanced risk analysis techniques to rate and financial planning studies for the water and wastewater industry. Mr. Davis is an active member of the Water Environment Federation Utility Management Committee where he chairs the subcommittee on Finance and Administration. He also serves on the WEF Technical Practices Committee and the WEFTEC Planning Committee. Mr. Davis has presented papers at the Utility Management Conference, WEFTEC, the AWWA Customer Service Conference, and several state association conferences. Mr. Davis also co-authored a chapter entitled, "Financial Capability and Affordability," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. Prior to joining RFC, Mr. Davis worked in water resource recovery facility management and capital projects engineering.

Relevant Project Experience

Philadelphia Water Department (PA)

Mr. Davis is serving as Project Manager on a long-term contract to provide financial and management consulting services for the Philadelphia Water Department (PWD). The services involve debt issuance support, financial forecasting, service affordability review, and strategic planning assistance. At present under the agreement, RFC is performing a bond feasibility study and consulting engineers' report for inclusion in PWD's Official Statement for a 2016 planned bond issuance. The bond feasibility study provides a forecast of revenues and expenditures for the utility to assure bondholders that PWD will be able to repay bonds and meet debt covenants.

As part of the same engagement, RFC is identifying and evaluating affordability programs including customer assistance and rate structure alternatives. The affordability program development is driven by a City Council mandate to overhaul the existing customer assistance programs. To date, RFC has developed program structure and administration options, modeled revenue impacts of a variety of options (including ones proposed by Council and outside groups), and participated in discussions both on structure and administration leading to the implementation of a final program.

In addition, Mr. Davis served as Project Manager for a management audit of customer service functions for PWD and the Water Revenue Bureau (WRB).

DC Water (DC)

Mr. Davis currently serves as Project Manager for an ongoing engagement with DC Water. RFC is working under a long-term contract to provide financial planning and rate consulting services. As the first task order under the contract, RFC performed the 2009 Cost of Service Study (COS Study). The COS Study included four major project deliverables: assure the sufficiency of projected revenue to cover projected expenditures; calculate cost of service-based rates and compare them to projected rates; review miscellaneous fees and charges; and, recommend rate structure alternatives that enhance priority pricing objectives of DC Water. RFC worked closely with DC Water staff over a compressed project timeframe beginning in July, 2009. Results of the COS Study, along with a comprehensive report and revenue sufficiency/cost of service model, were presented to the Retail Rates Committee of the Board on September 24, 2009. RFC will continue to develop rate structure options based on the recommendations in the study.

Columbus Water Works (GA)

Mr. Davis has served as Project Manager on a multi-phase project with Columbus Water Works (CWW) involving a financial management systems evaluation, cost of service analysis, block rate design, contract rate analysis, and financial reporting system review. The project goal was development and implementation of equitable yet understandable cost-based rate structures for both inside city and contract customers. The task was complicated by the recent departure of several large contract and wholesale customers and major looming capital needs. The study used a 5- to 10-year planning horizon that incorporated long-term capital planning needs, debt funding assumptions, operating cost projections, and demand projections. The Water Works Board voted on and agreed to the five-year program as recommended by RFC and CWW staff.

City of Baltimore (MD)

Mr. Davis serves as Project Manager on a multi-year cost of service, rate, and financial consulting contract for the City of Baltimore (City). As part of the contract, RFC is performing cost of service and rate design studies for the water and wastewater utilities. The contract also calls for assistance with long-term fiscal planning and development of financial plans for utility capital programs. Since the City provides wholesale and retail utility service for surrounding counties, the engagement includes inter-jurisdictional contract negotiation support and rate setting. Mr. Davis is responsible for project administrative functions such as invoicing and sub-consultant coordination over the term of the engagement.

Washington Suburban Sanitary Commission (MD)

Mr. Davis served as Project Manager on an engagement with Washington Suburban Sanitary Commission (WSSC) in Laurel, Maryland. WSSC is looking at alternatives to fund infrastructure renewal and AMR/AMI. The RFC Team is identifying and evaluating revenue enhancement opportunities to help fund approximately \$2.1 billion in incremental capital projects over the next ten years. As part of our assistance, the RFC Team is helping to build the business case for monthly customer billing facilitated by AMR/AMI. WSSC has looked into automated meter reading for at least 12 years but has run into challenges with cost justification; their system contains over 440,000 customer accounts and almost 1,000 square miles. The RFC Team, led by Mr. Davis, will help to justify the investment in AMR/AMI through placing a value on its intangible benefits: more frequent pricing communication with customers, reduced delinquency, and reduced unaccounted for water.

City of San Diego Metro Wastewater Department (CA)

Mr. Davis served as Lead Consultant for a sewer cost of service and rate design study for the City of San Diego (City) Metro Wastewater Department. The study was conducted with extensive stakeholder group involvement and included a comprehensive review of the City's revenue requirements and allocation methodology, review of the City's user classification, an analysis of cost of service and rate design for City users. Rate design included evaluation of rate structure alternatives with emphasis on incorporating a uniform monthly base fee in conjunction with volume rates. The study also included a review of the City's capacity charges.

Charlotte-Mecklenburg Utilities (NC)

Mr. Davis has assisted on several financial services engagements for Charlotte-Mecklenburg Utilities (Utilities). Originally, RFC assisted Utilities in developing a water financial planning and rate model and related user manual. The rate model has been used to update rates and assist with Utilities' financial planning. Since the original model development, RFC has provided assistance in updating and refining the rate model. In addition, Mr. Davis and RFC have provided assistance in conservation-based rate development, industrial waste charge methodology, recycled water rate setting, managed competition, and utility billing system cost allocation. RFC is currently assisting Utilities in developing stronger conservation-based water rates, while trying to maintain revenue sufficiency and stability.

Richmond Department Public Utilities (VA)

Mr. Davis currently serves as Project Director for our engagement with the Richmond DPU. RFC is developing a financial planning model that incorporates all utility systems: water, wastewater, natural gas, street lighting and storm water. DPU will use the model to set rates in addition to determining financial condition.

City of Virginia Beach Department of Public Utilities (VA)

Mr. Davis served as the Project Manager on an engagement looking into the feasibility of transitioning the Department of Public Utilities (DPU) from bi-monthly billing to monthly billing. DPU leadership was concerned that non-utility fees added to the utility bill would incite a public outcry for monthly billing. DPU wanted to be prepared to address this with two scenarios: an analysis of the most expedient method to enact monthly billing in the short term; and an analysis of the most efficient method to enact monthly billing in the long term. The RFC Project Team examined customer service functions related to monthly billing including meter reading, customer information systems, collections, and account management. These functions were split between the Operations Division, which handled field activities, and the Business Division, which handled customer account maintenance and call center operations. As a result of this project, DPU was able to identify both short-term and long-term approaches to meet its monthly billing transition.

York County (SC)

Mr. Davis served as Project Director on a wheeling rate study for York County, South Carolina (County). The County engaged RFC to calculate a wholesale or bulk rate for water purchased by the City of York and Tega Cay from the City of Rock Hill to be delivered through the County transmission system. The study involved developing a cost allocation methodology and associated rate for delivering water through the County system that considered alternative options for the assessment of capital costs.

City of Buffalo (NY)

Mr. Davis served as Project Manager for a comprehensive cost of service and rate study for the Buffalo Water Board (Board). The Board's primary pricing objectives were revenue sufficiency and equitable cost recovery from all customer classes. To achieve these objectives, RFC performed a cost of service study and developed two alternatives to the existing three-block, declining block rate structure. The results of the cost of service study indicated that the discount being realized by large volume customers was not cost justified and that only a minor portion of consumption was within the middle rate block. RFC recommended a phased approach to bringing the discount for consumption in the third rate block closer to a cost justified level and phasing out the middle rate block. Both the Board and the City's Common Council unanimously approved RFC's recommendations.

Other Relevant Project Experience

City of Arlington (TX) – Wholesale Reclaimed Water Negotiation

City of Baltimore (MD) – Cost of Service Rate Study, Financial Planning, Interjurisdictional Contract Negotiation Support, Stormwater Utility Implementation, Organizational Optimization

City of Buffalo (NY) – Cost of Service Water Rate Study
Bureau of Governmental Research, New Orleans (LA) – Managed Competition Proposal Evaluation Study
Charlotte-Mecklenburg Utilities (NC) – Conservation Pricing, Reclaimed Water Program Feasibility, Billing and Collections Costs Analysis and Allocation Study
Columbus Water Works (GA) – Cost-of-Service Rate Study, Financial Planning, Procurement Feasibility
City of Corona (CA) – Wastewater Rate Study
DC Water and Sewer Authority (DC) – Economic Development/Service Extension Policy
Erie County (NY) – Regionalization Feasibility Study
City of Hendersonville (NC) – Water and Sewer Rate Study
Town of Hillsborough (NC) – Development/Impact Fee Study for Water and Wastewater, Water and Wastewater Rate Study
City and County of Honolulu (HI) - Department of Environmental Services – Wastewater Rate Structure Study
Town of Marana (AZ) – Water Financial Planning/Rate Study
Philadelphia Water Department (PA) – Wholesale Rate Arbitration, Customer Service Strategic Review
City of Phoenix (AZ) – Environmental Fee Study, Privatization Study
City of Portland (OR) – Water Rate Model Design
City of Poway (CA) – Wastewater Rate Structure Study
City of Richmond (VA) – Financial Forecasting Model
City of Rock Hill (SC) – Wholesale Cost-of-Service Rate Study, Development/Impact Fee Study
City of San Diego (CA) – Recycled Water and Wastewater Rate Study
City of Siler City (NC) – Debt Feasibility Study
Tarrant Regional Water District, Fort Worth (TX)– Financial Feasibility Study
United States Navy – Privatization Procurement
City of Virginia Beach (VA) – Customer Billing Feasibility Study
York County (SC) – Countywide Study for Evaluation of Water and Sewer Alternatives

Presentations

“The New Deal: Capital Project Financing Under Constrained Credit Conditions” – WEFTEC Workshop, October 2009
“Rate Setting in Tough Times” - WEF Webcast, July 2009
“The New Drought Emergency - Combating Revenue Trickle” - Utility Management Conference, February 2009

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DIRECT TESTIMONY OF BART KREPS

Q. Please state your name and business address.

A. My name is Bart Kreps and my business address is: 227 W Trade Street, Suite 1400, Charlotte, North Carolina 28202.

Q. By whom are you employed and in what capacity.

A. I am a Senior Manager of Raftelis Financial Consultants, Inc. (RFC). RFC is a subchapter S Corporation incorporated in the State of North Carolina. RFC was established in 1993 in Charlotte, North Carolina, by George A. Raftelis to provide environmental and management consulting services of the highest quality to public and private sector clients, but primarily in the municipal water, wastewater, and stormwater utility sectors. Since that time RFC has grown to be one of the largest such firms in the nation employing over 50 financial and management consulting professionals and assisting over 500 utilities. RFC is a registered municipal advisor with the Municipal Securities Rulemaking Board and the Securities and Exchange Commission.

Q. Please describe your educational background and work experience.

A. I obtained a Master of Business Administration in Environmental Management from the University of Tennessee in 2002 and a Bachelor of Business Administration in Finance from James Madison University in 1998. I have worked in public finance for 15 years. Prior to joining RFC in 2002, I was a fixed income analyst for First Union Securities (Wells Fargo), in the company's Capital Markets Group. I am a member of the American Water Works Association (AWWA), the Water Environment Federation (WEF), and current lead of the Virginia AWWA/WEF financial management subcommittee. As an employee of RFC, I have been involved in hundreds of studies for public water, wastewater, and stormwater utilities helping them address various rate, financial, and economic issues. I have also served on engagements involving a wide range of technical specialties including:

- Utility Cost of Service and Rate Structure Studies

- Bond Forecast and Feasibility Studies
- Development Charge Studies
- Utility Financial Planning Studies
- Economic Feasibility Studies

I authored a chapter entitled, “Evaluating Risk in Capital Planning, Financing, and Rate Setting,” for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*, and published multiple articles on financial topics in the *AWWA Journal* including “Municipal Advisor Registration: What You Need to Know” (March 2013) and “The Cost of Borrowing: Understanding Credit Ratings” (November 2015).

Exhibit BK-1 provides more detail on some of my past experience.

Q. Please describe the purpose of your testimony.

A. This testimony provides information and perspectives on public water and wastewater utility regulatory structures with specific focus on economic oversight for utilities not regulated by state public service commissions.

Q. Can you provide general background information on the public water and wastewater utility governance structure as it relates to economic oversight from a national perspective?

A. Public, or government-owned, water and wastewater utilities may be owned by a city, county, district, agency, or other local municipal entity. Typically, economic oversight and rate setting for public water and wastewater utilities is provided at the local government level through elected or appointed representatives such as a city council, board of commissioners, etc. Private, or investor-owned, utilities are owned by one or more investors. Economic oversight for private water and wastewater utilities is provided through state Public Utility Commissions (PUC). However, it should be noted that in some states economic oversight for certain public utilities is also provided by state PUCs, particularly when the utility provides services outside of its corporate boundaries.

Q. Who provides economic oversight for public water and wastewater utilities? Why are these utilities not subject to regulation from state PUC?

A. Water and wastewater utilities are natural monopolies. As such, they have pricing power that requires regulation and oversight. For most public water and wastewater utilities economic oversight is addressed through the local governance structure. As noted previously, typical local governance structures include, for example, a city council, board of commissioners, or similar committee of individuals that are either elected or appointed to act on behalf of the community. If customers are dissatisfied with the pricing, level of service, or other aspects of the utility, they have the power to replace governing officials through the democratic process. Conversely, private water and wastewater utilities are not subject to economic oversight from local governance and are generally guided by the best interest of their shareholders. But as natural monopolies, without competition, and in order to ensure prices are not set higher than can be economically justified, private water and wastewater utilities are regulated by state PUCs.

Q. What regulatory entity provides economic oversight for the Philadelphia Water Department?

A. The Philadelphia Water, Sewer, and Stormwater Board (Rate Board) provides economic oversight to the Philadelphia Water Department. The Rate Board was recently created by a Philadelphia Home Rule Charter amendment. The Rate Board's ratemaking authority is subject to specific rate standards ordained by the Philadelphia City Council and set forth in Section 13-101 of the Philadelphia Code.

Q. Is the economic oversight provided by the Rate Board different than the economic oversight provided by the Pennsylvania PUC?

A. Yes. Each entity has its own enabling legislation defining its regulatory authority.

Q. Can you describe the typical process used by non-Public Utility Commission (non-PUC) regulated water and wastewater utilities to adjust rates and charges?

A. The process used by non-PUC regulated water and wastewater utilities to adjust rates and charges varies but is typically addressed through the budget process. The budget reflects the utility's anticipated revenue requirements, which are presented and discussed in a public forum

with opportunities for stakeholder comment. The traditional components of revenue requirements include operating and maintenance expenses, debt service (principal & interest), debt service coverage, and provisions for reserves. This is known as a cash needs approach. Most budgets are prepared on an annual basis, and the recommended rates and charges needed to support the budget are submitted for approval. Although budgets (and rates) may be approved annually, many non-PUC regulated water and wastewater utilities will embrace a planning approach to rate setting and engage stakeholders early in the process to discuss existing and future operating costs, capital needs and funding sources, financial policies, and other factors affecting the level of rates and charges. This provides an opportunity for stakeholder engagement and education, particularly when there are significant cost drivers, such as a large capital improvement plan, or other events that are expected to impact the utility's financial condition over time. A utility may also choose to adopt rates over multiple years based on a forward-looking financial plan. Multi-year rate plans are often used when a utility is forecasting the need for rate increases or requires access to the capital markets for funding and wishes to reduce the uncertainty of projected revenues. This approach may be viewed favorably by credit rating agencies. In some cases, a separate board or committee will be created to examine utility rate and financial planning issues more closely, and will then adopt rates or make rate recommendations for formal adoption by the city council or related governing authority.

Q. Can you describe the typical process used by PUC regulated water and wastewater utilities (public or private) to adjust rates and charges?

A. PUC regulated water and wastewater utilities are required to file for a rate increase with state PUCs. The rate filing process typically requires the identification of revenue requirements based on a test year of actual, audited financial results with the addition of known and measurable changes to the test year. Known and measurable changes may be associated with, for example, the expectation of rising costs (operating or capital) or changes in demand. The traditional components of revenue requirements include operating and maintenance expenses, depreciation, and a return on rate base, or the net value of the system's fixed assets. This is known as a utility basis approach. Recognition of debt service coverage and reserves typically varies by state, but is usually limited to minimum bond covenants and provisions for working capital. All relevant financial, accounting, capital planning, operational, and other relevant detail must be submitted

with the rate filing. All known and measurable changes must be documented, with testimony provided describing the process used to develop recommended rates and charges including all key assumptions. The rate filing process is reviewed by state PUC staff, and there is an opportunity for stakeholder intervention. Stakeholder intervention may require multiple rounds of testimony. Rate adjustments are ultimately determined by the state PUC and are typically approved based on a single test year.

Q. Does the American Water Works Association M-1 Manual titled “Principles of Water Rates, Fees, and Charges” (AWWA M-1 Manual) speak to the use of a “cash needs approach” in rate setting?

A. Yes. The AWWA M-1 Manual identifies the cash needs approach as an acceptable methodology for water rate setting and points out that it is more straight-forward to calculate and may be better aligned with the way many utilities prepare their budgets.

Q. In your experience working with non-PUC regulated water and wastewater utilities, is it more common to use a cash needs approach for setting retail rates?

A. Yes.

Q. What are some of the key differences in the rate setting process used by non-PUC regulated water and wastewater utilities compared to PUC regulated utilities?

A. There are a number of key differences in the rate setting process used by non-PUC regulated water and wastewater utilities compared to PUC regulated utilities. The most meaningful differences relate to the extensive documentation requirements for PUC regulated utilities, particularly as it relates to the identification and specificity of known and measurable changes to revenue requirements, the submittal of testimony, and the process for stakeholder intervention. In contrast, non-PUC regulated water and wastewater utilities typically engage stakeholders through public meetings, advisory groups, and other open forums to solicit input and feedback. PUC regulated utilities also follow a more structured process requiring a rate application, testimony, intervention (if necessary), and rate hearings. Also, most non-PUC regulated water and wastewater utilities maintain flexibility to adopt rates for multiple years while PUC

regulated utilities typically receive approval for rate increases based upon a single test year. The adoption of rates over multiple years is based on the development of a financial plan, including assumptions reasonably projected based upon budgeted expenditures and expected inflation, among other considerations.

Q. Does the AWWA M-1 Manual speak to use of test years in rate setting?

A, Yes. The AWWA M-1 Manual discusses the use of a pro forma test year that incorporates a historical test year including known and measurable changes as well as a projected test year identified as a “future period in which all of the costs and data are projected.” The advantage of the projected test year is that rates will more reasonably align with the utility’s budget or anticipated costs. The advantage of the pro forma test year is that it is less subjective.

Q. In your experience working with non-PUC regulated water and wastewater utilities, is it more common to use some form of a projected test year approach for setting retail rates?

A. Yes.

Q. Are any of these key differences advantageous to non-PUC regulated water and wastewater utilities from a financial planning perspective?

A. Yes. Non-regulated PUC water and wastewater utilities typically have more flexibility in the process used to develop rates and charges. It can be argued that this flexibility, and in particular, an ability to embrace a more forward-looking approach to projecting revenue requirements allows a non PUC-regulated water and wastewater utility to customize its financial plan around a risk profile of the utility’s service area, demographics, financial risks, capital planning needs, and other factors. For example, a utility facing a significant capital improvement plan and need for external financing may place an emphasis on its credit rating to limit the cost of borrowing. This approach typically requires developing and meeting well-structured financial policies related to both reserves and debt service coverage. Financial policies are typically set at levels higher than minimum bond covenants and/or general ordinance requirements, and these policies can be viewed favorably by rating agencies when assessing an ability to repay. Recent information available from both Moody’s Investor Service (Moody’s) and Standard & Poor’s Rating Services

(S&P) in proposed updates to their rating methodologies stress the importance of both debt service coverage and the level of reserves in evaluating a water and wastewater utility's financial health. In fact, Moody's measurement of annual debt service coverage and days cash on hand (unrestricted reserves) represent the highest weightings in their financial strength scorecard. Similarly, S&P's coverage metrics and liquidity and reserves categories represent the highest ratings in their financial risk assessment.

Additionally, non-PUC regulated water and wastewater utilities do not typically face what is described as regulatory delay, or the time between the period when costs change for a utility, and the point when these changes are recognized as an increase or decrease in rates and charges. Regulatory delay is often cited as a problem with regulated utilities because rates do not keep up with rising costs due to the length of time required for approval. Depending on the level of intervention, data requests, and testimony, the regulated utility process can be extremely long with current utility costs not being reflective of the test year with known and measurable adjustments identified at the initial time of the rate filing.

Q. How do non-PUC regulated water and wastewater utilities solicit input and protect the interest of different customer groups within the rate setting process?

A. As noted previously, non-PUC regulated water and wastewater utilities can engage stakeholders through public meetings, advisory groups, and other forums to solicit feedback. This often creates a more collaborative rate setting process compared to the regulated utility approach, as the interest of different customer groups can be protected through early and open dialogue rather than through rate intervention. Ideally, issues and areas of concern can be addressed prior to developing rate recommendations; this may help streamline the approval process to maximize efficiencies and minimize costs.

Q. Does this complete your direct testimony?

A. Yes, it does.

Exhibit BK-1: Resume for Bart Kreps

Raftelis Financial Consultants, Inc.

Senior Manager

Technical Specialties

Utility cost of service and rate studies
Bond forecasts and feasibility studies
Capital financing plan development
Development and impact fee studies
Economic feasibility studies
Regionalization studies
Alternative project delivery studies

Professional History

Raftelis Financial Consultants, Inc.: Senior Manager (2014-present); Manager (2010-2013); Senior Consultant (2005-2009); Staff Consultant (2002-2004)

Wells Fargo Securities: Fixed Income Analyst (1998-2000)

Education

Master of Business Administration in Finance & Environmental Management - The University of Tennessee (2002)

Bachelor of Business Administration in Finance - James Madison University (1998)

Professional Memberships

North Carolina AWWA

Tennessee/Kentucky AWWA

Virginia AWWA

Virginia AWWA/WEF Utility Management Committee - Financial Management Subcommittee lead

Profile

Mr. Kreps has been with RFC since 2002, managing a variety of projects to assist water, wastewater, and stormwater utilities in addressing economic and financial issues. Key areas of focus include utility rate, cost of service, and financial planning studies; capital financing plan development; bond forecast and feasibility studies; economic impact assessments; and system development fees studies. Mr. Kreps has extensive experience in financial forecasting and modeling including the application of advanced techniques in risk management. Mr. Kreps' background is focused predominantly on public finance. He has assisted many utilities in designing optimal capital financing plans and has developed numerous financial feasibility reports and forecasts related to more than \$600 million in revenue bond sales. Prior to joining RFC, Mr. Kreps served as fixed income analyst for Wells Fargo Securities, in the company's Capital Markets Group. Mr. Kreps is the current lead of the Virginia AWWA/WEA Financial Management Subcommittee. He also authored a chapter entitled,

"Evaluating Risk in Capital Planning, Financing, and Rate Setting," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*.

Relevant Project Experience

City of Akron (OH)

In 2013, the City of Akron (City) engaged RFC to perform a comprehensive cost of service, rate design, and financial planning study to assist them in managing the costs related to their combined sewer overflow (CSO) consent decree. Mr. Kreps is the Project Manager for this engagement and prepared the financial and rate model used to project the City's operating and capital financing requirements over a 30-year horizon. This engagement included detailed analysis of customer bill impacts arising from various rate structure alternatives and capital financing scenarios. The City has recently opened a dialogue with the EPA to utilize integrated planning in meeting regulatory requirements and RFC will continue to provide financial support throughout this process.

Franklin County (OH)

Mr. Kreps served as Project Manager for an engagement to assist the Franklin County (County) Department of Sanitary Engineering (FCSE) with a utility structure, operations, cost of service, and water and wastewater rate analysis. As a result of an expansive geographic service area and limited economies of scale, FCSE is facing a number of challenges in limiting the cost of providing utility services. FCSE is also faced with significant capital investment needs over the next 10 years to ensure continued and reliable services. RFC worked with FCSE to develop a 10-year financial plan and recommended rates that are consistent with industry pricing standards and fully support system operations and maintenance, asset repair and replacement, debt service, and debt service coverage requirements. RFC is also conducted an operational assessment to evaluate the efficiency and effectiveness of the organization, as well as an evaluation of the current strengths and weaknesses of the existing utility structure and alternative options for consideration.

City of Buffalo (NY)

Mr. Kreps provided financial advisory services for a comprehensive cost of service and rate study for the Buffalo Water Board (Board). The Board's primary pricing objectives were revenue sufficiency and equitable cost recovery from all customer classes. To achieve these objectives, Mr. Kreps performed a cost of service study and developed two alternatives to the existing three-tiered, declining block rate structure. The results of the cost of service study indicated that the discount being realized by large volume customers was not cost-justified and that only a minor portion of consumption was within the middle rate block. Mr. Kreps recommended a phased approach to bringing the discount for consumption in the third rate block closer to a cost-justified level and phasing out the middle rate block. Both the Board and the City's Common Council unanimously approved the recommendations.

Hallsdale-Powell Utility District (TN)

Mr. Kreps has served as Project Manager on several engagements for the Hallsdale-Powell Utility District (HPUD) in Knoxville, Tennessee. HPUD has faced significant challenges related to capital

infrastructure repair and replacement to meet the demands of its growing system. Mr. Kreps developed a water and wastewater rate model that has served as a financial planning tool for the District over the past 10 years. The model was designed to evaluate a variety of financing assumptions and operating scenarios with the ultimate goal of recommending an appropriate program of rate adjustments to meet HPUD's projected revenue requirements. Most recently, Mr. Kreps developed the financial forecast and opinion letter for inclusion in HPUD's Series 2006 and Series 2008 Revenue Bonds, as well as a Rural Utility Service loans in both 2009, 2011, and 2014.

City of Rock Hill (SC)

Mr. Kreps has served as Lead Consultant on several engagements with the City of Rock Hill, South Carolina (City). Specifically, Mr. Kreps assisted the City in calculating water, wastewater, stormwater, and fire development impact fees. Additionally, Mr. Kreps worked with the City to develop a cost of service wholesale rate methodology and associated model to serve as a basis for calculating wholesale water and wastewater rates. Based on a previous regionalization study conducted by RFC, it was determined that it was economically viable for the City to serve as a regional provider of water and wastewater services to wholesale customers within and around York County, South Carolina.

York County (SC)

Mr. Kreps served as Project Manager on a wheeling rate study for York County, South Carolina (County). The County engaged RFC to calculate a wholesale or bulk rate for water purchased by the City of York and Tega Cay from the City of Rock Hill to be delivered through the County transmission system. Mr. Kreps developed a cost allocation methodology and associated rate for delivering water through the County system that considered alternative options for the assessment of capital costs. Mr. Kreps also provided direction related to developing the contractual agreement that will govern these transmission services provided by the County.

Watauga Regional Water and Sewer Authority (TN)

Mr. Kreps served as Lead Consultant on an engagement with the Watauga Regional Water and Sewer Authority (WRRWA). The WRRWA commissioned RFC to conduct a study to evaluate the economic impact of designing, engineering, and constructing a regional water treatment facility and associated transmission system. Mr. Kreps developed an economic feasibility model that evaluated both the unit cost impact and average customer bill impact of two regional plan alternatives. Mr. Kreps, in association with a national engineering firm, assessed both the quantitative and qualitative impacts of both alternatives, which ultimately lead to the selection and recommendation of a preferred regional plant alternative.

White House Utility District (TN)

Mr. Kreps served as Project Manager on multiple engagements for the White House Utility District, Tennessee (WHUD). Mr. Kreps has conducted numerous water and wastewater rate and financial planning studies consisting of defining and evaluating the existing and projected cost basis for utility operations, allocating costs based on cost of service principles, and recommending updated water and wastewater fees for retail customers. Mr. Kreps also assisted WHUD with an evaluation of the appropriateness of its existing rate methodology for charging water service on a wholesale basis. Mr.

Kreps participated in discussions with WHUD's wholesale water customer to re-negotiate a rate that was both reasonable and equitable.

City of Johnson City (TN)

Mr. Kreps served as Lead Consultant for the City of Johnson City (City) in developing a ten-year financial plan and program of water and wastewater rate adjustments to meet the anticipated requirements of a substantial wastewater capital improvements plan. The City had not adjusted its water or wastewater rates in approximately ten years when it engaged RFC in 2003. Previously, the City had employed a short-term (one-year) planning process which implemented rate adjustments in reaction to annual capital and budget requirements. As part of our assistance, RFC recommended modifications to the City's water and wastewater rate structures to eliminate the minimum usage allowances and introduce base charges for both water and wastewater. Additionally, RFC developed a plan to gradually eliminate the declining block wastewater volume rates by consolidating the declining block rates into one uniform volume wastewater rate over a ten-year period. The elimination of the declining blocks was recommended to provide more consistency with current industry rate-setting practices as the recent decline in the City's manufacturing and industrial customer base no longer warranted a rate structure that provided incentives for large industrial wastewater users.

The elimination of the declining blocks also allowed the City to phase out the current subsidy provided from the water utility to the wastewater utility and move towards a more financially self-sufficient wastewater utility. Other recommendations involved implementation of a consistent outside-city differential for all rates and charges assessed to outside-city water and wastewater customers, and developing a program of rates and charges that would achieve a target level of debt service coverage of 1.20x in order to protect the utility's financial position and access to debt markets. RFC also worked with the City to determine the appropriate costs for providing potable water to wholesale customers under the Utility Approach to rate-setting and provided sample calculations of wholesale water rates for two potential types of wholesale customer contracts. These customer types included a customer who would not require City water services on a consistent basis and a customer who would require City water services as its primary source of water and would agree to "buy-in" to a portion of the City's available capacity.

RFC has been engaged by the City in 2007, 2008, and 2009 to update the rate and financial planning model.

Paulding County (GA)

Paulding County (County) is located in northwest Georgia with an estimated population of 148,232. The County is part of the Atlanta Metropolitan Area. Water service is provided to approximately 43,000 customers through a network of distribution infrastructure. Potable water is currently purchased on a wholesale basis from the Cobb County-Marietta Water Authority (CCMWA). Mr. Kreps served as Project Manager assisting the County with a financial and economic impact analysis of the Richland Creek Water Supply Project, which will supplement the current wholesale water purchases and eventually supply up to 35 million gallons per day (MGD) of the County's long-term

(50-year) need of 53 MGD supporting a population of 500,000. RFC was engaged by the County to conduct a detailed examination and evaluation of the Richland Creek Water Supply Project to determine the most advantageous strategy for financing and delivering the project. The major components of the analysis included the determination of a capital financing plan and development of an economic forecast model. The economic forecast model included a long-term projection of revenue requirements and development of quantitative evaluation metrics for various capital planning alternatives.

Laurens County Water and Sewer Commission (SC)

Mr. Kreps served as Lead Consultant on developing a five-year water and wastewater financial planning and rate model for the Laurens County Water and Sewer Commission, South Carolina (LCWSC). The LCWSC provides water and sewer service to retail residential and commercial customers located in unincorporated areas of Laurens County, and four adjacent areas located in Greenville County. The LCWSC was concerned that existing rate structures did not represent the appropriate cost of service. As a result, RFC was retained to evaluate the water and wastewater rate structures and identify alternative rate structures that could provide a more appropriate allocation of costs among the different user classes. After identifying alternative water and wastewater rate structures, RFC developed a five-year financial planning and rate model with the flexibility to calculate rates under the existing and alternative rate structures and assess the rate impacts of changing rate structures. Based on the potential for significant rate impacts on certain water customers, RFC recommended staying with the existing water rate structure with minor modifications to provide more the appropriate recovery of costs from commercial customers. For wastewater, the potential rate impacts associated the alternative rate structure were less significant, and an alternative rate structure was recommended.

Northeast Ohio Regional Sewer District (Cleveland, OH)

Mr. Kreps served as Project Manager in the development of a comprehensive financial plan for the five-year period 2007-2011 and 2012-2016, as well as various other engagements for the District since 2004. The District was facing a \$3.2 billion capital program, and it was critical to develop an optimal financing plan that balanced revenue requirements and customer impacts. The financial plan included projections of customers, water usage and revenues under the existing rates, projections of operating and maintenance expense, debt service on existing bonds and additional bonds necessary to fund the capital improvement program, and reserve fund deposits. In addition, RFC recommended a rate adjustment program over the five year study period to meet the projected revenue requirements and maintain the District's financial sustainability. A user-friendly computer model was also developed for use by District staff to analyze different planning scenarios.

Town of Oak Island (NC)

Mr. Kreps served as Project Manager on several engagements with the Town of Oak Island, North Carolina. (Town) to provide financial feasibility consulting services related to its Series 2008 Utility System Revenue Bonds (Series 2008 Bonds), the Series 2009 Utility System Revenue Bonds (Series 2009 Bonds), and the Series 2011 Utility System Revenue Bonds (Series 2011 Bonds). The bonds were issued to fund the design and construction of a wastewater collection system to provide

centralized service to the remaining 85% of the Town's residents that receive wastewater service from septic systems. The wastewater collection system includes approximately 85 miles of vacuum collector sewers, nine vacuum stations, one main pump station, and a force main transmission line to deliver wastewater to the West Brunswick Regional Wastewater Treatment Facility. The collection system was constructed in two phases at a total cost of \$150 million.

In order to assist the Town in securing the necessary funds for its capital initiatives, RFC prepared a financial feasibility report that was included in the Official Statement for the Series 2008 Bonds, the Series 2009 Bonds, and the Series 2011 Bonds. The feasibility reports included a five-year projection of revenues, expenses, debt service and debt service coverage, along with specific documentation of significant forecast assumptions. RFC continues to provide the Town with ongoing rate and financial planning assistance.

City of Oxford (NC)

In July 2000, the City of Oxford (City) retained RFC to develop a comprehensive financial planning and rate model to evaluate revenue sufficiency for both the water and wastewater utilities. The City was anticipating a significant increase in growth due to its proximity to the Raleigh-Durham area. The growth was expected to be both residential and industrial customers. Due to the expected growth in the area and the need for renewal and replacement of assets, the City anticipated significant financing needs to undertake its Capital Improvement Program. In order to generate the revenues needed to address projected increases in operating costs and debt service costs, the City decided to review and update their previous water and wastewater utility rate structure. The financial planning model developed by RFC incorporated the City's intensive capital improvement plan and was structured so that the City could use the model to evaluate revenue impacts under various scenarios. Since July 2000, RFC has updated the model annually for the City of Oxford to ensure that the City has the revenue sufficiency needed to continue to perform its needed capital improvements.

City of Peoria (AZ)

The City of Peoria (City) has experienced fast-paced growth and heavy development pressure as the City's population has more than doubled since 1990. As a result, demand for water and wastewater services has also increased at a rapid pace. Concurrently, the State of Arizona (State) enacted the Groundwater Management Act and the Assured Water Supply rules to limit the use of groundwater and to encourage the use of alternative water supply sources. As a result, the State mandated that the City reduce its reliance on mined groundwater and increase its use of renewable water resources. To comply with these regulatory requirements, the City developed an aggressive capital plan to reduce its former 100% use of groundwater through a combination of its existing water supply sources, maximization of reclaimed water for non-potable use, and a continued commitment to water resource conservation.

To effectively address these growth and regulatory related issues and concerns, the City sought assistance in reviewing and updating its existing water and wastewater rate structure and developing a 10-year financing plan for its extensive capital requirements. In February 1998, the City engaged RFC to conduct a comprehensive water and wastewater rate and financial planning study, which

incorporated a water and wastewater utility rate study, an update of its water and wastewater development fees, the development of a water resource fee, and the development of an appropriate financial plan and bond feasibility forecast. Following these initial engagements, RFC has assisted the City in updating its water and wastewater rates, utility financial plan, and utility development fees on a biennial basis (2000, 2002, 2004 and 2006). As part of these updates, the City implemented a uniform service area approach to determining its development fees.

In 2003, RFC further assisted the City in determining utility development fees for a separate service area located west of the Aqua Fria River. Although the City assesses uniform water and wastewater development fees to customers in all other areas of its water and wastewater system, proposed development in this independent service area requires significant investments in capital improvements and certain portions of the required infrastructure will be financed through a Community Facilities District. Since these fees will be separate and unique from the fees assessed to other customers within the City's current service area, the City requested that RFC calculate the fees based upon the specific costs for the infrastructure they are intended to recover.

City of Phoenix (AZ)

RFC has performed numerous projects for the City of Phoenix (City) over the past ten years. The projects have included rate analyses, bond feasibility analyses, calculating an environmental fee, and design/build/operate procurement. RFC has assisted the City with four debt issuances. In 2001, RFC assisted with the preparation of a bond feasibility analysis for a \$220,000,000 Junior Lien Water System Revenue Bond issuance. In 2003, RFC assisted with the preparation of a bond feasibility analysis for \$130,260,000 in Senior Lien Wastewater System Variable Rate Demand Revenue Refunding Bonds. In 2003, RFC assisted the City by performing a parity test and preparing a parity test certificate for \$11,325,000 in Junior Lien Water System Revenue Refunding Bonds, and, in 2004, RFC performed a parity test and issued a parity test certificate for \$180,000,000 in Junior Lien Wastewater System Revenue Bonds. In 2005, RFC prepared a bond feasibility analysis for a \$600,000,000 in Junior Lien Water System Revenue Refunding Bonds. For this engagement, RFC reviewed the financial forecast prepared by the City; reviewed the report prepared by the City for inclusion in the bond official statement; prepared an opinion letter related to the reasonableness of the City's financial forecast; and performed a parity test and issued a parity test certificate. The scope of work for this project also included a benchmarking study that compared the City's performance on a variety of financial performance metrics with the performance of other similar utilities. Data for the benchmarking study was derived from information collected as part of RFC's biennial rate survey and from a targeted survey of the City's peer utilities that was created specifically for this project.

Pima County (AZ)

Mr. Kreps served as Project Manager or Lead Consultant on multiple engagements for Pima County, Arizona (County). In 2005, RFC was engaged by the County to provide strategic financial and analytical support related to the long-term revenue and rate implications associated with the investment of approximately \$1.4 billion in its wastewater system over the next 15 years. The County is faced with an extraordinary challenging of improving a significant portion of its wastewater system in order to comply with more stringent effluent quality standards imposed by State and Federal

regulators and to meet the needs of a growing customer base. RFC, in association with Greeley & Hansen, developed an economic planning model to assess, at a high level, the long-term rate and customer impacts of various capital investment strategies and system configurations designed to adequately address regulatory requirements and provide sufficient capacity to serve both existing and projected demand. RFC also developed a financing plan for the capital program that considered the use of traditional public financing instruments, and the use of non-traditional, alternative financing options, both public and private, that could provide a more cost-effective strategy for funding certain components of the capital program.

Based on the results of the capital planning analysis, RFC was retained by the County, in two separate engagements, to develop its fiscal year (FY) 2008 Financial Plan and conduct a more detailed economic analysis of alternative project delivery options. The development of the FY 2008 Financial Plan included a comprehensive rate study and creation of a Rate and Financial Planning Model (Rate Model), to be updated on an annual basis, covering the Department's Operating and Maintenance (O&M) and capital improvement financing over a 10-year forecast period. The Financial Plan was designed to serve as road-map for funding capital improvements and basis for developing rates and charges that are fair and equitable. In 2008, RFC was retained by the County to update its FY 2009 Financial Plan.

Both the FY 2008 and FY 2009 Financial Plans assumed the use of more traditional public financing instruments, such as revenue bonds and State Revolving Fund (SRF) loans, to financing the proposed capital improvements, and assumed a more traditional Design-Bid-Build (DBB) project delivery model. However, the County was interested in understanding both the economic and non-economic implications of alternative financing options and approaches to project delivery, including Design-Build (DB), Design-Build-Operate (DBO) and Design-Build-Operate-Finance (DBFO) delivery models. One of the largest projects in the capital program was the construction of a new 32 million gallon per day (MGD) water reclamation facility designed to meet all new effluent discharge requirements. It was determined that this project, in particular, should be evaluated in terms of the potential risks and benefits of alternative project delivery options, to determine which option under consideration could provide the least risk and lowest probable cost.

To facilitate the quantitative aspects of the alternative project delivery analysis, RFC develop a Multiple Criteria Risk Model (Risk Model) to project operating and capital costs and calculate Net Present Value (NPV) life cycle costs for design and construction of the new water reclamation facility under a base case (DBB), DB, DBO, and DBFO project delivery alternatives. RFC participated in several workshops with County staff to identify specific variables and risk parameters that could be quantified. These variables and risk parameters were incorporated into the Risk Model, which used Monte Carlo simulations over 5,000 trials to project risk adjusted NPV life cycle costs for each project delivery alternative. Specific variables considered included construction schedule, tax-exempt interest rates, private interest rates, private cost of equity, operating cost inflation, capital cost inflation and discount rate, among numerous others. The results of the quantitative analysis identified DBO as the project delivery alternative with the lowest risk and NPV life cycle cost.

Other services provided to the County by RFC include the valuation of a small water reclamation facility serving a community in the County's outlying service area. The study was conducted to support the County in negotiations with the community, as it was evaluating the implications of seeking ownership of this facility. RFC is currently conducting an analysis of the County's methodology used to assess connection fees.

City of Durham (NC)

Mr. Kreps served as Project Manager on numerous engagements with the City of Durham, North Carolina (City) related to water and wastewater finance and pricing. In 2007, he assisted the City with a cost of service water and wastewater rate study focusing primarily on water conservation pricing. Due to an extreme drought in 2007, the City was faced with an unprecedented challenge related to preserving its water supply, and the addition of a pricing mechanism within its water rate structure became an immediate priority. Mr. Kreps worked closely with the City to develop defensible, cost-justified tiered water rates that included pricing incentives to promote the efficient use of water resources. Mr. Kreps developed a comprehensive cost of service based rate model that is currently used by the City as a financial planning tool. Most recently, Mr. Kreps prepared financial forecast and opinion letter related to the City's \$60.0 million 2011 Utility Revenue and Revenue Refunding Bonds.

City of Lakewood (OH)

Mr. Kreps served as Project Manager on a comprehensive water and sewer rate study for the City of Lakewood, Ohio (City). The City was facing multiple challenges in developing its financial plan including, for example, declining consumption, rising costs, and significant capital needs related to its Long-Term Combined Sewer Overflow Control (LTCSO) Plan. Mr. Kreps assisted the City in evaluating the revenue sufficiency and cost equity of its rate structure for providing water and sewer services. The focus of the analysis involved the development of a financial plan that fully supported system operations and maintenance, asset reinvestment, debt service, and debt service coverage requirements. Mr. Kreps developed recommendations that provided a projection of utility rate adjustments necessary to meet forecasted revenue requirements over a five-year planning period. For planning purposes, a long-term, 20-year forecast was also developed to assess, in particular, the potential impacts of the City LTCSO Plan, with specific emphasis on measuring rate affordability.

Bowling Green Municipal Utilities (KY)

Mr. Kreps served as Project Manager on a water and wastewater rate and cost of service study for the Bowling Green Municipal Utilities (BGMU). BGMU was seeking a comprehensive analysis of the existing and projected cost basis of utility operations and an evaluation of the appropriateness of its existing rate structure for providing water and sewer services. BGMU is facing significant capital expenditures related to asset repair and replacement and system improvements to address aging infrastructure and to meet regulatory requirements. Mr. Kreps developed a rate and financial planning model to provide a forecast of rates, revenues, expenses, debt service, debt service coverage, and reserves over a 5-year forecast period. The rate model included specific metrics for tracking reserves to increase liquidity, mitigate operational risk, and enhance the credit profile of the utility.

City of Cookeville (TN)

Mr. Kreps served as Project Manager on a water and wastewater rate and financial planning study for the City of Cookeville, Tennessee. The study was designed to address a number of financial and pricing objectives including, in particular, recommendations for cost justified water and wastewater rates that fully support system operations and maintenance, asset repair and replacement, debt service, and debt service coverage requirements. Additional recommendations were also provided related to water and wastewater capacity charges that support growth related projects to ensure that new customers are making an equitable contribution toward the capital investment in the capacity to accommodate growth. Mr. Kreps also developed a rate and financial planning model to forecast annual revenue requirements and rates over a five-year planning period.

City of Newport News (VA)

Mr. Kreps served as Lead Consultant on a financial feasibility evaluation for the City of Newport News Department of Public Utilities, Waterworks Division (Waterworks) related to the proposed issuance of revenue bonds in 2007. Waterworks, in partnership with other Virginia Peninsula localities, was seeking capital market funds to develop and implement a long-term solution to the area's water supply needs. The most significant project in the capital plan was the development of a new 12.0 billion gallon off stream reservoir and pumping station on the Mattaponi River in King William County, Virginia. Our analysis included a forecast of revenues, expenses, and debt service over a five-year period, to ensure compliance with all bond covenants and debt service coverage requirements.

RFC also assisted Waterworks with defining appropriate and effective financial policies to mitigate operational risk, ensure adequate reserves, and improve the credit profile of the utility. Recommendations were provided for specific categories of reserves including rate stabilization funds, operating reserves and capital reserves, among others. Specific metrics were identified that defined target fund levels that balanced risk mitigation and funding requirements with the potential impact on rates and charges. RFC is currently assisting the City with various financial and rate setting services on an on-call basis.

City of Dover (NH)

Mr. Kreps provided assistance to the City of Dover, New Hampshire (City), to assess the implications of alternative approaches for addressing the City's stormwater management needs. Mr. Kreps managed multiple tasks involving the financial, rate, and billing implications of establishing a separate enterprise fund for a stormwater utility. The City, which currently funds stormwater costs through its General Fund, was interested in options for developing a user-based system of stormwater charges to provide a more reliable source of revenue. Mr. Kreps identified and evaluated alternative approaches for designing stormwater rates including, in particular, fee structures based on impervious area only, impervious area plus gross area, and intensity of development. The impervious area only-based charge was identified as the most equitable methodology assigning responsibility for stormwater costs. Study recommendations were approved by a Steering Committee and was presented to City Council in January of 2011.

City of Richmond (VA)

Mr. Kreps managed the development of a comprehensive rate and financial planning model (Model) for the City of Richmond Department of Public Utilities (DPU). The Model incorporates all utility systems: water, wastewater, natural gas, street lighting, and stormwater. DPU currently uses the Model to set rates, determine optimal capital financing scenarios, and report on utility system financial conditions. The financial planning output from includes a projection of units of service (customer accounts and usage), operating expenses and capital expenditures, as well as a projection of net revenues available for debt service and debt service coverage. The Model provides the flexibility to evaluate the impacts of various capital funding sources including revenue bonds, general obligation bonds, Virginia Resource Authority (VRA) loans, and grants.

City of Alcoa (TN)

Mr. Kreps has served as manager on multiple engagements with the City of Alcoa, Tennessee (City). In 2008, RFC developed a wholesale water exchange rate for an emergency connection between the City and the City of Maryville, Tennessee, as well as a wholesale water rate for the service provided to the Tuckaleechee Utility District. In 2010, RFC was engaged to conduct a comprehensive rate and financial planning study covering both the water and wastewater utilities. The City was seeking financing from the Tennessee Drinking Water Revolving Loan Program to fund a new finished water storage facility. The State requested that the City conduct a rate study prior to awarding the funding source, to ensure the City's rates were sufficient to maintain a positive change in net assets, which is a requirement of the Tennessee Utility Management Review Board.

Other Relevant Project Experience

City of Alcoa (TN) – Wholesale Water Rate Analysis

Berkeley County (SC) – Development Impact Fee Study, Industrial Water and Sewer Rate Study, and Industrial Rate Update

Bowling Green (KY) – Water and Wastewater Rate Study

City of Buffalo (NY) – Water Cost of Service Study

Borough of Carlisle (PA) – Water and Wastewater Rate Study

City of Concord (NC) – Wholesale Wheeling Charge Study

City of Cookeville (TN) – Water and Wastewater Rate Study, Capacity Fee, and Wholesale Rate Study

Clark County (OH) – Water and Wastewater Rate Study

D.C. Water (DC) – Water and Wastewater Cost of Service Study

District of Sooke (British Columbia) – Contract Operations Review

Durham County (NC) – Bond Feasibility Study and Rate Model Update

City of Durham (NC) – Water Conservation Rate Study

Erie County (NY) – Wastewater Utility Consolidation Study

City of Florence (SC) – Capital Planning Analysis

Franklin County (OH) – Rate, Financial Planning and Organizational Management

Gloucester County (VA) – Water and Wastewater Organizational Assessment

Hallsdale-Powell Utility District (TN) – Water and Wastewater Rate Study

Hardin County Water District #1 (KY) – Water and Wastewater Rate Study and PSC Filing
City of Johnson City (TN) – Water and Wastewater Rate Study (Retail and Wholesale) and Rate Model Updates
City of Kinston (NC) – Water and Wastewater Rate Study
City of Lakewood (OH) – Water and Wastewater Rate Study
Laurens County (SC) – Water and Wastewater Rate Study
City of Manassas (VA) – Water and Wastewater Valuation
City of Maryville (TN) – Wholesale Water Rate Analysis
City of Myrtle Beach (SC) – Water and Wastewater Rate Study
City of Newport News (VA) – Bond Feasibility Study
Northeast Ohio Sewer District (OH) – Wastewater Rate Analysis and Stormwater Rate Study
City of Oxford (NC) – Rate Study and Model Update
City of Peoria (AZ) - Water and Wastewater Rate and Impact Fee Study
City of Phoenix (AZ) - Organizational Management Study
Pima County (AZ) – Wastewater Planning and Rate Study and CIP Analysis
City of Richmond (VA) – Water, Wastewater, Gas, Electric, and Stormwater Rate and Financial Planning Model
Rivanna Water and Sewer Authority (VA) – Wholesale Rate Review
City of Rock Hill (SC) - Development Fee Study and Wholesale Rate Study
San Diego County Water Authority (CA) – Wholesale Wheeling Charge Study
Sewanee Utility District (TN) – Water and Wastewater Rate Study and Developer Charge Study
Stanly County (NC) – Water and Wastewater Rate Study
United States Navy – Privatization Procurement
Watauga River Regional Water Authority (TN) – Regionalization Study
Water and Sewer Authority of Cabarrus County (NC) – Water Consolidation Study
Webb Creek Utility District (TN) – Water and Wastewater Rate Study
White House Utility District (TN) – Water and Wastewater Rate Study (Retail and Wholesale)
City of Wilmington (DE) – Litigation Support
York County (SC) – Wholesale Wheeling Charge Study

Speaking Engagements

“2006 Water and Wastewater Rate Survey Results and Industry Trends”: Tennessee/Kentucky AWWA Annual Conference, 2006; Virginia AWWA Annual Conference, 2006
“Financing and Prioritizing Your Utility’s Capital Needs”: Tennessee/Kentucky AWWA Annual Conference, 2008
“Are Your Rates Affordable?”: WEF Webcast – Managing Rates and Charges in Challenging Economic Times, 2009
“Pima County Regional Optimization Financial Plan”: WESTCAS Fall Conference, 2009
“Securing Financing in Challenging Economic Times – Case Study: Town of Oak Island, NC”: North Carolina AWWA Annual Conference, 2009
“Quantify Risk in Project Procurement”: Utility Management Conference, 2010.
“Creative Financial Strategies for Virginia Utilities”: AWWA/WEF Webcast, 2011.

"Rates 101: Basic Fundamentals of Financial Planning and Rate Setting": Virginia Rural Water Association Annual Conference, 2012.

"Strategies for Financing a \$3.0 Billion Long-Term CSO Control Plan": Utility Management Conference, 2012.

"Fixed vs. Variable Charges: Finding a Balance: VA AWWA | WEA Webcast, 2013; WEF Webcast, 2013

"Addressing Affordability Challenges With Data Driven Management" Water Finance Conference, 2015

Publications

Municipal Advisor Registration: What You Need to Know. AWWA Journal, March 2013

"Evaluating Risk in Capital Planning, Financing, and Rate Setting," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape.*

BEFORE THE
PHILADELPHIA WATER, SEWER AND STORMWATER RATE BOARD

Re Application of the Philadelphia Water Department for Increased Rates and Related Charges	Fiscal Years 2017-2018
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DIRECT TESTIMONY OF HENRIETTA H. P. LOCKLEAR

Q. PLEASE STATE YOUR NAME AND BUSINESS AFFILIATION.

A. Henrietta Locklear, Senior Manager at Raftelis Financial Consultants, Inc.

Q. PLEASE PROVIDE SOME BACKGROUND ON RAFTELIS FINANCIAL CONSULTANTS.

A. Raftelis Financial Consultants (RFC) is a subchapter S Corporation incorporated in the State of North Carolina. RFC was established in 1993 by George A. Raftelis to provide national financial and management consulting services of the highest quality to public and private sector clients, but primarily in the municipal water, sewer, and storm water utility sectors. Since that time RFC has grown to be one of the largest such firm in the nation employing over 50 financial and management consulting professionals and assisting over 500 utilities. RFC is a registered municipal advisor with the Municipal Standards Rulemaking Board and the Securities and Exchange Commission.

Q. WHAT IS THE NATURE OF YOUR PROJECT RESPONSIBILITIES?

A. I am a senior manager with the firm, responsible for project management and oversight of production of project deliverables and production of deliverables.

Q. WOULD YOU PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE?

A. I am a graduate of the University of North Carolina at Chapel Hill with a Bachelor of Arts in Political Science and a Masters of Public Administration.

In 2004, I joined amec (now Amec Foster Wheeler), in its Nashville, TN office and in 2006 transferred to its Raleigh, NC office. While at amec, I served in positions of increasing responsibility from public relations coordinator up to project manager. I was involved in a wide variety of water resources projects including water quality permit compliance, regulations development, floodplain mapping and stormwater finance. As a project manager and supervisor I managed multi-million dollar projects and a team of stormwater finance and Geographic Information System (GIS) specialists.

In 2011, I joined Raftelis Financial Consultants, Inc. (RFC). At RFC, I have been involved in many financial and management consulting engagements for water, sewer, and storm water utilities. I have served in increasing levels of responsibility within the firm moving from senior consultant to manager and now, in my present position as a senior manager.

Exhibit HL-1 provides more detail on some of my past experience.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of this testimony is to describe our work with the Philadelphia Water Department and Water Revenue Bureau, convey the findings of the management audit and communicate the cost of service reports that were developed as a part of that effort. The project report, summary digest for the cost of service reports and cost of service reports are attached as Exhibit HL-2..

Q. WOULD YOU PLEASE DESCRIBE THE TIMELINE FOR THE AUDIT AND THE PROCESS YOU FOLLOWED TO COMPLETE THE AUDIT?

A. The bulk of activities related to the audit took place from March 2014 to September 2015. In summary, RFC conducted over 100 interviews of City staff, Basis2 support staff, and knowledgeable individuals at peer utilities. RFC spent the first approximately 6 months performing interviews and field observations of dozens of customer service processes and mapping those processes for which diagramming was helpful. During this period and beyond, we performed testing on Basis2 to assess data integrity and quality, efficacy of reports produced and related matters. These tests resulted in preliminary recommendations regarding Basis2 management reporting.

Beginning in March 2015, we began implementing these recommendations and developing cost of service reports for fiscal year 2014. These were completed in June 2015.

We communicated with City staff and the Public Advocate at least every few months and notified the City immediately upon development of a recommendation that could be immediately impactful.

A draft final report was delivered to the City in December 2015 and is attached to this testimony.

Q. WOULD YOU BRIEFLY DESCRIBE THE AREAS THAT YOU ASSESSED DURING THE AUDIT?

A. The audit focused on the areas of (1) Management Reporting and Basis2 and (2) Customer Service, Credit, and Collections Processes. The first area comprised a functional assessment of the Basis2 billing system as both a reliable repository for water consumption, billing, and account information and a tool for customer service as well as for reporting data that are integral to ratemaking and management decisions. RFC and our subcontractor, Miitek, performed numerous tests to assess the integrity of the data and the functionality of the database itself. We also assessed the personnel resources devoted to the system relative to those of other utility billing systems and industry standards.

The second area focused on assessment and benchmarking of customer service processes around payment receipts, credit application review, collections efforts, and account management. These processes were reviewed with an eye toward efficiency, timeliness, and customer service outcome.

Q. WOULD YOU PLEASE SUMMARIZE THE MAJOR FINDINGS OF THE AUDIT?

A. The major finding of the first part of the management audit, (1) Management Reporting and Basis2 is that Basis2 is in line with industry standard billing systems and does not have essential data integrity issues. Basis2 does not need to be replaced immediately but improvements should be implemented to improve its longevity and efficacy. Staff resources are below what would be needed for optimal system performance.

The major findings of the second part of the management audit, (2) Customer Service, Credit, and Collections Processes include the fact that in the customer service functions of WRB and the Revenue Department we examined, there are a number of redundant processes where people or systems manage parts of the processes that have already been nearly or completely done by others. In addition to the computer-based systems redundancies, WRB has an almost entirely duplicated paper-based process. Nearly all incoming and outgoing customer communication is paper-based, and this information is all either entered into or reported from one of the many databases or electronic systems in use. In terms of customer assistance applications, the City does not have a robust application log and tracking system, making it difficult both to ensure compliance to internal deadlines as well as to respond to customer inquiries.

From the survey of 14 peer utilities, we found that:

- Compared to other utilities serving Philadelphia, PWD/WRB is in the typical range for delinquencies, turnoffs and reconnections. PWD has the highest reconnection percentage (turnoffs turned back on) of the three.
- PWD/WRB has the second longest turnoff cycle of utilities surveyed, which appears to be related to high delinquency rates.
- PWD/WRB has a high reconnection percentage.
- PWD/WRB has the second longest moratorium period of the utilities surveyed. Long moratoriums appear to be related to higher receivable levels and high delinquency levels.
- PWD/WRB is toward the high end of, but still within, the typical range on unit billing and collection costs. It is also within the typical range on cashing costs.
- PWD/WRB is within the typical range on delinquency rates.
- PWD/WRB has a high number of customers whose service cannot be shut off due to medical necessity, as defined by each individual program (Medical-Do Not Shutoff) when compared with most other benchmark utilities. However, the other two local utilities show similar numbers of these customers.
- Most utilities have Customer Assistance Programs (CAP) and most utilities have CAP managed by another group, such as a social service agency.
- In many other respects, the City is not markedly different than its peers. It has a well-organized and well-executed collections program and a good working relationship with third party collection agencies.

Q. WOULD YOU PLEASE SUMMARIZE THE MAJOR CONCLUSIONS OF THE AUDIT?

A. The major conclusion of the (1) Management Reporting and Basis2 portion of the audit is that Basis2 does not need to be replaced immediately but functionality could be improved through careful tweaks to database architecture and the devotion of increased resources. Specifically, the City should increase resources devoted to billing system maintenance, including hiring a fulltime database administrator (DBA) and additional business analytics and quality assurance support staff.

We also concluded that reducing or eliminating redundancies would improve efficiency and improve customer satisfaction, and that implementation of a digital method for customers to interact with and communicate with the City could reduce paper copy duplication. Developing such an electronic system, or utilizing available features in the existing applications, could greatly ease these efforts and improve WRB's ability to complete processing in a timely manner.

Additionally, a workflow management system outside of Basis2 would ease the burden on Basis2.

Q. COULD YOU SUMMARIZE THE MAJOR RECOMMENDATIONS OF THE AUDIT?

A. Basis2 does not need to be replaced immediately, but efforts to transform it into an optimally functioning system should be undertaken. In particular, projects that are already high priority for WRB should be completed in order to ensure that Basis2 continues to be able to function at the highest level possible. A plan for achieving these improvements includes hiring or allocating a fulltime database administrator (DBA) and new business analyst and quality assurance support staff. To determine when a transition to a new billing system is appropriate, we recommend convening a decision-making group – including an array of stakeholders, users, and support staff – now, and meeting regularly (maybe twice a year, to start) to provide a living assessment of Basis2.

We recommend a reconciliation framework to reduce miscommunication around Basis2 when it is being used by multiple agencies. We also offer a number of recommendations for closing reporting gaps, producing cost of service reports and improving management reports. We support the efforts of WRB to upgrade the functionality of Basis2 to remove the need for a separate WRAP database.

To support and improve customer service functions, we recommend that the City implement a digital method for customers to interact with and communicate with the City. A simple way to achieve this is to develop an online WRAP application interface. We recommend implementation of a workflow management system and an electronic management system to better manage files and information being transferred among individuals, units, and departments.

We suggest that PWD/WRB adopt Public Utility Code Chapter 14 delinquency report formats to facilitate comparisons against other Philadelphia utilities and provide improved insight into delinquencies for both management and stakeholders. To remedy delinquency-related issues, we recommend the City investigate shortening the turnoff timeline to reduce delinquency levels as well as alternative temperature-based moratorium criteria (as other utilities have done) which protect Philadelphia citizens during cold weather but would shorten moratorium period in most years.

Q. AS A PART OF THE MANAGEMENT AUDIT, DID YOU ALSO DEVELOP REPORTS TO SUPPORT COST OF SERVICE DEVELOPMENT?

A. Yes four primary reports were developed for use in the rate study: 1. Service Usage and Billing; 2. Water Usage and Billing; 3. Revenue Collection Factors; and 4. Payment Patterns..

Q. COULD YOU DESCRIBE THE REQUIREMENTS FOR THESE REPORTS?

A. The requirements for the cost of service study reports were set forth by Black & Veatch (B&V). Black & Veatch detailed needs for the cost of service study reports including the source, contents, constraints, timeframes, and format to be employed in each report. B&V's direction was sufficiently detailed to determine the bounding constraints for the data for each report given a number of variables known to the rate consultant such as service type, customer type, installation type, etc. B&V did not go so far as to specify the exact data tables to be used in the Basis2 customer information system, but the contents and constraints did indicate the types of information needed from Basis2 to fulfill the requirements. Additional face to face meetings and

teleconferences further established and refined the requirements when the rate consultant could see what was available from Basis2

Q. COULD YOU DESCRIBE THE PROCESS FOR DEVELOPING THESE REPORTS?

A. Technical requirements were initially established for each report based upon the direction from B&V previously described. The data tables underlying Basis2 were examined in detail during the management audit, so we had an understanding of what data elements were available in Basis2 and where those elements could be found. Code was developed to query and format the reports based upon team knowledge of the Basis2 system as well as comprehensive explanations provided to the project team by key WRB staff members involved in the day to day operation of Basis2. Each report was developed over multiple iterations where the rate consultant and staff from WRB were consulted to discuss and refine results. A sufficient number of iterations were completed once the report results were deemed to meet the requirements set forth by the rate consultant.

Q. COULD YOU SUMMARIZE THE RESULTS OF THE REPORTS?

A. Four primary reports were developed by the project team for use in the rate study. The first report highlighted service usage and billings across the service area in aggregate by customer type, service type, and meter size. This report provides three fiscal years' worth of historical information on water, wastewater, and stormwater charges and usage at varying levels of detail. The second report used in the rate study provided water usage and billings broken into the four tiers currently employed in the water rate structure. Each of these tiers was provided by customer type and provided information for a single fiscal year. The third report contains information on revenue collection factors as determined via billing and collection data from Basis2. Three fiscal years' worth of data are provided and a number of different collection factor metrics are provided given how data are stored and recorded in Basis2. The fourth report contained information on the payment patterns of each customer type. This report contained three fiscal years' worth of historical data and showed how many days to payment from each bill received by a customer.

Q. COULD YOU DESCRIBE IMPORTANT DIFFERENCES BETWEEN THE WAY THAT THE DIFFERENT REPORTS ARE DERIVED AND THE REASONS WHY THEY ARE DERIVED THIS WAY?

A. Depending upon the stated requirement of the report, the contents and constraints could have been developed based upon different tables within the basis2 database structure. For example, water consumption information was only available in the "debit lines" table whereas information on whether a transaction had later been reversed was only available in the "transactions" table. Due to the fact that certain tables only had data relating to one theme (i.e. one table for billings, one table for payments), each report had to be coded to reference and limit data based upon the stated need. Three of the four reports were developed to reference historical extract information on customer types and service types to attempt to access the clearest picture of those data attributes back in time. The project team endeavored to use the same bounding conditions in all reports where possible so that revenue and usage information would align. Alignment and reconciliation of usage and billing data were performed between the reports and satisfactory results were achieved as measured by B&V, PWD staff, and our team.

Q. DOES THIS CONCLUDE YOUR PREPARED DIRECT TESTIMONY?

A. Yes, it does.

Henrietta Locklear
1001 Winstead Drive, Suite 355
Cary, NC 27513
Raftelis Financial Consultants, Inc.

Professional History

Raftelis Financial Consultants, Inc.: Senior Manager (2015-present); Manager (2013-2014); Senior Consultant (2011-2012)

AMEC: Team Leader and Project Manager (Morrisville, NC) 2009-2011; Supervisor and Project Manager (Raleigh, NC) 2008-2009; Project Manager (Raleigh, NC) 2006-2008; Public Affairs Coordinator (Nashville, TN), 2004-2006

Wake County Government: Planning Technician (Department of Environmental Services) (2003-2004); Intern (Manager's Office) (2003)

School of Government at the University of North Carolina at Chapel Hill: Research Assistant (2004)

Education

Master of Public Administration -- University of North Carolina at Chapel Hill (2004); Deil S. Wright Award for Outstanding Capstone Paper

Bachelor of Arts in Political Science, University of North Carolina at Chapel Hill (2002); Phi Beta Kappa; Order of the Golden Fleece

Professional Memberships

Water Environment Federation

Profile

Ms. Locklear has 11 years of experience in local government finance and stormwater management. She specializes in working with local government staff, stakeholders, and elected officials to identify solutions and implement programs to meet environmental and public health challenges. Ms. Locklear is experienced in governmental financial analysis and planning, particularly in stormwater utility implementation and rate studies. She is also experienced in all aspects of utility implementation, with particular focus on policy analysis and development, and data and billing system implementation. She has studied fee credit programs and served as project lead on credit program development for several large stormwater utilities. She was a member of the working group that developed the certification test for APWA's Stormwater Manager Certification. She is also a reviewer for the Water Environment Federation's Special Publication titled *User-Fee-Funded Stormwater Programs, 2nd Edition*. In addition, Ms. Locklear co-authored two chapters in the industry guidebook *Water and Wastewater Finance and Pricing: The Changing Landscape*, which are entitled, "Public Outreach and Gaining Stakeholder Commitment," and "Expanding Financing and Pricing Concepts into Stormwater." Ms. Locklear has a wealth of experience with public input processes. On a variety of projects, she has developed and facilitated public stakeholder processes, outreach strategies, and education campaigns for programs ranging from stormwater utilities and NPDES compliance efforts to brownfields, on-site wastewater, and hazard mitigation programs. Her strengths include policy analysis and development; research methods, including survey development and administration; data analysis; local government finance; stakeholder facilitation; and strong written and oral communication skills.

Project Experience**Philadelphia Water Department (PA)**

Ms. Locklear is assistant project manager for a management study of the utility's meter-to-cash operation. She oversees the review of customer service and billing processes as well as a detailed analysis of the utility's billing system. She is also assistant project manager for RFC's multi-year engagement with the Department to provide financial consulting services.

City of Baltimore (MD)

Ms. Locklear served as one of the project leads for a complex and fast-paced project to implement a stormwater fee for the Bureau of Water and Wastewater with the City of Baltimore. She was the architect of the project approach covering all aspects of required elements for implementation. The City sent its first stormwater bills in October of 2013 and Ms. Locklear has continued to assist the City with customer service, billing system and policy topics to the present.

Pinellas County (FL)

Ms. Locklear led the development of the business case for Advanced Metering Infrastructure (AMI), monthly billing, and rate structure changes. Pinellas County (County), located in the Tampa-St. Petersburg area of Florida, provides potable water, wastewater, and reclaimed water service throughout its utility service area. The County engaged RFC in January 2014 to conduct a comprehensive utility business and rate sustainability analysis to provide a comprehensive road map for the County utility over the next decade in terms of customer service, technology, rate structure, and sustainability. The business case initiatives include evaluation of the billing cycle (currently bi-monthly), the potential for automating the meter reading process, and other technology and process improvements. Another part of the project, focused on rate sustainability, included development of a comprehensive 10-year financial forecast and evaluation of existing rate structures for equity, revenue sufficiency, and long-term sustainability.

Based on the need for a comprehensive analysis of the factors involved in changing the utility's business model, Ms. Locklear lead workshops to define over 80 cost variables involved in the transitions. The results of the workshop were rolled into a detailed, flexible model that allowed for a variety of scenarios (from conservative to not conservative) to be modeled for seven business case scenarios and the best, worst, and expected costs and benefits for each. The model provides a 20-year net present value to the utility for each case. Ms. Locklear vetted the model with staff, employing collaborative work with stakeholders throughout the business case development. The results were explicated in a detailed report in late 2014 and presented to the core group and the County management team. The report, including the long-term road map for utility enhancements and rate recommendations, was finalized in early 2015 and presented to the Board of County Commissioners.

Granville-Person Cooperative Stormwater Services (NC)

Ms. Locklear served as project manager for implementation of an innovative multi-jurisdictional utility in a group of jurisdictions affected by nutrient-sensitive waters rules. The three municipalities and two counties that make up the collaborative group differ in population, population density, land use/land cover, and current and planned level of service provision. The project thus involved complex policy development around rate structure, organizational structure, and other issues.

In addition, Ms. Locklear now serves as the Stormwater Utility Services Manager for the group of jurisdictions to assist with coordination and regulatory compliance. Here duties included assisting the local governments with compliance for the Falls Watershed nutrient management strategy rules. She has served as the manager since 2013.

County of San Diego (CA)

Ms. Locklear is project manager for a study of the County's funding strategies to meet new, stringent regulatory requirements for stormwater. The study includes analysis of an array of options including county-only and regional funding alternatives that would include the jurisdictions within the County, co-permittees under a single water quality permit. The study involves coordination with the co-permittees as well as extensive data analysis, development of a financial model and implementation plan for the recommended strategy.

City of Sacramento (CA)

RFC was engaged by the City to develop rate structure alternatives for the City's water, wastewater, and stormwater drainage rate structures. Ms. Locklear oversaw the development of the stormwater drainage rate structure alternatives and modeling, including more than five alternatives. She oversaw the development of the potential rates from each and for modeling the City's favored rate structure alternative. RFC's findings were compiled in a report, and Ms.

Henrietta Locklear
RFC

Locklear contributed to presentations to stakeholders and staff throughout the project on the storm drainage fee alternatives.

City of Richmond (VA)

Since 2007, RFC has been engaged by the Department of Public Utilities (DPU) as its financial and rate consultant. Ms. Locklear lead the review of a potential stormwater fee structure change under the City's consideration. Since the rate structure posed issues of public acceptance as proposed, Ms. Locklear developed additional, more palatable alternatives for the City's consideration. The analysis involved a detailed impacts analysis for customers. Ms. Locklear assisted with presentations to staff on the alternatives, the selected alternative and the potential rates for the current stormwater financial plan.

Ms. Locklear is leading an assessment of reporting capabilities, gaps, and needs for DPU. The goal of the assessment and RFC recommendations is to enable staff to streamline reporting and facilitate strategic activities within the Department. The assessment is ongoing.

Adams County (CO)

Ms. Locklear managed an engagement with Adams County to complete a Stormwater Utility Credit Study, of which the outcome was to develop guidelines, policies, and procedures for offering utility fee credits to customers in the Adams County Stormwater Utility. The team completed a preliminary review of the stormwater program and utility documentation, financial materials, billing data, and the Stormwater Management Task Force meeting materials and minutes. Following this review, Ms. Locklear visited sites around the utility service area that were representative of existing stormwater management or special drainage conditions. Ms. Locklear summary of these site visits and an overview of available credit types were presented to utility staff and the County board along with the preliminary RFC recommended program structure. Ms. Locklear used program costs and other data to determine maximum available credits and estimate the revenue impacts of implementing the program. RFC recommended that the utility implement a limited credit program, focused primarily on incentivizing treatment practices that result in improved water quality or reduced peak flow or runoff volume. Recommendations were based on analyses of the utility's costs and a determination of which costs have the potential to be reduced through customers' stormwater treatment or activities, and which costs could not be further reduced through these means. Finally, Ms. Locklear estimated the potential revenue impact of implementing the recommended credit program.

City of Charlotte (NC)

RFC's most recent engagement, with the City of Charlotte, has been to assess the City's program including comparing the program with those of other utilities nationwide. Ms. Locklear lead the assessment, which included reviews of program policies and finance, including funding methodology. One focus of the assessment was on the City's Maintenance and Repair program which is the portion of the City's capital improvement program that resolves drainage complaints from citizens. The program has a large backlog of projects and the City sought to analyze the program and the best solution to resolve the backlog, including potential level of service, policy and funding changes. As a part of the study, RFC performed analysis of debt funding options over 10-year and 20-year planning horizons as one option to increase investment to meet capital needs. RFC provided the broad assessment of the program's health, identified chief challenges for the future and recommended strategies to meet those challenges. RFC provided presentations to Council and to the program's citizen stakeholder committee on the study and results.

City of Raleigh Public Utilities Department (NC)

In March 2012, the City of Raleigh contracted RFC to conduct a comprehensive organizational analysis and development study for the City's Public Utility Department within a 20-week time frame. For several years, the City has been discussing whether to relocate its stormwater utility from the Public Works Department to the Public Utilities Department. The move could have far-reaching effects on the relationship between stormwater and transportation, the efficiency of planning, design and engineering activities, regulatory compliance, and customer service management. Ms. Locklear is one of the project leads on the RFC team. With extensive knowledge of and experience in the field of surface water management, the RFC team was asked to compile, measure, and analyze the costs and benefits of relocating the utility. As this data would inevitably be presented in both qualitative and

Henrietta Locklear
RFC

quantitative formats, RFC conducted both types of analysis to arrive at its recommendation. Finally, RFC has reported its findings to the leadership of Public Utilities, Public Works, and the City of Raleigh.

In addition, Ms. Locklear is currently serving as Project Manager for on-call stormwater services contract. In this position, she serves as lead for tasks including benchmarking study of the City's program.

Northeast Ohio Regional Sewer District (OH)

Ms. Locklear assisted in the Data Track of the project to develop a user fee to support Northeast Ohio Regional Sewer District's (NEORS) stormwater management program. Once implemented, the stormwater management program will serve 61 municipalities and two counties that are part of NEORS's service area. She developed policy documentation for the utility's data management. Ms. Locklear also assisted in a variety of tasks to support the development of a user fee to support the NEORS's stormwater management program. She has performed policy analysis and documentation and data analysis to support program implementation and billing and data development. She also supervised additional documentation and analysis and peer reviewed project deliverables. As Project Manager, Ms. Locklear has overseen project management for NEORS, reviewing charges, invoicing, and subcontractor invoicing in compliance with NEORS standard procedures. She managed both data development and data quality control tasks as supervisor of the data and policy analysts performing tasks such as parcel aggregation and database development.

Ms. Locklear is currently serving as Assistant Project Manager for the billing implementation phase of this project. In this capacity, she has led policy review and development and prepared and reviewed deliverables.

City of Dallas (TX)

Ms. Locklear is serving as Assistant Project Manager for the study and implementation of a stormwater rate structure change for the City of Dallas (City). The City implemented a stormwater fee in 1991 that generates about \$49 million annually. The rate structure change represents a significant effort on the part of the City to assure the financial stability of its Storm Drainage Fund, recover costs more equitably from its ratepayers, and to do both in a transparent fashion. If implemented, the updated rate structure embodies a considerable change, not only for ratepayers receiving changed bills, but also for the City's business processes for billing and account maintenance. RFC is tasked with determining the stormwater cost of service and developing the stormwater financial plan. RFC will also be updating available impervious area data and evaluating potential rate structures. We will be performing an account review and evaluating the impacts upon customers of a rate structure change. In addition we will evaluate the billing mechanism and perform account to parcel matching. RFC will assist the City with necessary rate ordinance changes and with public outreach around the rate structure changes. RFC will be assisted by subcontractors K Bealer, Pacheco Koch Consulting Engineers, and Ware and Associates.

Town of Kernersville (NC)

Ms. Locklear served as Project Manager for the development of a strategic plan for the Town's stormwater program. The plan development involved a series of workshops with staff throughout the Town that touch the stormwater program and the development of a comprehensive plan to drive the program over the next five years. Her team is currently conducting a review of the Town's stormwater billing data and providing recommendations on bringing the data up to date. Previously, Ms. Locklear led a project to review the Town's stormwater program. She conducted interviews of stormwater, public services, and Town administrative staff to document stormwater program details. She then analyzed the program for compliance with NPDES requirements and is in the process of compiling results. The project also involved developing a written procedure for the annual stormwater billing update for the fees, which are conveyed on Guilford and Forsyth Counties' tax bills.

City of Tacoma (WA)

Ms. Locklear served as Technical Reviewer of the stormwater cost allocation study as part of a water, wastewater, and surface water rate study. In this role, she provided guidance on cost allocation methodology.

Henrietta Locklear
RFC

Town of Mooresville (NC)

Ms. Locklear served as Project Lead for a feasibility study for the Town of Mooresville. Tasks included development of stormwater program existing and future costs, including staffing, hourly equipment costs, and capital program costs. She assisted with development of rate base estimate and fee estimations. She developed stakeholder process meeting materials and presentations, and led stakeholder meetings.

City of Charlotte and Mecklenburg County (NC)

Ms. Locklear serves as Project Manager for strategic planning in support of business process improvements for all business processes that relate to stormwater utility billing, collections, database maintenance, and customer service. The outcomes from this project will support improvements in the connectivity between the third-party billing vendor and the stormwater utility and among the departments serving stormwater customers.

In addition, Ms. Locklear served as Project Manager for the analysis of residential rate structures and crediting options for this well-established stormwater utility. She developed options and analyzed rate implications and pros and cons of various options. She also presented initial options to the Storm Water Advisory Committee (SWAC), responded to comments, presented revised options to SWAC, and developed handout materials for SWAC and final report for staff.

Philadelphia Water Department (PA)

Ms. Locklear served as project key lead for a study assessing potential changes to PWD's stormwater fee rate structure, credits regulations, and green infrastructure incentives. The project involved a detailed assessment of the Department's then current rate structure and program, a national credit and incentives study of comparable utilities, as well as an intensive stakeholder input process. Ms. Locklear led the national credits study and coordinated the stakeholder process, including policy development and assessment. Ms. Locklear also oversaw data analysis inputs into the stakeholder process.

Town of Butner (NC)

Ms. Locklear served as Project Manager for a stormwater management program development project for the Town of Butner (Town). The Town is subject to both NPDES Phase II rules and the recently mandated Falls Lake Nutrient Management Strategy, which is considered to be one of the strictest set of nutrient management rules in North Carolina. Ms. Locklear developed a five-year stormwater program plan, prepared the Town's NPDES Phase II permit application, and assisted in presentation of each of these to Town Council for approval. As part of the project, Ms. Locklear developed planning level costs for the program and then assessed options for funding the program plan. The Town is currently weighing these options.

Tri-Cities (TN) (Bristol, Elizabethton, and Johnson City/East Tennessee State University)

Ms. Locklear co-authored Notices of Intent for renewal of MS4 NPDES Phase II permits for three northeast Tennessee cities, one of which was a co-permitted application with East Tennessee State University. To complete the NOIs, Ms. Locklear reviewed current programs with each of the permittees, consulted with the regulator on acceptable BMPs, developed best management practices and measurable goals for each permittee, and developed Public Information and Education plans (PIE plans) for each permittee. Ms. Locklear also coordinated the co-permitting information and development of BMPs between Johnson City and ETSU, and coordinated the on-time submission of NOIs, submitting one on behalf of a permittee.

City of Wilmington (NC)

As Project Manager for a rate study of a 10-year old stormwater utility in eastern North Carolina, Ms. Locklear developed a program cost of service for the seven-year analysis period as well as a rate model, and performed rate modeling. Issues considered in the cost of service projections and rate model included uncertainties in costs related to regulatory compliance and landfill fee. The utility funds an aggressive capital improvements program and all modeling was performed in compliance with the City's conservative cash management principals and with existing revenue bond covenants. Ms. Locklear drafted the cost of service report and rate study report.

Henrietta Locklear
RFC

Lexington-Fayette Urban County Government (KY)

Ms. Locklear was peer reviewer for the development of a user fee to support LFUCG's stormwater management program including review of policy documentation.

City of Tega Cay (SC)

Ms. Locklear was Project Manager for development and implementation of the stormwater utility for the City of Tega Cay. In this role, she coordinated program review and finalization, crediting process, cost of service analysis, rate structure and rate study reports, rate ordinance and enterprise fund establishment, data development, and public relations assistance. She also served as client manager overseeing annual updates to the billing file for annual stormwater fee billing.

City of Aspen (CO)

Ms. Locklear performed an analysis of current regulations and the degree to which development standards encourage green stormwater practices. In addition, she performed reviews of draft manual chapters.

City of Manchester (NH)

Ms. Locklear was Project Manager for development and implementation of the stormwater utility for the City of Manchester. In this role, she was responsible for reviewing policy papers related to data issues, as well as ensuring timely deliverables and financial control of the project.

Wake County Department of Environmental Services (NC)

As Project Manager, Ms. Locklear was responsible for a multi-faceted project to implement the recommendations of a countywide, multi-jurisdictional stakeholder group that recently completed its work. The project involved several disparate elements: facilitation of a stakeholder group tasked with developing a multi-jurisdictional post-construction ordinance, development of a risk-based methodology for erosion control enforcement, and an innovative pilot basin model that would help the County test development scenarios. In this role, she oversaw the coordination and management of a stakeholder group; conducted research on risk factors for construction site erosion, channel protection methodologies, and other stormwater concerns; conducted interviews with local key stakeholders including stormwater staff, regulators, and members of the real estate community; and supervised modeling schedule, technical review and input, and publicization.

City of Jacksonville (NC)

As Project Manager for year-long management consulting project to assist the City departments, Ms. Locklear was responsible for stormwater compliance activities with organization, scheduling, tracking of activities, and reporting to enable the City to comply with its NPDES phase II permit. The project also included education sessions for Council, assistance with the creation of the City's stormwater ordinance to include construction and post-construction requirements, and coordination with the Unified Development Ordinance revisions process.

Southeast Metro Stormwater Authority (CO)

Ms. Locklear served as Project Manager for a project to identify and describe potential credits and other fee-reducing actions that could be undertaken by the Southeast Metro Stormwater Authority (SEMSWA) stormwater utility in Englewood, CO. This analysis included a qualitative screening of the pros and cons of credits, an examination of the financial implications of adopting credits, a presentation to the Board of SEMSWA about the options, and development of credit application policies and procedures chosen by the Board. Ms. Locklear managed the project, wrote the qualitative and quantitative analyses, and presented to the Board of SEMSWA.

Georgetown County (SC)

Ms. Locklear was Project Manager for development and implementation of a stormwater utility for Georgetown County. In this role, she coordinated the program review and finalization, crediting process, cost of service analysis, rate structure and rate study reports, rate ordinance and enterprise fund establishment, data development, and public relations assistance. In addition, she ensured timely deliverables and financial control of the project and responded to requests for follow-up on work for MS4 program implementation and program management.

Henrietta Locklear
RFC

City of Cartersville (GA)

As Project Manager for the implementation phase of the City's stormwater utility, Ms. Locklear developed a public education and outreach campaign. Her responsibilities included writing public education and outreach plan and carrying out the plan. She created content and oversaw design of public education materials such as brochures, and drafted stakeholder policy papers and meeting presentations. Ms. Locklear coordinated timely delivery of materials and meeting follow-up tasks.

City of Bettendorf (IA)

Ms. Locklear was primary researcher and writer of technical, informational papers for use by staff to present to council on policies and designs of infiltration practices nationwide. Topics were: the use of infiltration practices to reduce required detention volume and utility credits for infiltration practices.

Metro Water Services of Nashville and Davidson County (TN)

As Task Manager on Phase II of revisions, Ms. Locklear's responsibilities included drafting manual revision language and BMP designs and communicating with client and stakeholders on responses to revisions. Train staff and assist Metro with training for development community on new manual. She assisted with Phase I of revisions including facilitation of staff technical review and public stakeholder groups for Metro Water Services, Stormwater Division. Responsibilities included developing policy options for discussion, review, and modification or adoption by stakeholders groups; coordination of group meetings including distribution of meeting materials, facilitating communication among group members, and fielding and addressing group member concerns; addressing policy concerns from multiple agencies including Metro Planning, Public Works, Public Health, Legal and state environmental agencies. In addition, Ms. Locklear revised the stormwater management manual based on stakeholder and staff process.

Knox County (TN)

Ms. Locklear assisted with Stormwater Ordinance and Manual Revisions for the County. Her responsibilities included conducting policy research and development; formulating policy alternatives and recommendations; drafting white papers on policy research and recommendations and drafting stormwater management manual chapters.

Local Government Program Development and Environmental Compliance Assistance

Wake County (NC)

Ms. Locklear served as Project Manager for a follow-on project to implement recommendations made by a stakeholder group facilitated by an earlier project, tasked with developing an action plan for County on-site wastewater program. The project included development of a plan for implementing the recommendations of the stakeholder group, including options for providing public education and outreach, making changes to County on-site wastewater rules, managing data collection on on-site wastewater systems, and developing a financial framework for the plan. Ms. Locklear provided assistance in implementing some of these recommendations, such as drafting rule changes. To assist in implementation of one of the committee's public education recommendations, Ms. Locklear designed brochure templates to be distributed by the County to residents using on-site wastewater systems.

In addition, Ms. Locklear was Project Manager and facilitator for a project to lead a stakeholder group tasked with developing an action plan for the County on-site wastewater program. The year-long process involved identification of needs and issues and development of a plan to meet the needs and issues, and support of budget requests to support the action plan.

Ms. Locklear was also Project Manager and client contact for program and funding study of options for expansion of on-site wastewater management program. The study led to follow-on projects during which Ms. Locklear facilitated a stakeholder group that recommended an expanded on-site wastewater system management program.

Texas Army National Guard, various sites in TX.

Henrietta Locklear
RFC

Ms. Locklear conducted site visits for updating Spill Prevention Control and Countermeasure Plans in compliance with local, state, and federal regulations. Collected and updated information on personnel and facility characteristics through interviews, digital photographs, GPS points (using Trimble unit), inventory of materials, and an examination of the site.

Brownfields Assessment

City of Concord (NC)

Ms. Locklear provided public education assistance to the City in the implementation of its Brownfields Assessment Grant.

City of New Bern (NC)

Ms. Locklear led public education and outreach track for the City including finalization of public input plan, coordination and production of public outreach materials and leading public stakeholder group (Brownfields Steering Committee). In addition, she assisted the City in writing another EPA grant application, for area-wide planning for Brownfields Programs.

Hazard Mitigation and DFIRM

City of St. Augustine (FL)

Ms. Locklear facilitated the outreach project strategy stakeholder group and developed documentation in support of the City's CRS program. Through the project, the City obtained an upgrade in its CRS classification from an 8 to a 7. Ms. Locklear also assists on additional CRS credit activities such as the development of outreach materials.

State of North Carolina, Raleigh (NC)

Ms. Locklear was Project Manager for an innovative project to derive finished floor elevations in five sea level rise risk counties using mobile scanning (terrestrial LiDAR) field data for buildings inside the 0.2% annual chance floodplain and using a statistically-derived algorithm for buildings outside the floodplain. In addition, her team performed quality control field measurements of coastal structures.

In addition, Ms. Locklear was Assistant Project Manager for statewide aerial photography acquisition and orthophotography production for 48 of 100 North Carolina counties. She was responsible for subcontractor management and contracting, client invoicing, scope and budget control.

State of Alabama

Ms. Locklear developed content for user-guided multimedia training CD and web application. Topics included general information on flooding and floodplains, as well as the NFIP, flood studies, map modernization and floodplain management. The intended audiences for the training were local government officials. Media collected and/or created included text, illustrations, animated sequences, sounds and songs, and pictures. Ms. Locklear coordinated creative development of curriculum themes and design.

Other relevant experience

NPDES Phase I or II Permit Implementation Assistance, Various Clients

Ms. Locklear provided program assessment, developed new program component, provided training and carried out public education, involvement and other activities as staff extension.

- Hurlburt Field, Fort Walton Beach, FL
- City of Indianapolis, Indianapolis, IN
- City of Clarksville, Clarksville, TN
- Metropolitan Nashville-Davidson County
- City of Jacksonville, NC

Publications and presentations

- “Facilitating and Tracking Chesapeake Bay Compliance through Stormwater Fee Credits - Baltimore's Innovative Program” Locklear, Henrietta H, Kimberly Grove, Jennifer Fitts. WEFTEC 2015
- “Saving Money Together: A multi-jurisdictional Environmental Compliance Approach in North Carolina” Locklear, Henrietta H, Keith Readling, Jennifer Fitts, Utility Management Conference, February 2014
- “Stormwater Billing: Getting the Best of Both Worlds” Locklear, Henrietta H., Jeff Duke, Keith Readling, Chris McPhee. Stormwater Congress, WEFTEC October 2013
- “Satisficing LID: Local Government Ordinances that Incorporate LID” Locklear, Henrietta H., Annual Conference of the Southeastern Stormwater Association; October 5, 2011.
- “Mobile Scanning to Collect First Floor Elevations for Assessing Coastal Risk” Readling, Keith, Tim Cawood and Henrietta Locklear. The North American Surface Water Quality Conference and Exposition. Ed. Janice Kasperson. Proceedings of StormCon Coastal Protection Symposium 2011. August 23-24, 2011.
- “Trackin’ Mud: Keeping an Eye on the Construction General Permit” Locklear, Henrietta H., Current Issues in Stormwater Regulation. Lorman Educational Services. April 8, 2011.
- “Mobile Scanning to Collect First Floor Elevations for Integrated Hazard Risk Management Projects” Locklear, Henrietta H. and Christopher McPhee, 2010 AMEC Technical Summit, Englewood, CO. September 26, 2010.
- “Satisficing LID: Real Life Experiences with Local Government Ordinances that Incorporate Low Impact Development.” Locklear, Henrietta H.P. and Trina Ozer. The North American Surface Water Quality Conference and Exposition. Ed. Janice Kasperson. Proceedings of StormCon 2010. August 2-5, 2010.
- “Managing Septic Systems to Meet NPDES and Infrastructure Sustainability Goals” NCAPWA Annual Conference and Equipment Show, June 9,2010 – Henrietta Locklear, Keith Readling
- “NPDES and Performance Measurement.” Locklear, Henrietta H.P. and Trina Ozer. The North American Surface Water Quality Conference and Exposition. Ed. Janice Kasperson. Proceedings of StormCon 2009. August 17-20, 2009.
- “Washington State Decision Makes LID Mandatory” Locklear, Henrietta H.P. Stormwater Magazine July/August 2009. <http://www.stormh2o.com/july-august-2009/washington-state-decision.aspx>
- “Wasting Water by Law.” Locklear, Henrietta H.P., Trina Ozer, and Keith Readling. WaterEC, the International Water Efficiency Conference. March 30 – April 2, 2009.
- “Mind the Gap: The National Water Infrastructure Gap and the Local Stormwater Manager.” Henrietta H. P. Locklear. Stormwater Magazine. November/December 2007.
- “Major Trends in Stormwater Utility Fee Credit Programs” Henrietta H. P. Locklear and April M. Barker. Proceedings of Stormcon 2007, The North American Surface Water Quality Conference and Exposition Ed. Janice Kasperson. August 19-23, 2007.
- “National Policy, Local Innovation: Clean Water State Revolving Funds at 20 Years.” Henrietta H. P. Locklear. Stormwater Magazine. October 2007.
- “Preparing for Everyday Threats: A New Landscape in Stormwater Infrastructure Security.” Henrietta H. P. Locklear. Stormwater Magazine. July 2007.
- “What’s all the fuss? News and Views on EPA’s Proposed Water Transfer Rule.” Henrietta H. P. Locklear. Stormwater Magazine. May 2007.
- “Successful Implementation of Riparian Buffer Programs.” Henrietta H Presler. Stormwater Magazine. November/December 2006.
- “Infiltration BMPs: Policies and Design Standards That Permit Detention Volume Reductions.” Henrietta H Presler. Proceedings of Stormcon 2006, The North American Surface Water Quality Conference and Exposition Ed. Janice Kasperson. July 24-27, 2006.
- “Municipal Stormwater System Maintenance: An Assessment of Current Practices and Methodology for Upgrading Programs.” Andrew J. Reese and Henrietta H. Presler. Stormwater Magazine. September/October 2005.
- “Municipal Stormwater System Maintenance: An Assessment of Current Practices and Methodology for Upgrading Programs.” Andrew J. Reese and Henrietta H. Presler. Proceedings of Stormcon 2005, The North American Surface Water Quality Conference and Exposition Ed. Janice Kasperson. July 18-21, 2005.
- “How Public is Too Public? Property Tax Records Availability on North Carolina Government Websites.” Henrietta H. Presler. Digital Government Innovation Bulletin, No. 2004/02, Institute of Government, University of North Carolina at Chapel Hill. June 2004.

Henrietta Locklear
RFC

“How Public is Too Public? Property Tax Records Availability on North Carolina Government Websites,” Henrietta H. Presler. Presentation of paper at Southeastern Conference on Public Administration, Charlotte, NC. October 2004.

CITY OF PHILADELPHIA

WATER DEPARTMENT MANAGEMENT AUDIT

DRAFT REPORT / DECEMBER 14, 2015

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APPENDICES

EXECUTIVE SUMMARY

Owing to concerns related to the City's water billing system, billing and collection processes and related reports and as a result of the 2013 rate mediation, the Philadelphia Water Department (PWD) engaged Raftelis Financial Consultants, Inc. (RFC) in a joint effort with the Revenue Department (Revenue), most particularly the bureau of the Revenue Department associated with the billing, collections, and customer service of Philadelphia Water, the Water Revenue Bureau (WRB) to assess customer service functions in order to increase revenues, increase efficiencies and improve data flow and analysis with the goal of improved customer service. The study was, early on, dubbed the “meter-to-cash operations study” but also called the “management audit” throughout the project. The project was focused on two major areas:

- Basis2, the City's water billing system, and Management Reporting
- Customer Service Functions (excluding the PWD and WRB call centers), Credit and Collections

This study was performed concurrently and in cooperation with multiple large-scale initiatives being undertaken by PWD and WRB. In addition, Council legislation, introduced in the fall of 2014 and passed in the summer of 2015, added a requirement to revamp and quickly implement programs to address customer affordability in the systems at the heart of the project.

BACKGROUND

In the City of Philadelphia, customer service operations are divided between the Philadelphia Water Department (PWD) and the Water Revenue Bureau (WRB), with field work (including enforcement) under PWD and billing and customer service processes under WRB. Each maintains its own call center for customer inquiries and order entry and with some capacity to handle the other's work. As stated in the request for proposals (RFP), “In the 2012 rate case, problems arose regarding the issue of data quality and the ability of the departments to analyze information.” Some of the problems raised in the 2012 rate case were attributed to the customer information system, Basis2.

Beginning in the mid-1970s, the City of Philadelphia used a mainframe system for automated billing and customer service known as Water1. By the early 1980s, the City recognized a desire to replace the mainframe system with a more robust and up-to-date alternative. Over the next 25 years, several attempts were made to achieve this, which ultimately failed. In mid-2006, the City contracted with Prophecy International to provide a software billing system known as Basis2. Within a year, the City had implemented Basis2 and all but phased out the Water1 system (except for as an historical record of billing and customer information).

The 2012 rate case problems, noted above, acted as the catalyst for this study. The scope of the study was shaped both by perceived limitations with Basis2 and other concerns, which are described in the following paragraphs (quotes taken from the original RFP).

Basis2 Concerns about Basis2 included, “The Basis 2 operating system is approaching the end of its useful life,” and PWD was interested in discerning whether they need to replace it or whether possible modifications could make the system more efficient and longer-lived. If the study concluded that replacement of Basis2 was needed, the department wished to know what it would cost and how long the process would last if undertaken.

Accounts Receivable Balance At the time of the RFP, PWD was also concerned about the increasing accounts receivable balance, which “stood at \$250 million of active (pre-written off) accounts.” The department was looking to “address the policies, practices, and structural impediments to successful collections and the reduction of receivables to **industry norms**” (emphasis added).

Management Reporting and Basis 2 The City and customers advocates were continually concerned that certain types of information was not accurate or able to be consistently interpreted, and wanted to resolve these issues related to accounting, policy, financial, and operations reporting, which all potentially affected the accounts receivable balance. There was also “concern about the accuracy of accounting information as processed through Basis2.”

Other concerns included collection strategies, the limitation on collections resulting from the annual moratorium on shutoffs and related concerns.

WORK SCOPE

The scope of the project to respond to the above concerns went through an evolution. The RFP listed four requirements:

Requirement One – Customer Relationship Management

Best industry practices for comprehensive electronic, telephonic and interpersonal customer relationship management including all aspects of billing and collection, call center operations, account management, field order entry and inter-departmental coordination with Operations.

Requirement Two – Credit & Collections

Identify effective credit and collection strategies and procedures for successful accounts receivable management.

Requirement Three - Basis2 Review and Data Evaluation

The integration of proposed policy, procedure and practice modifications with existing software and hardware for short term/interim implementation and/or detailed specifications for a replacement operating system for Basis 2.

Requirement Four – Financial and Management Reporting

Provide appropriate, accurate and reliable financial, accounting, and management reporting.

The customer service functions related to the PWD and WRB call centers were removed from the scope of work for RFC. Instead, these functions were covered, along with an assessment of field operations, under a concurrent study conducted by Schumaker and Company.

Through discussions with PWD/WRB the final scope was consolidated into two tasks - 1) *Basis2 Review, Data Evaluation and Management Reporting*, and 2) *Customer Service Functions (excluding the PWD and WRB call centers) and Credit and Collections* with the following scope:

Basis2 Review and Data Evaluation

- Does Basis2 need to be replaced?

- If it does not need to be replaced, what is required for it to function optimally?
- What resources are required for optimal functionality?

Management Reporting

- Catalog and review existing customer service reporting
- Identify reporting necessary to meet business needs
- Reporting gap analysis and recommendations to eliminate gaps
- Recommended reports for use in managing the utility.

Customer Service Functions

- Map customer service and back office processes
- Identify inefficiencies (redundant and/or unneeded activities)
- Identify opportunities for additional efficiency through automation

Credit and Collections (Effective Accounts Receivable Management)

- Catalog and review existing credit and collections policies and practices
- Benchmark credit and collections against peers
- Process mapping for account shut-off and restoration
- Evaluate effectiveness of third-party collections efforts
- Credit and collections gap analysis

During the project an additional work product – the production of tables describing customer, account, and billing information in Basis2 to support the 2015 rate filing – was added.

METHODOLOGY

Our approach to meeting the requirements of the work scope included:

Interviews - More than 100 interviews were conducted with individuals involved in the processes being studied: end users and developers of data and systems, stakeholders, and peer utilities that were benchmarked.

Field Observations - We observed the processes being studied first-hand to supplement the information gained in interviews and document reviews.

Process Mapping - More than 10 process maps were created of the processes being studied to graphically identify improvements and process efficiencies.

System testing - A variety of tests were performed on the Basis2 database to test data integrity and quality, efficacy of reports produced and related matters.

Benchmarking - Two groups of peer utilities were benchmarked to identify industry and City norms for credit and collections. In addition, a survey of large utility billing system organizations was performed.

Analysis - a variety of analyses were performed to determine Basis2 efficacy, target organization structure, gap analysis, report structure and related matters.

Work Product - we developed a methodology for producing the desired tables in support of the rate filing.

FINDINGS AND CONCLUSIONS

The following is a summarized list of findings and conclusions by task area.

Overall

- PWD and Revenue are actively involved in a number of initiatives that directly relate to this study.
- The initiatives, many of which are listed in this report, relate to improving customer service provision through a variety of means.
- The departments' staff engage in regular active communication. An example is a regular interdepartmental meeting to discuss Basis2 ongoing project priorities.
- The number of initiatives, both short and long term, demands that communication between the departments continues to be regular and open so that initiatives do not conflict and their goals are fully realized.

Basis2

- Basis2 is in line with industry standard billing systems and does not have essential data integrity issues that threaten its ability to function as a billing system for the City.
- Basis2 functionality could be improved (as detailed in this report).
- Basis2 does not need to be replaced, but improvements should be implemented.
- Staff resources are below what would be needed for optimal system performance.
- The City should increase resources devoted to billing system maintenance, including hiring a fulltime database administrator (DBA) and additional business analytics and quality assurance support staff.

Management Reporting

- Basis2 is a system utilized by multiple agencies with different missions, nomenclature differences and differences in reporting transactions.
- Use by multiple agencies without reconciling these differences results in problems of interpretation.
- There are reporting gaps and Basis2 can be utilized to produce improved reports for utility management (these areas of improvement are detailed in report).
- **It is possible to produce reliable tables from Basis2 for cost of service and management.**

Customer Service Processes:

- Throughout the customer service functions of WRB and the Revenue Department, there are a number of redundant processes where people or systems manage parts of the processes that have already been nearly or completely done by others.
- Reducing or eliminating redundancies would improve efficiency and improve customer satisfaction.

- In addition to the computer-based systems redundancies, WRB has an almost entirely duplicated paper-based process. Nearly all incoming and outgoing customer communication is paper-based, and this information is all either entered into or reported from one of the many databases or electronic systems in use.
- Implementation of a digital method for customers to interact with and communicate with the City could reduce paper copy duplication.
- For the WRAP program in particular, does not have a robust electronic application log and tracking system, reducing the ease of efforts ensure compliance to internal deadlines as well as to respond to customer inquiries.
- Developing such an electronic system, or utilizing available features in the existing applications, could greatly ease these efforts and improve WRB's ability to complete processing in a timely manner.
- Basis2 is burdened with needed updates and bug fixes.
- A workflow management system outside of Basis2 would ease the burden on Basis2.

Credit and Collections (Effective Accounts Receivable Management)

- Compared to other utilities serving Philadelphia, PWD/WRB is in the typical range for delinquencies, turnoffs and reconnections. PWD has the highest reconnection percentage (turnoffs turned back on) of the three.
- PWD/WRB has the second longest turnoff cycle of utilities surveyed. A long turnoff cycle appears to be related to high delinquency rates. PWD/WRB is above median on level of shutoffs – some utilities are significantly lower but also claim that inadequate staffing limits their ability to expediently turn off service.
- PWD/WRB has a high reconnection percentage.
- PWD/WRB has the second longest moratorium period of the utilities surveyed. Long moratoriums appear to be related to higher receivable levels and high delinquency levels.
- PWD/WRB is toward the high end of, but still within, the typical range on unit billing and collection costs. It is also within the typical range on cashing costs.
- PWD/WRB is within the typical range on delinquency rates.
- PWD/WRB has a high number of customers whose service cannot be shut off due to medical necessity, as defined by each individual program (Medical-Do Not Shutoff) when compared with most other benchmark utilities. However, the other two local utilities show similar numbers of these customers.
- Most utilities have Customer Assistance Programs (CAP) and most utilities have CAP managed by another group, such as a social service agency.
- In many other metrics, the City's operation is not markedly different than its peers. It has a well-organized and well-executed collections program and a good working relationship with third party collection agencies.

RECOMMENDATIONS

Based on our findings and conclusions, we offer the following recommendations:

- The Departments should continue to facilitate communication between them, particularly as it relates to numerous technology and other initiatives that are underway with the goal of enhancing operations and customer service.

- Basis2 does not need to be replaced immediately, but efforts to transform it into an optimally functioning system should be undertaken.
- In particular, projects that are already high priority for WRB should be completed in order to ensure that Basis2 continues to be able to function at the highest level possible. A plan for achieving these improvements is included in this report.
- Increase resources devoted to billing system maintenance, including hiring or allocating a fulltime database administrator (DBA) and new business analyst and quality assurance support staff.
- Reduce multiple agency use problems by utilizing our reconciliation framework for reporting.
- Implement recommendations for closing reporting gaps, producing cost of service reports and recommended management reports.
- We support the efforts of WRB to upgrade the functionality of Basis2 to remove the need for a separate WRAP database.
- Implement a digital method for customers to interact with and communicate with the City.
- Implement a means to better manage files and information being transferred among individuals, units, and departments through a workflow management system or electronic management system
-
- Adopt Public Utility Commission Chapter 14 delinquency report formats to facilitate comparisons against other Philadelphia utilities and provide improved insight into delinquencies for both management and stakeholders.
- Investigate alternative temperature-based moratorium criteria (as other utilities have done) which protect Philadelphia citizens during cold weather but would shorten moratorium period in most years
- Investigate shortening the turnoff timeline to reduce delinquency levels.
- Convene a decision-making group – including an array of stakeholders, users, and support staff – now, and meet regularly (maybe twice a year, to start) to provide a living assessment of Basis2.

BENEFITS

The study process, conclusions and recommendations offer a number of benefits to PWD/WRB:

- During the study, findings such as information shared with Revenue about mailroom processes, verification of stormwater fee billing accuracy, and information shared with Community Legal Services about a WRB change in process around Philadelphia Housing Authority property transfers have benefited the stakeholders in this study.
- In identifying that Basis2 is in line with industry standard billing systems and does not have essential data integrity issues that threaten its ability to function as a billing system, PWD/WRB will realize substantial time and cost savings, and will better be able to plan for and execute a successful billing system conversion when needed in the future.
- Implementing the recommended Basis 2 improvements will improve Basis 2 functionality and performance.
- The customer service and back office process recommendations will eliminate redundancies, increasing efficiency and improving the quality of customer service
- The credit and collections benchmarking verified that PWD/WRB is similar to its peers in most respects. Implementation of credit and collections recommendations should improve PWD/WRB's performance in this area.

- The benchmarking findings and the cost of service report produced by this project should improve the next rate filing and stakeholder's view of PWD/WRB performance.

1. PROJECT BACKGROUND & SCOPE

The Philadelphia Water Department (PWD) engaged Raftelis Financial Consultants, Inc. on a joint working team with the Revenue Department (Revenue), most particularly the bureau of the Revenue Department associated with the billing, collections, and customer service of Philadelphia Water, the Water Revenue Bureau (WRB). , to assess customer service functions in order to increase revenues, increase efficiencies and improve data flow and analysis with the goal of improved customer service. This section provides the background to the study and work scope.

1.1. PROJECT BACKGROUND

In the City of Philadelphia, customer service operations are divided between the Philadelphia Water Department (PWD) and the Water Revenue Bureau (WRB), with field work (including enforcement) under PWD and billing and customer service processes under WRB. Each maintains its own call center for customer inquiries and order entry and with some capacity to handle the other’s work.. At the time of the RFP, PWD was about to undertake a separate management review of the field activities associated with customer service to assess the issue of duplication of services. This “division of operations has been an ongoing issue raised in water rate proceedings that addressed revenue requirements, cost allocation, and rate design. In the 2012 rate case, problems arose regarding the issue of data quality and the ability of the departments to analyze information.” Some of the problems raised in the 2012 rate case were attributed to the Customer Information System (CIS), named Basis2.

To provide a context to these problems the next section describes the history of the Customer Information System.

1.1.1. History of the Customer Information System

Beginning in the mid-1970s, the City of Philadelphia used a mainframe system for automated billing and customer service known as Water1. By the early 1980s, the City recognized a desire to replace the mainframe system with a more robust and up-to-date alternative. Over the next 25 years, several attempts were made to achieve this. Two attempts were made in-house, using existing staff and programming expertise to develop a new customer information and billing system; both failed during development or implementation. Subsequently, the City contracted KPMG as an external system developer and implementer. This, too, failed. Finally, the City contracted with Oracle Corporation to develop a custom system in an effort known as “Project Ocean.” Project Ocean was finally terminated in June 2005 after the City had invested significant resources without realizing a functioning CIS replacement. During this entire nearly 30 year time frame, Water1 was still in use, propped up by a series of bug fixes and small enhancements.¹

The City negotiated a settlement with Oracle in mid-2006 in which the contracted firm provided a third-party software billing solution, Basis2, developed by Prophecy International, and necessary

¹ Personal interview with Susan LaCour, April 25, 2014;

implementation and post-implementation support.² Within a year of settlement, the City had implemented Basis2 and all but phased out the Water1 system (except for as a historical record of billing and customer information).³

As with any large system implementation, a number of problems were encountered which have been the subject of other studies.

RFC learned that during the settlement process and the due diligence steps to confirm Basis2 as an acceptable billing system, the City's Information Technology (IT) Department was primarily involved.⁴ This was an entirely different group than those that had developed and administered Water1, who were within PWD.⁵ This transition, which did not adequately involve all stakeholders, resulted in a limited knowledge transfer from those who supported Water1 to those who began to support Basis2. At the outset, the reports being generated out of Water1 were not translated smoothly to Basis2 and the information being provided to PWD appeared to be inconsistent between the two systems. Because of the early roll out, some components of Basis2 were not fully functional from the beginning, especially those related to enforcement and reporting. Basis2 was originally unable to generate reports on customers, accounts, consumption, billing, or collections that were aligned with those numbers being generated from the Water1 system. Still, bills were generated correctly and on time, so Basis2 was not a failed implementation. Over time, reporting and other capabilities were implemented, in addition to the basic billing capability.

1.1.2. PWD/WRB Concerns

As noted above the 2012 rate case settlement resulted in this study. The Scope of the study was shaped both by perceived limitations with Basis2 and other concerns which are described in the following paragraphs (quotes taken from RFP).

Basis2

There was concern about "current customer information system, Basis 2, which was believed to be more limited and less robust for meeting integrated customer service goals." "The Basis 2 operating system is approaching the end of its useful life," and PWD was interested in discerning whether they needed to replace it or whether possible modifications could make the system more efficient and longer-lived. They wanted to know what the full replacement of Basis2 would cost and how long the process would last if undertaken.

Accounts Receivable Balance

At the time of the RFP, PWD was also concerned about the increasing accounts receivable balance, which "stood at \$250 million of active (pre-written off) accounts." The department was looking to "address the policies, practices, and structural impediments to successful collections and the reduction of receivables to **industry norms**" (emphasis added).

² Office of the Controller, Water Billing System Corrective Action Needed to Prevent Recurrence of Prior Implementation Failures, August, 2007

³ *ibid*

⁴ Personal interview with Susan LaCour and Mark Harvey, April 25, 2014

⁵ Corroborated by Steve Junod personal interview April 15, 2015

Also at the time, “PWD was undertaking a review of its meter reading technology in anticipation of replacing the system as early as 2015” and as part of the department operations review.” PWD was looking for a consultant to “determine how information gathered from meter reading informed or affected the Basis 2 operating system improvement or replacement.”

PWD also acknowledged that its water bill is deficient, and that the form was “confusing to customers – the information provided did not conform to industry best practices nor did it permit management to communicate necessary and valuable information. The bill was being redesigned at the time of the RFP and a bill redesign has since been implemented.

Management Reporting and Basis 2

The City and the consumer advocate were continually concerned that certain types of information was not accurate or able to be consistently interpreted, and wanted to resolve these issues related to accounting, policy, financial, and operations reporting, which all potentially affected the accounts receivable balance. There was also “concern about the accuracy of accounting information as processed through Basis2.”

RFC obtained input from both users and non-users of Basis2, the latter group comprising primarily finance staff in PWD. Staff in PWD have access to a dashboard with certain limited data from Basis2. Except for individuals who are working directly with WRB on particular projects, staff in PWD, other than PWD Call Center staff, do not appear to have direct access, even as read-only users to Basis2. PWD staff are consumers of ad hoc and standard reports from Basis2. They cited issues with ad hoc and standard report consistency and reliability. The reports showed different results even when the same report was run for the same period. Reports also show conflicting trends. For example, while one report may show increases in collection percentages another shows lower-than-forecasted revenues. Reports that have shown increases of two thousand accounts every year contradict demographic trends within the City.⁶

These issues not only hamper on-going management of the utility, with activities such as monitoring collections efficiency, but also presented issues for the Department during the 2012 rate case.

For example, the expert witness who testified on behalf of the public advocate criticized the Department’s projection of expected growth in number of customers over the rate analysis period. The Department’s rate consultant provided work papers that showed past growth in number of accounts (correlated to the growth in number of customers). The workpapers were cited by the public advocate expert in his testimony.⁷

Other Major Concerns

At the time of the RFP, collection strategies using risk based analysis were not used. Shut off orders were being handled by both PWD and WRB with frequent miscommunication. WRB had previously maintained a force to follow up on PWD personnel who were in charge of reconnection service. Management was

⁶ Mentioned several times but specifically by Joe Clare, Telephone call. March 5, 2014

⁷ Found in Black & Veatch Calculations Supporting Direct Testimony of Black & Veatch Corporation and Exhibits JRM-1, JRM-2, JRM-3, February 2012. Work papers RREQ, p. 23.

concerned about the limitation on collections resulting from the annual moratorium on shut-offs from December to February.

1.2. SCOPE

The scope of the project to respond to the above concerns went through an evolution. The RFP listed four requirements:

Requirement One – Customer Relationship Management

Best industry practices for comprehensive electronic, telephonic and interpersonal customer relationship management including all aspects of billing and collection, call center operations, account management, field order entry and inter-departmental coordination with Operations.

Requirement Two – Credit & Collections

Identify effective credit and collection strategies and procedures for successful accounts receivable management.

Requirement Three - Basis2 Review and Data Evaluation

The integration of proposed policy, procedure and practice modifications with existing software and hardware for short term/interim implementation and/or detailed specifications for a replacement operating system for Basis 2.

Requirement Four – Financial and Management Reporting

Provide appropriate, accurate and reliable financial, accounting, and management reporting.

The customer service functions related to the PWD and WRB call centers were removed from the scope of work for RFC. Instead, these functions were covered, along with an assessment of field operations, under a concurrent study conducted by Schumaker and Company.

Through discussions with PWD/WRB the final scope was consolidated into two tasks, conforming to the interrelatedness of the original elements. These tasks are still presented in their components parts to facilitate enumeration but were considered as more holistic elements. The final two tasks were 1) *Basis2 Review, Data Evaluation and Management Reporting*, and 2) *Customer Service Functions (excluding the PWD and WRB call centers) and Credit and Collections* with the following scope:

Basis2 Review and Data Evaluation

- Does Basis2 need to be replaced?
- If it does not need to be replaced, what is required for it to function optimally?
- What resources are required for optimal functionality?

Management Reporting

- Catalog and review existing customer service reporting
- Identify reporting necessary to meet business needs
- Reporting gap analysis and recommendations to eliminate gaps
- Recommended reports for use in managing the utility.

Customer Service Functions

- Map customer service and back office processes
- Identify inefficiencies (redundant and/or unneeded activities)
- Identify opportunities for additional efficiency through automation

Credit and Collections (Effective Accounts Receivable Management)

- Catalog and review existing credit and collections policies and practices
- Benchmark credit and collections against peers
- Process mapping for account shut-off and restoration
- Evaluate effectiveness of third-party collections efforts
- Credit and collections gap analysis

During the project an additional work product – the production of tables describing customer, account, and billing information in Basis2 to support the 2015 rate filing – was added.

1.2.1. Intermediate Progress Reporting

Over the course of the project, RFC formally reported intermediate results the PWD and Revenue leadership, the Basis2 team, and the Public Advocate to report intermediate results and receive additional direction. Major check-ins occurred in November and December 2014 and in April and July 2015.

RFC also regularly conveyed information process improvements and any items that could benefit from urgent consideration as they became known. For example, during review of the mailroom process, staff identified an existing challenge related to bill address placement and inability to maximize the efficiencies of a new sorting machine. We conveyed this information to PWD and WRB. In addition, after draft management reporting revealed an apparent inconsistency between PWD and Basis2 records related to city accounts, RFC developed a clear explanation of the current process to the parties involved, allowing for examination of and increased understanding of the information about interfund payments recorded in Basis2 and FAMIS.

Throughout the entire project period, City staff and the consulting team were in regular communication via email, phone calls, and in-person meetings.

1.2.2. Receipt of Additional Direction

On occasion, intermediate project check-ins generated changes in the overall scope and direction of the project. For example, once RFC determined the sources of the perceived inconsistencies between reports that were run at different times, RFC conveyed this information to the City and we were directed to execute revised cost of service reporting for FY 2014 (and later, FY 2015).

2. PROJECT PROCESS/METHODOLOGY

In order to meet the requirements of the Work Scope we utilized the following methodologies:

- Development of Project Charter
- Strengths, opportunities, aspirations, and results (SOAR) analysis
- Interviews (more than 100)
- Field observations of each process
- Process mapping (10 major processes)
- Analysis
- Benchmarking
- Implementation

2.1. PROJECT CHARTER

As a project initiation activity, RFC facilitated a Project Charter exercise, to ensure alignment between the PWD leadership team and the consultant team, as well as to establish the guiding principles of the study and articulate the factors that would contribute to its overall success. Project charters typically include discussion of study goals, participants, critical success factors, boundaries, and a schedule or project timeline. For this study, PWD's goals were to:

- Improve customer service
- Increase collections
- Ensure timely and accurate financial analysis and reporting
- Reduce billing and collections costs
- Improve workflow processes and structural frameworks

The study aimed for broad and deep stakeholder involvement, with input from PWD and WRB customer service staff, IT support, the Law Department, PWD's public advocate, key council staff, and other interveners and contractors as necessary. Accomplishing the study goals was anticipated to require stakeholder buy-in, a future-focused orientation, coordination amongst concurrent initiatives, a general respect for resource and time commitments, and a commitment to achieving quick wins within the project.

In defining the limits of what the project would entail, boundaries included the informal hearing process, which would not be evaluated, the timeline for the cost of service study, and any work that duplicated the efforts of other consulting projects underway. The proposed timeline included finishing the business case portion of the project for its timely inclusion in the rate sustainability study.

2.2. SOAR

PWD utilized a strengths, opportunities, aspirations, and results (SOAR) analysis to form the basis for the business case and rate sustainability study. SOAR is a facilitation technique that utilizes appreciative inquiry to determine an organizations' strengths and build on those strengths moving forward. This is similar to a SWOT analysis, where strengths, weaknesses, opportunities, and threats (SWOT) are defined, but SOAR utilizes a deliberately positive process to determine what the organization does well. The SOAR approach fits well with PWD's defined critical success factor of maintaining a future-focused orientation, rather than concentrating on past challenges or mistakes.

Strengths were derived by asking session participants to think about their proudest achievements within PWD, and what PWD did as an organization that made them proud. Initial focus on positive attributes led participants to conclude that the organization's most significant strengths were the employees, the collaboration-focused culture, and effective communication techniques. The most highly rated opportunities, when external forces, stakeholder needs, and existing challenges were taken into account, were to build on current technology to improve the customer service experience, to take advantage of innovative ways to reduce the cost of capital, and to use technology to obtain better information about internal processes.

Aspirations are unique to the SOAR process, and they help participants to clarify and define what they want their organization to be in the future. For PWD, the most compelling aspirations were to achieve a reputation for extraordinary customer service, to be known for delivering an excellent product, and to maintain financial sustainability. Finally, the Results portion of the exercise asked participants to consider their responses to the strengths, opportunities, and aspiration prompts, and to reflect on the measures that would indicate progress toward the organization's goals. Participants determined that appropriate results would be improved customer satisfaction (as measured by surveys, reduced customer calls and enhanced call center service), and improved collections/reduced accounts receivables.

2.3. INTERVIEWS

RFC assessed systems and processes through structured interviews of end users of all types (from frontline users to management) and system support personnel. The interviews explored how users perform their work, interact with the Basis2 system and other users and how well or how poorly existing systems support staff's duties from the interviewees' perspectives. We also sat with staff as they demonstrated use of the system to learn about its capabilities, everyday use, and shortcomings. That story we heard through these interviews includes the undocumented policies and ways that staff use the system or perform processes outside of it.

Interviews of key technical support staff allowed RFC to understand the data contained in Basis2, FAMIS, and other systems as well as the intended and unintended uses of particular data sources. By talking through data entry, business analytics, report generation, and processed data consumption, the team was able to follow the data creation, editing, and consumption process from start to finish, identifying areas where discrepancies or misunderstandings occurred.

2.4. FIELD OBSERVATIONS

Our understanding of the systems and processes that was gained through interviews and review of documents was enhanced through field observations. RFC conducted in situ field observations, wherein staff responsible for a variety of customer service functions explained and displayed their procedures within the context of performing an actual work function. For example, we witnessed customer assistance applications being received, filed, distributed, reviewed, and determined by individuals performing each part of the process and learned a great deal about process elements and protocol that may not have been exposed in an interview setting.

2.5. PROCESS MAPPING

Based on the understanding of documented and undocumented business process observed during the interview phase and in field observations, RFC conducted process mapping of several critical WRB back-office processes in order to identify opportunities for improved efficiency through process or policy revision. Process mapping highlighted redundancies and inefficiencies by graphically showing the number of people involved, the number and form of process transfers or transitions, and narrow division of labor.

2.6. BENCHMARKING

To evaluate credit and collections performance, we formed two peer utility groups:

- Water utilities of comparable size and demographics
- Other utilities serving the City of Philadelphia

Following the formation of peer groups, the benchmarking consisted of the following steps:

- Identification of Key Performance Indicators
- Survey development
- Survey Administration
- Analysis

RFC also conducted an informal survey of a subset of utilities comparable in size and service provision to address CIS support questions.

2.7. TRACKING OF CONCURRENT INITIATIVES

During the course of this review, RFC developed a list of the ongoing initiatives that were interrelated with this project. The list was developed primarily from information shared in personal interviews with staff and was intended to ensure that the study did not duplicate efforts already covered in other studies. The initiatives included:

- Field service review and implementation of changes
- Customer service call centers review and implementation of changes
- Establish data definitions
- Tax data warehouse for case management
- Stormwater returned mail initiative
- On-going Basis2 enhancements
- Customer self-service (enhancement to phone system)
- Water compliance checks (together with tax compliance)
- Cashiering system change
- RemitPro equipment and software change
- Overhaul of bills and standard letters
- Basis2 upgrade
- Mediation with Public Advocate
- Review of assistance programs
- WRAP database migration to Basis2
- Annual close out of WRAP database - process revisions
- Requests by accounting to meter shop to have occupancy status recorded for zero usage visits
- PWD to take credit cards at the door at shut off

- Land bank creation
- Platinum system migration to Basis2, known as the Agency Receivables Project
- Zero bill project (joint PWD, WRB)
- Policy on Shut off for tenants (the 24-hour rule)
- Recertification for the senior discount program
- Payment patterns report revisions
- Business case development for Basis2 data warehouse and business intelligence tools
- Development of a new assistance program in response to City Council action
- Study and planning for Automated Meter Infrastructure (AMI) project

These initiatives are both internally and externally driven and they relate to improving customer service provision through a variety of means. We noted that the departments' staff engage in regular active communication. The prime example is a regular interdepartmental meeting to discuss Basis2 ongoing project priorities. The sheer number of initiatives and the interplay of these efforts, however, demands that communication between the departments continues to be regular and open so that initiatives do not conflict and their goals are fully realized.

2.8. ANALYSIS

Based on our understanding of the data, processes, and policies gleaned during the interview phase of the project, the RFC team analyzed various aspects of the City's program in light of the questions and concerns originally posed by PWD. Basis2 data were analyzed for data integrity and accuracy; the system itself was reviewed with an eye toward consistency and adequacy in meeting the City's needs for customer information and account management. System administration and support was considered with respect to the perspectives shared during interviews with City staff as well as information gleaned from the CIS support survey. Customer service and back office processes were analyzed in an effort to identify opportunities for furthering the goals of increased efficiency, improved customer service, and cost savings. Credit and collection processes were compared against peer utilities.

2.8.1. Implementation

The final stage of the effort involved compiling and reporting on the results of the assessment, and developing recommendations for implementation. The recommendations, as well as the supporting analyses and findings, are included in the body of this report.

Copies of the project charter, the SOAR exercise results, and interim finding presentations are included as Appendix A.

3. MANAGEMENT REPORTING AND BASIS2

At the outset of the project, the PWD/WRB team prioritized the initiation of the Management Reporting task above the other components of the project.⁸ The principle driver for the prioritized task is PWD's ratemaking cycle. It was anticipated that, for the revised reporting to be used in the development of the cost of service study, the reports would need to be available in November or December of 2014 to be used in the cost of service study preparation that began in July 2014.

In PWD's words the task's purpose was to "identify accurate, reliable, financial/accounting and management information systems and reports." The major system and group of existing reports at issue were Basis2 and its output reports summarizing water consumption, customer and financial metrics over time. Thus, the prioritization of the management reporting task necessarily drove the Basis2 assessment. It was not possible to identify the causes of existing report reliability issues without a thorough investigation of Basis2, thus moving the evaluation of Basis2 to an early task.

Basis2 Major Outcome: The team was able to verify that Basis2 is in line with industry standard billing systems and is not plagued with essential data integrity issues that threaten its ability to function as a billing system for the City. We concluded that Basis2 does not need to be replaced immediately but that a number of efforts need to be undertaken immediately in order to transform the system into the optimally functioning system the City needs. The plan for achieving these improvements is included in this report. Finally, the team assessed the resources devoted to the maintenance of Basis2 and provided recommendations for meeting the City's needs in this area

Management Reporting Major Outcome: The team was able to identify the structure and report logic issues that resulted in problematic reports and to develop improved reports for the cost of service study. The team identified reporting gaps and recommended reports for use in managing the utility.

3.1. SCOPE

At the foundation of the Basis2 review were these three basic questions:

- Does Basis2 need to be replaced?
- If it does not need to be replaced, what is required for it to function optimally?
- What resources are required for optimal functionality?

The scope of the Management Reporting element consisted of four major areas:

- Catalog and review existing customer service reporting
- Identify reporting necessary to meet business needs
- Reporting gap analysis and recommendations to eliminate gaps
- Recommended reports for use in managing the utility.

⁸ Per direction from staff shared at project contract meeting 02/19/2014

3.2. METHODOLOGY

Our approach to meeting the work scope consisted of the following:

- Interviews with both users and non-users
- Interviews with Basis2 team and database administrators
- Analysis, including resource analysis
- Surveys of other large utility billing systems
- Review of database, data, and reports

The database had been characterized as having reached the end of its useful life. In addition, it was feared that the identified reporting issues were linked to essential data integrity flaws in the database. The team evaluated the database and application with regard to these two potential issues.

3.2.1. Interviews

RFC conducted interviews with a number of staff to gain an understanding of the uses of Basis2, its capabilities, and its shortcomings. These interviews and feedback can be grouped into three categories:

- User interviews: Staff at WRB who use Basis2
- Non-user input: Staff, primarily at PWD, who use outputs (reports) from Basis2 but do not use Basis2
- Basis2 team and database administrator interviews: Staff at WRB and OIT who support Basis2

3.2.1.1. User interviews

In support of the Basis2 data review and evaluation, RFC conducted an assessment of systems and processes through structured interviews of Basis2 end users, from frontline users to management. The interviewees were from the following units:

- WRB Accounting
- WRB Accounting Adjustments
- WRB Water Revenue Assistance unit
- WRB Technical Operations
- WRB Intake
- WRB Account Analysis Unit

The interviews explored how users interact with Basis2, how the system supports interaction with other users (workflow management), and how well the system is perceived to support staff duties. By conducting a series of interviews and relying on a cross-section of users, RFC assembled the story about the capabilities, everyday use, and shortcomings of the Basis2 system. This story includes both the intended uses and processes of Basis2 as well as the undocumented policies and processes that staff use within, as well as outside, the system, the latter being the result of its inability to support some procedural needs.

3.2.1.2. Non-user input

RFC also obtained input from non-users of Basis2, comprising primarily finance staff in PWD. Staff in PWD have access to a dashboard and a report server with certain limited data from Basis2. Except for individuals who are working directly with WRB on particular projects and Call Center staff, most staff in PWD do not appear to have direct access, even as read-only users to Basis2. PWD staff are consumers of ad hoc and standard reports from Basis2. Senior staff at PWD cited issues with ad hoc and standard report consistency and reliability. The chief concern cited was that reports showed different results even when the same report was run for the same period.⁹ Reports also showed conflicting trends. For example, while one report may show increases in collection percentages another shows lower-than-forecasted revenues. Reports that have shown increases of two thousand accounts every year contradict demographic trends within the City. By contrast, one group within PWD that produces the utility's annual Water Audit, consumes a report called the Retail Customer Trends report. This report was developed through an extensive and carefully-documented requirements process between PWD and WRB. The result is a report that is produced at the end of each month that is used by the audit team and is rolled up into annual figures at the end of each fiscal year for use in the audit.¹⁰

These issues not only hamper on-going management of the utility, with activities such as monitoring collections efficiency, but also presented issues for the Department during the 2012 rate case.

For example, the expert witness who testified on behalf of the public advocate criticized the Department's projection of expected growth in number of customers over the rate analysis period. The Department's rate consultant provided work papers that showed past growth in number of accounts (correlated to the growth in number of customers). The workpapers were cited by the public advocate expert in his testimony.¹¹

⁹ Mentioned several times but specifically by Joe Clare, Telephone call. March 5, 2014

¹⁰ Telephone meeting with Finance and Water Audit Teams of PWD, March 2, 2015

¹¹ Found in Black & Veatch Calculations Supporting Direct Testimony of Black & Veatch Corporation and Exhibits JRM-1, JRM-2, JRM-3, February 2012. Work papers RREQ, p. 23.

Table 1: Workpapers Account Data Cited in Public Advocate Expert Witness Testimony

Type	Year	Number of General service 5/8 meter customers	Change from Previous year
Actual	2005	450,759	
Actual	2006	450,013	-746
Actual	2007	449,415	-598
Actual	2008	448,934	-481
Actual	2009	451,080	2146
Actual	2010	454,009	2929
Projected	2011	456,593	2584
Projected	2012	456,823	230
Projected	2013	457,053	230
Projected	2014	457,283	230
Projected	2015	457,513	230
Projected	2016	457,743	230
Projected	2017	457,973	230
Projected	2018	458,203	230

The public advocate expert witness advocated that the projection of 230 new customers per year was much too low and that the actual projection, based on averages of the period from 2005 to 2011 should be an annual increase ten times the one shown in the table above, 2,584 customer per year. His table, showing averages over time is below¹²:

Table 2: Average Customer Increases 5/8" Meters as Calculated by Public Advocate Expert Witness

Time Period	Average Increase
2005-2011	972
2006-2011	1,316
2007-2011	1,795
2008-2011	2,553
2009-2011	2,757
2010-2011	2,584

¹² Direct Testimony of Michael A Bleiweis on Behalf of the Public Advocate, July 20, 2012. In the Matter of a Proposed Increase in Water and Wastewater Rates: FY2013-2016, p. 16

3.2.1.3. Basis2 Team and Database Administrator Interviews

RFC and our subcontractor Miitek, interviewed most of the staff on the Basis2 team and also had the opportunity to interview the City's database manager and the primary application database administrator who supports Basis2. These two latter staff are within the Office of Information Technology office, rather than WRB. Our goal in interviewing the staff devoted to supporting Basis2 was to assess the team and to look for ways to maximize the efficiency and effectiveness of these staff members. This assessment was driven by a request from PWD and Revenue at our December 2014 progress meeting.

For the interviews, we focused on some key questions, the discussion of which illuminated the areas we were investigating. We discussed:

- The specific work the staff members do to support Basis2
- The team member's everyday duties and special projects
- The way the team member's work fits in with the other roles within the Basis2 team
- The system, Basis2 itself, its performance, structure, reliability, good qualities, and flaws
- The way that the process of supporting Basis2 works, including such processes as change management, responses to user requests, and major projects

RFC and our subcontractors interviewed and communicated frequently with WRB's Application Support Manager for Basis2. We gathered fundamental and detailed data about how the system works. We were provided with:

- Entity relationship diagram from Basis2's vendor Prophecy International.
- List and description of Basis2 interfaces
- SQL packages used to generate queries (as requested)
- Verbal information about processes within the database such as generation of the monthly report environment or interfund transfers (as requested)

3.2.2. Basis2 and Report Analysis

RFC conducted an in-depth analysis of Basis2 and of the current reports that are generated out of the system for management reporting needs. This analysis followed these main stages:

- Interviews and review of Basis2 documentation: RFC interviewed the Basis2 application team manager at length about Basis2's structure and important pieces of data. We also reviewed the Basis2 interfaces list, Basis2 generalized entity relationship diagram, and some portions of user documentation.
- Basis2 test database analysis: RFC was given access to the Test Basis2 environment via VPN in June, 2014. The copy of Basis2 in Test at that time was dated as of April 30, 2014. We conducted the majority of data integrity testing and reporting issue investigation within Test. We were able to identify the sources of issues with report consistency during the investigation.
- Current reports analysis: RFC reviewed the data used in PWD's last rate case, testimony from the Department and from the Public Advocate's expert witness regarding these data, WRB and the Revenue Department's major ongoing reporting, peer utilities' reporting practices.
- Revenue extracts analysis: RFC was provided with a copy of the Revenue extracts layouts, followed by several months' worth of extracts, followed by all available extracts dating back to the beginning of the extracts' production.

- Basis2 year-end copy analysis and report generation: RFC was also provided with a copy of Basis2 dated as of June 30, 2014 in October, 2014. This copy was provided as a series of flat files and RFC's team stood up the database copy to use it. Having made the major findings on reporting using the Basis2 test database, RFC drafted the reports PWD needed using the June 30, 2014 version in conjunction with the Revenue extracts. In addition, RFC tuned the Basis2 year-end copy, to enable reporting, including partitioning the database's crucial, large tables.
- Examine existing reports and develop recommendations for management reporting: RFC examined the code and output of a number of reports from Basis2, developed new reports for rate setting purposes and recommended several changes in approach to meet reporting needs. We had been provided with a sample of daily, monthly, and annual regular reports generated from Basis2.

3.2.2.1. **Basis2 Technical Interviews and Review of Technical Documentation**

RFC and our subcontractors interviewed and communicated frequently with WRB's Application Support Manager for Basis2. We gathered fundamental and detailed data about how the system works. We were provided with:

- Entity relationship diagram from Basis2's vendor Prophecy International.
- List and description of Basis2 interfaces
- SQL packages used to generate queries (as requested)
- Verbal information about processes within the database such as generation of the monthly report environment or interfund transfers (as requested)

3.2.2.2. **Basis2 "Test" Database Analysis**

RFC was granted access to the Basis2 test environment, one of several database environments to which new code is deployed before being promoted to the production database. Each of the environments is a complete replica of the production environment. This copy of the database was suitable for a thorough analysis of the data.

The analysis was made up of the following components:

- Review of major tables
- Review of minor tables
- Data integrity testing
- Definition of account
- Life of one account
- Reconciliation of stormwater billing between PWD Stormwater database and Basis2
- Remittance type analysis by day, month, and year
- Reconciliation between consolidated cashing report and Basis2 daily payment total
- Transactional data analysis
- Reconciliation between FAMIS annual revenues and Basis2 annual payments
- Comparison of the use of different dates for reporting
- Analysis of revenue reporting extracts for historical information
- Analysis of stormwater-only and other service types
- Analysis of wholesale water customers

Detailed information on the first three items is found in Appendix C. Other information is summarized in following subsections. The test database analysis provided our team with the first major set of findings for the Basis2 and management reporting portion of the project.

3.3. FINDINGS AND CONCLUSIONS

3.3.1. User Experience

From the user stories, RFC understands that Basis2 provides the necessary customer information system functionality or interfaces with other existing systems allowing staff to carry out the full spectrum of customer relationship management processes. Staff noted several opportunities for improvements in system reliability and process efficiency. Most notably, nearly all interviewees referenced the frequency with which Basis2 becomes nonfunctional; this occurs on a daily basis. Several users also noted concerns about the reliability of data stored in Basis2 in that many fields are editable by users and appear not to be completely auditable (i.e. the system logs only the most recent editor). While users did not express discontent with the need to use supplemental systems and paper processes, RFC recognized these as opportunities for improvements in efficiency. For example, WRAP applications are submitted as paper documents and their review and approval is a paper process, the results of which are entered into a separate software application with only minimal relevant information being integrated into Basis2. Staff regularly make use of Basis2 functionality to view different types of information about an account (customer, meter, property, payment history, etc.) and to communicate with other departments. In general, the concerns discussed did not significantly limit staff ability to carry out their respective duties. The full results of user interviews are found in Appendix B.

3.3.2. Resource Adequacy

One item of interest to the Revenue Bureau was an assessment of the level of resources devoted to the maintenance and upkeep of the Basis2 system. One means of assessing the resources relates to the reported workload and backlog and typical output from the team. A second means of assessing the resources involves relating them to the upkeep of other systems or utilities, preferably comparable systems.

3.3.2.1. Description of typical types of resources devoted to system maintenance

To provide some additional background on the resources typically devoted to large billing and customer information system maintenance, this section describes the following typical staff needs and their roles.

- Database Administrators
- Software Developers
- Production Support Team
- Business Analysts
- Quality Assurance Team
- Managers, Project Managers, and Leads
- Network Support
- Security and PC Support

Database Administrators

Database administrators (DBAs) are responsible for the performance, integrity and security of a database. They are also involved in the planning and development of any new databases as well as troubleshooting any issues on behalf of the users. A DBA makes sure that databases have the following qualities:

- data remain consistent across the database,
- data are clearly defined,
- users access data concurrently, in a form that suits their needs, and
- there are provisions for data security and recovery control (all data are retrievable in an emergency).

Some of the tasks performed by DBAs are:

- controlling access permissions and privileges;
- monitoring and improving system performance, both the response time for front-end users and the time and system resources used for batch processes;
- organizing and tuning the data and database tables;
- maintaining data standards, including adherence to the Data Protection Act;
- writing database documentation, including data standards, procedures and definitions for the data dictionary (metadata);
- developing, managing and testing back-up and recovery plans;
- capacity planning;
- creating new database tables and columns as needed for IT developers
- deploying emergency production defect corrections as needed
- deploying new software releases to production per scheduled release dates
- designing and building new databases;

Because of the increasing levels of hacking and identify theft, security and disaster recovery must be a critical focus of a DBA's job responsibilities.

Software Developers

Developers can be involved in a wide range of tasks depending on the experience, skills and initiative of the individual. Typical development tasks include the following:

- writing technical design specifications based on functional design documents,
- writing new software code based on the technical design, unit testing new code,
- performing peer reviews of code written by other colleagues,
- performing root cause analysis on software defects,
- performing code repair on defects detected, and
- documenting defect corrections.

Experienced developers are often brought into requirements discussions to help determine an initial technical solution to a business requirement and to provide an initial estimate of the level of effort required to perform the work. Experienced developers may also be brought in to support reporting to and meeting with management and other stakeholders.

Production Support Team

The production support team is tasked with ensuring that the day-to-day operations of the billing system and all its outlying applications are delivering expected results. Typically members of this team receive support requests through some type of help 'ticket' so the issues are logged into a database and their lifecycle tracked. A phone help-line may also be a tool for users to use to request assistance. The team

should be made up of technical developers as well as business analysts whose time is primarily allocated to providing end user support for a wide range of system disruptions. Because these roles are primarily reactive as opposed to pro-active, these team members should not have long term assignments with inflexible deadlines. However, some less time-sensitive tasks should be allocated to these resources so that they can focus on other work when user demands are fairly light. Typical production support tasks include

- responding to users who experience unexpected system behavior
- researching root causes of unexpected behavior
- provide resolution to unexpected system behavior such as informing users of end-user errors, identifying new requirements, creating new software code, and recommending and implementing software configuration changes
- developing functional and/or technical design documents to resolve defects or fulfill new requirements
- performing unit and system testing on defect corrections and or new development
- validating, supporting and/or providing evidence of User Acceptance Testing
- tracking and reporting on operations metrics to upper management

Managers, Project Managers and Leads

Management and lead roles are critical to ensuring the successful operation of any billing department. These resources are liaisons between stakeholders and IT staff. They typically have more information than staff regarding department priorities, external projects and long range plans. Operations staff depend on a well-informed management team because that enables them to focus their attention on resolving tactical issues while letting other resources focus on strategic plans and political concerns. These resources typically manage project deadlines, resource allocations and day-to-day resource management. Depending on the structure of the organization they may also be responsible for hiring, firing, and working with the human resource department on employee issues. Employee development such as coaching and mentoring are also natural extensions of this job function.

Business Analysts

Business Analysts (BA's) are the liaisons between the end users of the application and the technical staff supporting and developing the software solution. Typical responsibilities of BA's are:

- Document end user requirements of an application. Requirements can be defined as needs or expectations of stakeholders that are to be met by the software solution. Often end users are not able to clearly articulate or envision requirements for a solution that has not yet been developed. An effective BA can draw from the end user's implied, assumed and otherwise unspoken requirements as well as document requirements that are obvious to the user.
- Design the functional solution that will meet most if not all requirements specified. Using story boards, user cases, Visio diagrams and/or other tools the BA documents the business process and system process for the future solution, so that a technical design can be developed from this documentation
- Support the development of the technical design, code development and unit testing, as required
- Execute various test scenarios against the code once delivered to detect any software defects and ensure the requirements are met.
- Develop or support in the development of end user training materials
- Deliver or support in the delivery of end user training

Quality Assurance Team

Quality assurance (QA) tasks should be incorporated in every core staff function to prevent as well as detect software defects. In addition, when resources are provided whose time is specifically allocated to formal quality assurance tasks, the entire organization can experience greater efficiencies and higher customer satisfaction. Some tasks performed by QA analysts are:

- Develop and audit the organization's processes, such as
 - verify test cases are a part of every functional and technical design document,
 - verify test cases are executed, results documented and any unexpected results documented and tracked to resolution,
 - verify requirements can be traced throughout all phases of the development lifecycle (design, technical development and all phases of testing),
 - verify all requirements, designs, defects, defect resolutions and release notes are documented and meet the organization's documentation standards,
 - verify software code is commented and contains references to any defects the code has been deployed to correct,
 - verify software code adheres to versioning, and
 - bring visibility to chronic gaps in quality and work to determine root causes and resolutions.

Additional Resources

Two additional types of resources commonly support a billing system and user environment and are provided, in this case by the Office of Information Technology (OIT):

- **Network Support**, which provides for ensuring the stability and performance of the network that users need to complete daily tasks and for configuring settings and permissions for users and user groups.
- **Security and PC Support**, which provides for assistance to users on hardware and software issues.

3.3.2.2. Survey of Comparable Utility Billing Systems

As a part of researching optimal staffing for Basis2, RFC conducted multiple interviews with comparable utilities. On the one hand, there appears to be no absolute formula for determining the number of support personnel required in each of the various operations roles. However, a critical area of consensus was that whether the operations staff was outsourced or internal, one full time equivalent DBA allocated to the care and feeding of the CIS application was required. This was accomplished by dedicating a single individual, or job sharing among DBAs so that between the team, at least 40 hours per week was available to support the CIS operations. Larger utilities who outsourced their IT operations indicated that in addition to the DBA resource(s) provided through the outsourcing agency, the utility also provided an internal, dedicated DBA Full Time Equivalent (FTE).

The utilities interviewed also had a general consensus that there was a need to allocate full time Business Analyst (BA) resources to support the CIS system, although the number provided for this function varied widely, indicating some economies of scale. The smaller utilities allocated at least two BA-type resources who also performed QA duties. The larger utilities indicated a need for up to 5 BA resources.

Specific information from the utilities is found in Appendix G but the utility names have been redacted.

3.3.3. Basis2 Administration

Our findings from interviewing the Basis2 resources, corroborated by information gleaned from Basis2 users, non-users and work within the database revealed strengths, as well as areas for improvement for support of Basis2.

3.3.3.1. Strengths

Key strengths of the team are centered on the procedures for updating and maintaining the database. These strengths are areas where the team observes best practices.

The team has a system for peer review of code changes before code changes are integrated into the production database. Code is written by a developer or developers and then is referred to another developer for review before the code advances to the next stage of implementation. In addition, the team uses a version control software for all code, which requires that code be checked out in order for staff to alter the code. The name of the version control software the team uses is VSS. Use of version control software is intended to ensure that successive versions of code are archived (in case there is a need to revert to an earlier version), changes to code are evident, and that changes to code by multiple developers are maintained and tracked. The City, via the controls set up by OIT, maintains very restricted access to the Basis2 production environment, helping to ensure that the database, which is large and complex and critical to the PWD and WRB missions, is secure and uncorrupted. The software developers (and other users like RFC) are given access to parallel environments for querying, testing code, and the code promotion process. Finally, given the many demands on the team, the group implemented a log of requests and responses to those requests called Ticket Tracker, which assists the team in monitoring, prioritizing, and responding to user requests for changes and bug fixes in Basis2.

Unprompted, we received favorable feedback for the team's manager, Susan LaCour. The team consistently expressed the opinion that she was an effective manager and assisted the team with balancing competing demands. Favorable feedback also came from others outside the team, including management within WRB and PWD.

In response to questions about the responsiveness and effectiveness of the OIT data base manager and database administrator, the team responded positively. In particular, the team cited favorable feedback for Charles Mouteng and his management of simultaneous demands on DBA staff. The DBA herself, Kala Bodge, also received positive feedback, both from production support and software developer staff, for her helpful demeanor and 'can do' attitude, despite the tremendous demands on her time.

Lastly, the RFC team noted that the staff provided consistent, but individual responses across the team. To us, this feature indicated a consistent experience across the team, lending validity to the findings. The responses were not so uniform as to be prompted or rehearsed. Considering the sensitivity of the subjects for the team, the fact that team members were open and not coached was significant to the interviewers. Among the important common themes were that all resources had a clear understanding of a mature software development lifecycle, and an understanding of the obstacles that prevent them from following it. Frustrations that the team members observed are tied to common gaps identified in the following section.

3.3.3.2. Gaps

RFC and Miitek identified three major resource gaps for the system:

- Business Analyst/Quality Analyst resources
- DBA resources
- Enforcement of Best Practices in Change Management

The impacts of these gaps are experienced by the team itself, WRB and PWD.

Business Analyst and Quality Analyst Resources

Currently, most of the team is made up of technical developers. In addition, a group called “Basis2 Support” is made up of subject matter experts within various WRB business areas that also provide additional support functions in addition to their regular full-time operations duties:

- Training
- Onboarding support for new employees
- Day-to-day support- for example, if someone can’t send documents to a printer for printing.

Finally, the Basis2 team has a manager, who performs BA and QA roles in addition to major project management, production support and team management duties.

As described in an earlier section, business analysts and quality analysts serve critical roles in the development and deployment of changes to the system. The impacts of inadequate BA/QA resources are as follows:

- Inadequate identification of requirements: A critical BA role is defining and documenting requirements. Many times what is initially asked for is not what is actually required across the organization. BA’s have the training and experience to draw out discussions and dig for root solutions that can address multiple symptoms. They are also trained to document, publish and get agreement among stakeholders so that the requirements are accepted. Clear requirements build the foundation for the entire development effort, even for ‘small’ defect corrections. With clear requirements, developers have a better idea of the target, and once that target is achieved, the business has assurance what they asked for is actually what is delivered. Multiple industry studies have documented that 85% of all software defects are introduced through ambiguous requirements.
- Inefficient use of resources:
 - Inefficient use of developers and end users: When Basis2 resources are not available the users go directly to the developers. When requests are made directly to developers without required business analysis, more back and forth discussions are required between the developer and end user. Without a liaison, these two types of resources do not always communicate effectively and often have many sessions of discussions to clarify the solution. This back and forth was mentioned in several of the interviews as something that blocked developers’ ability to do their best work. Several of the developers mentioned they could be more effective and efficient if the initial requirements gathering were done before they received assignments. They also mentioned there are some areas where their tasks could

be automated, which would be more efficient in the long run, but they do not have the time to focus on this automation due to other demands on their time.

- Inefficient use of other resources: Other resources (than developers) get pulled in to take on the BA/QA role to the detriment of their main responsibilities. Production support, project management, team management, or user support resources are also asked to perform BA and QA.
- Inadequate testing: Software testing is a specific discipline that requires training and experience. Quality of delivered solutions are sacrificed if staff are not dedicated to this role. We heard that the Basis2 team manager is often pulled in to perform this task before code is promoted to production. Although her commitment to quality is commendable, having her perform this task is at the detriment of the organization because it pulls her away from her other responsibilities.
- Dissatisfaction by the business of the final deliverable. If the initial requirements are not clearly documented, understood and traced throughout the entire development process, it is very likely that the delivered solution may not meet the actual requirements and the requesting party will not receive what they thought they requested.

DBA resources

A very significant resource issue we identified is with the lack of database administrator resources available for Basis2. There is currently one full time DBA resource who is shared between two extremely large database needs: the human resources database and Basis2. In addition, there is one contract DBA hired to focus on performance and another contractor hired to support the DBA employee's job duties. The contractor hired to support the full-time DBA does not yet have enough experience to fully support Basis2. From what we learned this DBA coverage does not appear to be sufficient to support day-to-day operations and enhancement projects. In comparison with similar, adequately-supported systems, the level of DBA support is low.

From what we saw and heard, the Basis2 DBA and database manager simply do not have the capacity to devote to the major projects that are needed to ensure the optimal performance of the database. They are more than fully occupied with the day-to-day operations and projects they currently handle, and already work regular hours, at night, on holidays, on weekends, and through vacations. The impacts of inadequate resources are visible to others in WRB and PWD and include:

- Slow system performance owing to an inadequately tuned database. Some of the Prophecy code is proprietary code, which means database tuning requires collaboration with the vendor who works in an Australian time zone. Collaborating off shore to tune the database with proprietary code is a complex project that would require dedicated time to complete. The current DBA resources do not have the capacity to devote the required time to this effort.
- Slow system performance owing to database fragmentation. As a normal by-product of daily operations in a growing transactional database, space is added to the database as a reaction to application demands and may not be added in a way that supports optimal retrieval of that data. A regular DBA job function is to monitor the database performance and from time to time optimize

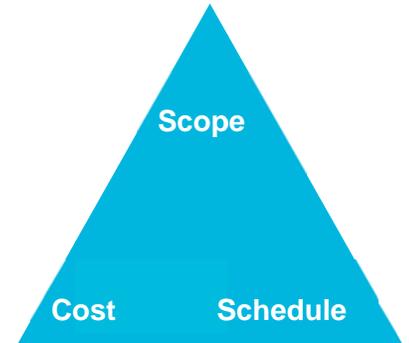
database space by reorganizing how data is stored. Monitoring and defragging a database of this size requires DBA time and effort not currently available with the resources on staff.

- Slow system performance owing to placement of table and indexed data. Queries pull data from both tables and indexes. When both of these elements are stored in the same table space there is the potential the query will run more slowly. Likewise, for complex queries, multiple tables are joined together so this table contention issue could be compounded. Currently Basis2 has the three largest tables in a single table space, which is not optimal for system performance. Given dedicated time, a DBA could determine whether this is causing performance degradation and resolve by segregating table space. However, with such a large database, the effort requires significant time to complete.
- Data contention errors occur during the nightly batch jobs which periodically cause the jobs to fail. These job failures could be caused by database configuration, hardware specifications or software defects. Resolving this chronic failure requires dedicated time of a DBA or network administrator (or both) to identify the root cause and then propose a solution. Nightly batch failures require urgent attention of Basis2 development staff at any hour of the night and can also threaten the ability of the nightly batch to complete in time for the opening of business the next morning.
- Users experience lack of application availability. It appears to them the system hangs up and doesn't respond to input. This system performance could be caused by any of the database conditions described in the items above.
- Background processes abort unexpectedly. The cause for this system failure could be any of the conditions described in the first four bullets above or could be caused by something altogether different. Research into the root cause requires dedicated DBA time.
- Delayed developer support. Sometimes the developers have to wait a week or two for DBA support to create tables or promote code. These delays have a direct impact on their ability to complete enhancement projects.
- Delayed upgrades. Two projects have been identified by the Basis2 and OIT teams that could significantly improve database performance and prolong the Basis2 lifespan: changeover from Windows to LINUX and an upgrade of the underlying Oracle version. Both of these major projects are out of reach with current resources.

Enforcement of Best Practices in Change Management

The final gap we identified is enforcement of best practices in change management. This gap is indicative of inadequate resources described above. Unfortunately, it also contributes to poor perceptions of the team.

- Invisible work – end users make requests via phone and email. Without strenuous enforcement of Ticket Tracker by all Basis2 resources the time spent on support cannot adequately be measured and reported.
- Production support is usually urgent so Ticket Tracker is often neglected.
- Several interviewees mentioned how disruptive last minute scope changes and sudden shifts in priorities are to their work and to their work satisfaction.
- Lack of appreciation throughout the organization of the quality triangle, shown in the figure. Any changes to any corner of the triangle without a corresponding change in the other corners to balance the triangle will directly impact quality.



3.3.4. Basis2 Team Resources and Budget

3.3.4.1. Staffing

As described above, RFC and Miitek had the opportunity to interview most members of the Basis2 team. The team members and their roles are summarized in the table below. There is an application team, a support team, and database administration staff. Most of the application team staff have been working with Basis2 since its inception, beginning as a part of the implementation team for the system. These staff members remain full-time, contracted employees. One staff member was a Water1 developer before being moved to the Basis2 team. A junior-level developer has been hired as a City employee within the last few years. The team has two additional part time contracted resources, a developer who works on special projects periodically and a technical writer. The Basis2 support team comprises subject matter experts in other areas of WRB who provide support and training to users of Basis2 and serve in testing and user acceptance roles as well. All Basis2 duties are additional to their full-time duties in their respective areas. Staff who serve in this role are one team leader and five other staff members. Finally, the Office of Information Technology manages the production database and, as described in this section, provides a database administrator (DBA). The DBA also administers another major database, the human resources database. This team is comparable in number to many of those of peer utilities, but as described, staff have responsibilities outside the realm of Basis2 to which they must devote some portion of their time. The informal survey of other utilities revealed that a dedicated Database Administrator is critical to a fully functional application, and that Business Analysts in particular fill a crucial role in facilitating collaboration between database technical staff and users of the data it houses.

Table 3: Basis2 Staff

Number of staff	Role	Percent devoted to Basis2	Contract or City
Basis2 application team			
1	Manager (plus serves roles as production support, BA, QA, project lead, project manager)	Full-time	Contract
1	Production support analyst, Sr. developer	Full-time	Contract
4	Sr. developer (of which 1 specializes as ad hoc query analyst and one as technical architect)	Full-time	Contract
2	Developer	Full-time	City
1	Sr. developer	Special projects only (limited)	Contract
1	technical/business analyst, application developer supervisor	Less than 25% time (serves tax as well)	City
1	technical writer	Part-time (contracted up to 20 hours per week)	Contract
Basis2 support team			
6 (1 lead, 5 team members)	Basis2 support team (User support and training)	In addition to full-time duties	
Database Administration			
1	DBA	~50% of time	City
1	Database Group Manager	Portion of time as needed	City

3.3.4.2. Budget

RFC obtained cost estimates from WRB for the support of Basis2. These costs are made up of internal City staff costs, external contracted staff costs, external contracted professional services provided by the Basis2 vendor (Prophecy International), software maintenance agreement costs (Prophecy International), and OIT costs for software and hardware. OIT’s costs are simply an estimate as the Department does not directly bill or allocate costs to WRB.

The total annual estimated cost is between \$2.4 and \$2.6 million dollars. The contract for vendor professional services varies each year, depending on the projects that occur in a given year and the degree to which Prophecy International support is needed. For example, the costs may be higher in a year when the application requires a major upgrade or change.

Table 4: Estimated annual costs

Type	Description	Estimated Cost
Personnel	City employees (salaries only, no fringe and benefits)	\$130,000
Contract	Vendor software maintenance agreement	\$390,000
Contract	Vendor professional services (varies depending on specific needs)	\$50,000 – \$250,000
Contract staff	Contract employees	\$1,556,000
Other departmental	Estimated OIT dollars for Oracle dB contract, server and disk space (no cost included for DBA)	\$300,000
	Annual estimated cost	\$2,426,000 - \$2,626,000

Although the Basis2 budget is comparable to some surveyed utilities, most utilities were unable to provide enough information to make a worthwhile comparison.

3.3.4.3. Other Findings

In addition to the major findings listed above, RFC offers these as further points to consider in developing conclusions and offering recommendations.

- a. Some of the Prophecy code is proprietary. Without full access to all code, a DBA cannot fully assess the impact of database changes suggested to improve system performance. Thus, collaboration with the vendor is required, and as discussed earlier in this section, that collaboration requires that more time be invested in analysis of system performance and improvement.
- b. A data warehouse project is currently being scoped for Basis2. Data warehouses are powerful tools for transaction based systems and have the potential for providing valuable information to multiple stakeholders in user friendly formats. However, this type of database requires significant data management resources. The city will not recognize the full potential of implementing the data warehouse if resources are not dedicated to its support.
- c. The technical writer for the team spends 6-7 hours a week updating names and addresses in the municipal court interface file so they conform to the court requirements. She has been performing this task since 2009 which amounts to approximately 1500 hours invested. It does not appear these updates are entered back to Basis2 so any time these accounts are re-selected the data clean-up will be required again. It seems that an automated solution could be developed for a fraction of the 1500 hours already invested.

3.3.5. Basis2 Investigation

3.3.5.1. Definition of Account

The starting hypotheses about why inconsistent or apparently inaccurate reports were being generated were as follows:

1. Basis2 has fundamental data integrity issues that prevent it from producing replicable, reliable reports
2. Reporting issues stem from the use of different definitions across standard reports, ad hoc reports, verbal discussions, and unstated understandings, and from report to report.

Within Basis2, a new account is a unique identifier for a customer at a location. This means that new accounts are created for a number of reasons: properties are bought and sold, customers move in and out of locations, new customers enter the city (at existing locations), existing customers leave the City (replaced by different customers at existing locations), properties are subdivided and redeveloped (creating new locations), and so forth. The number of new accounts that contribute to an overall increase in the City's water and sewer rate bases is a relatively small proportion of all new accounts. From the City's demographic trends, it was clear to the rate consultant and the Department that a much more conservative growth path was expected and the rate consultant projected 230 new customers per year. The data from Basis2, which reported a much greater number of new accounts, were assumed to be incorrect and unreliable. In fact, the terminology involved was simply too imprecise to convey the intended use of the output with regard to the rate base.

As described in an earlier section, the definition of "account," and more significantly, and "active account," was an important area of disagreement in the 2012 rate case. The Basis2 application team and WRB define an account as "a customer at an installation". That is, a unique account number is generated to signify a customer at a location (installation). For an example of how significant this definition is, consider customer, Mr. A, who moves between two existing installations: installation 1 to installation 2. A new customer, Mrs. B, moves between existing installations: installation 3 into installation 1. For that case, there would be several accounts:

- Account 1: Mr. A at installation 1
- Account 2: Mr. A at installation 2
- Account 3: Mrs. B at installation 3
- Account 4: Mrs. B at installation 1

Data are not purged from Basis2 once they become irrelevant to current billing and collection efforts. As a result, over time, the number of accounts shown in the system grows as customers move in and out of installations as well as when new installations are created through development or redevelopment. For the purposes of calculating growth in the customer base that generates more consumption and more revenue within the PWD system, only a sub-set of those accounts are relevant. Importantly, Basis2 does not contain a signifier for whether an account is "active" or "inactive". The attribute items "Current" versus "Discontinued" status and non-bill status that do give a sense of active/inactive status but are static rather than transactional. This means that it is only possible to know the status for those items for accounts as they are in the current database, and not when they changed.¹³

After examining the trends, RFC recommended that "active" accounts be defined as ones with transactions or transactions of a certain type in any given period. The figure below shows the number of active

¹³ If the Demographics tables from the Revenue Reporting extracts are used, these characteristics can be tracked from month to month.

accounts, active customers and active installations over time, defined as accounts, customers and installations with a transaction in a particular month. The figure shows large increases in accounts when the stormwater fee was implemented and that since those accounts were fully implemented, growth in the system has been flat.

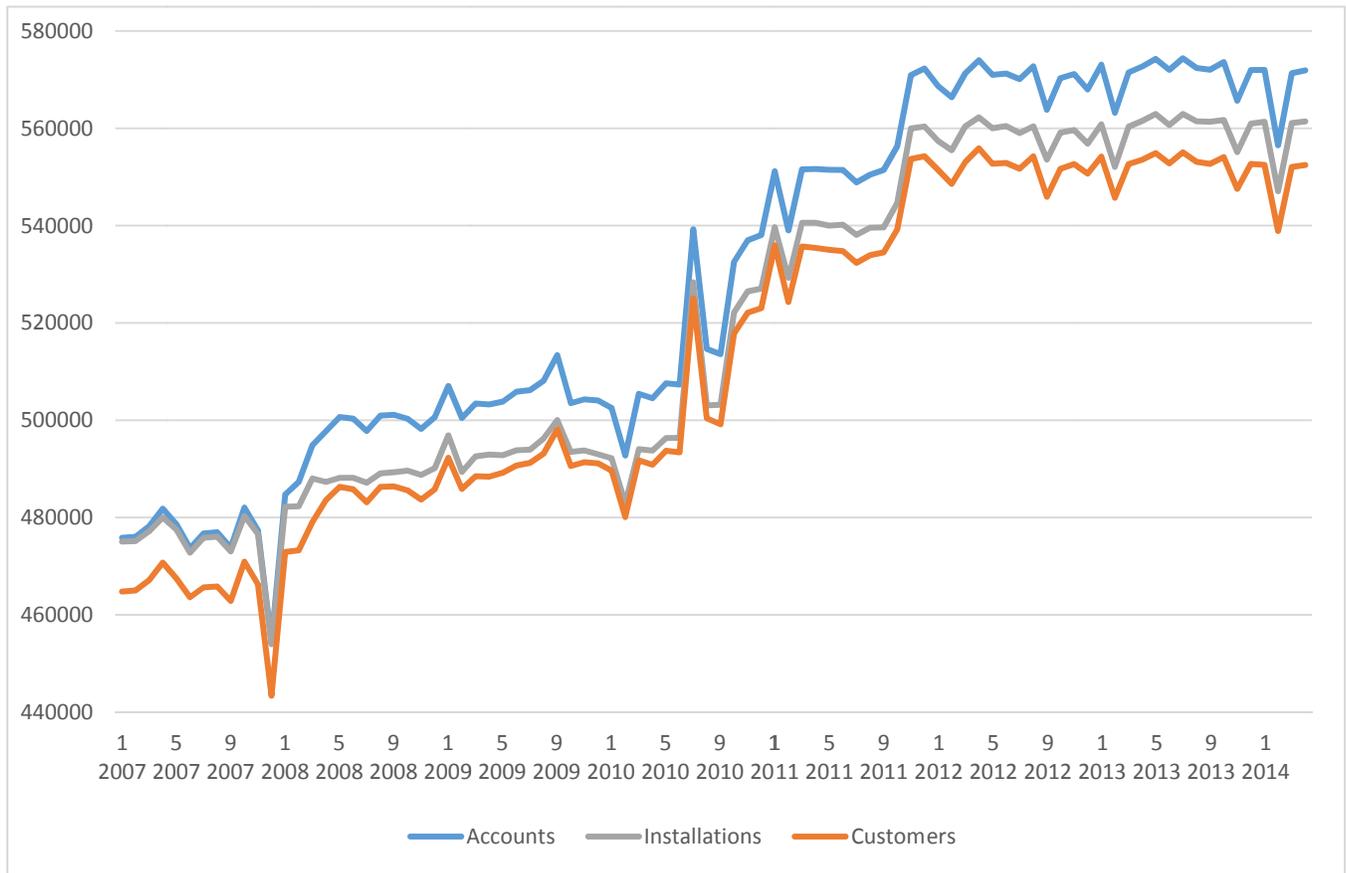


Figure 1: Accounts, Customers, and Installation numbers as measured by presence of a transaction in Basis2

3.3.5.2. Life of One Account

In order to understand how accounts are represented in Basis2 over time, RFC traced the life of one account. The account represents a very basic example of a residential customer at an installation. The database contains basic information about the account:

- Physical and mailing addresses
- Customer type, installation type, payment profile
- Whether the customer is an owner or a tenant
- Creation and update dates

In addition, we were able to observe the wealth of information on the financial transactions for the account during its active period of several years and to understand the way that tables containing transactional data relate to one another. These important tables were the transaction, debit lines, credit lines, credit/debit allocation and bankslips.

We examined the major financial tables for information about the accounts. The first table was the transactions table (CIS_TRANSACTIONS). The transactions table shows both credits and debits to an account, each one with a transaction creation date (the date the entry was created in Basis2) and a transaction date (the accounting day of the transaction). Each credit and debit not only has the amount of the transaction but also a “task code” with both primary and secondary types that allowed us to know what type of transaction the debit or credit was. For example, “BILL” is a task code. Payment credits by the customer are shown in the transactions table and each payment has a bankslip number to associate with the bankslip deposited containing that payment.

The second table was the debit lines table. The debit lines table shows all debits for the account, including debit adjustments. Debits are very granular in the system, so that one debit in the transactions table (like a “BILL”) is shown in all its component debits in the debit lines table. From the debits line table it is possible to see the individual charges that make up a bill such as water usage, water service, sewer usage, sewer service, and stormwater charges. As in the transactions table, each line item has a dollar amount, task code, secondary type, transaction creation date and transaction date. The debit lines table is the source for consumption data for the water utility. Each debit line is also associated with a code for the account’s service designation, the “REVENUE_GLIF_CODE”.

The third financial table was the credit lines table. The credit lines table contains detailed information about payments made and other credits, such as credit adjustments, on the account. Lines each contain the dollar amount, task code, secondary type, transaction creation date and transaction date for the credit.

The fourth financial table, a large and complex table is the credit debit reconciliation table (or CIS_CRDR_ALLOCATIONS). Importantly, this table links credits to the debits to which they are applied in the system. Each credit line identification number is referenced and each debit line identification number is referenced. The amount of money that was allocated is also provided in each line (the allocation amount). The important date identifiers are the creation date and the allocation date. Similar to the transaction date, the allocation date is the accounting day on which the allocation took place.

The bank slips table provides information on when payments went into the bank. During the analysis, we identified that the bankslip date and transaction date for payments had historically been identical. However, in September of 2013 the two dates diverged reflecting a new practice. This business practice change is described in more detail in the section on RemitPro. Basis2 began to accept two different dates from the cashiering system, one of which reflected the date that the customer mailed his or her payment. The two dates were the “post-mark date” as transaction date and the bank slip date as the date the deposit was made. The customer account would be credited as of the transaction or “post-mark” date. The “post-mark” date for most payments was assigned in intake for mail, while for exceptions, accounting could use the actual post-mark date (a small proportion of payments). The purpose of the change was to give the customers an additional window to submit payments on time based on the fact that they mail their payments in advance of when those payments may be received or processed by Revenue.

In summary, the life of a single account allowed the team to examine the data structure of Basis2 in action, revealing the intended use and function of the important tables. The detailed look provided insights that were later used to define parameters as new reports were developed.

3.3.5.3. Single Day in Utility Billing

In addition to looking at how a single account is treated over time within Basis2, RFC looked at summary level information from some of the most critical tables in Basis2 for single business days. Given the level of detail and the sheer volume of data in many of these tables, simplifying to a single day allowed the team to look in detail at how activities manifest themselves in Basis2 on a daily basis. This allowed us to gather further information to help understand the workings of the system, and how various parameters would affect the reporting of data that could impact the cost of service study reporting.

The analysis began by looking at the definition of accounts using a variety of transactional and non-transaction parameters. This analysis gave us a sense of the level of sensitivity that the number of accounts sees with relation to a number of parameters used by WRB in some of its reports. Running this analysis on a single day allowed for the rapid return of results and helped us to define our preferred methodology for counting accounts: customers at installations with transactions of task code type “Bill” for the given time period.

We next examined a variety of financial transaction information on a given day to see the scale of billings, payments, bank deposits, etc. This effort would again help the team to determine the best parameters to use to describe debits, credits, adjustments, and bank deposits. Importantly, we found that the amount of money stored in the transactions table matches with the debit lines table or credit lines table for debit transaction and credit transaction amounts, respectively. Looking at financial transactions in this way also helped us to understand the relative scale of the different task codes in each table.

During this analysis we also looked closely at payments in relation to the values that are entered into FAMIS via a Basis2 report called the 5C report. We were able to match values from the 5C report from data in Basis2 by looking at the amount of money credited in the system by bank slip date. The days that were examined in this analysis aligned as expected and encouraged our team that there was some reliable linkage between payment information in Basis2 and revenues in FAMIS.

During the single day analysis the team thought that it would be interesting to plot the activity of various task codes against the day of the week when the transaction occurred to see if there were any patterns or outliers. This information helped us to see which types of transactions occur most frequently on what days. Some examples for Fiscal Year 2014 are included below. We can see that 15 year write-offs and interfund transfers most commonly occur on the weekend, credit adjustments peak on Wednesdays, and various types of payments peak on Tuesdays. This analysis also helped lead us to the information regarding transactions being posted as of different days than when they were processed (i.e. REMITPRO transactions on Saturdays).

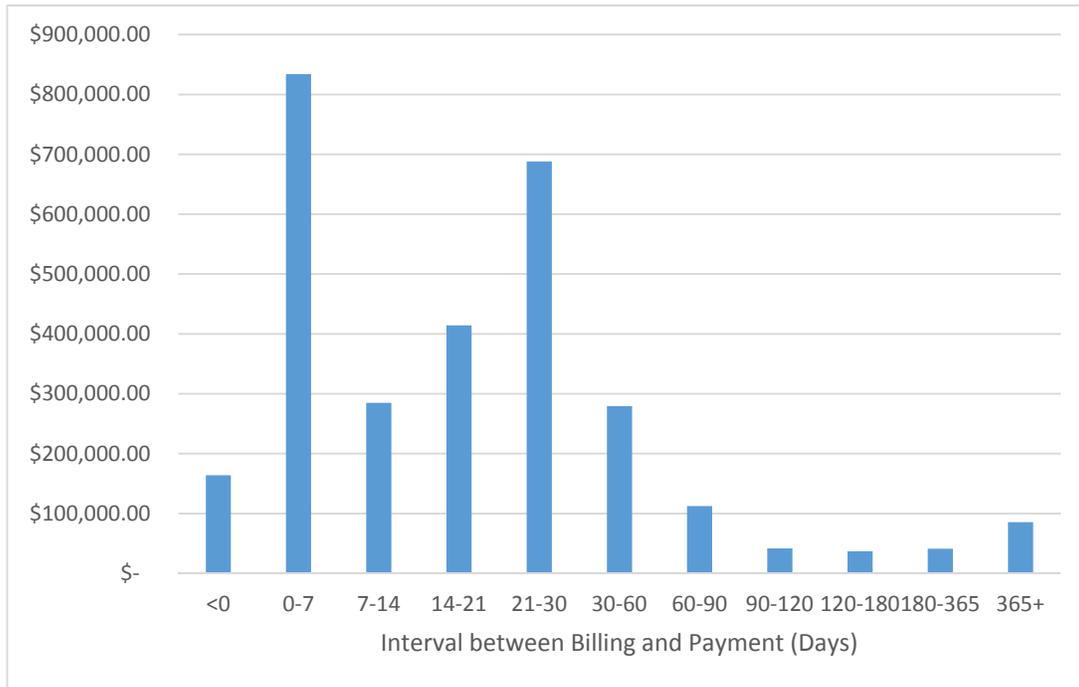
Table 5: Transactions by day of the week

DAY	15WRITE	INTFUND	CA	REMITPRO	WEB
Monday	\$37,252.53		\$2,212,670.60	\$55,023,698.14	\$4,116,219.93
Tuesday	\$49,844.49		\$1,404,604.27	\$66,360,000.97	\$8,127,200.93
Wednesday	\$14,163.61		\$3,865,587.92	\$49,521,775.39	\$4,419,810.64
Thursday	\$16,635.87		\$1,854,159.29	\$61,205,254.35	\$3,350,247.19
Friday	\$40,369.28		\$1,658,831.30	\$44,450,898.16	\$3,700,211.00
Saturday	\$6,162,618.69	\$36,419,298.97	\$1,985,335.32	\$9,268,079.51	
Sunday	\$6,295,849.68			\$8,675,611.38	

Next the team looked at adjustments, highlighting the transactions where the amount reduced or increased balances for debits and credits respectively. This analysis helped us to define particular types of adjustments that were not being included in prior reports by WRB. It also helped to see the scale of various types of adjustments on a given day.

The last major analysis the RFC performed by looking at individual days was to examine the most common intervals between billing and payment. This information helped to give us a very basic sense of payment patterns given how they manifest on a particular day. An example for February 18th, 2014 is included below. This analysis helped us to identify some patterns in payments that we hadn't previously observed such as pre-payments (<0) and same day scheduled payments. These findings would impact the development of the collection factor and payment patterns cost of service study reports.

Figure 2: Payment patterns for February 18th, 2014



In summary, the analyses conducted on financial information on a single day allowed RFC to test the use of various parameters on transactional information in a way that provided rapid results and feedback. By zooming in to a particular day, this analysis gave us a sense of scale on various types of financial transactions and helped us to see their sensitivities to changes in reporting parameters. The findings that resulted from this analysis helped us to better tune our definitions and improved our understanding of how data should be reported to support the cost of service study.

3.3.6. Basis2 Architecture and Reporting Reliability

The first findings related to Basis2 itself. As described in the user interviews, Basis2 provides a user interface, functioning as the customer information system (CIS) in addition to serving as the billing system for the utility. With respect to its function as a CIS interface, it provides comparable functionality to standard industry systems with graphical user interfaces. In addition, it provides users with more granular and detailed information about accounts and transactions than some other systems. Basis2 is a relational database on an Oracle platform. Relational databases are now nearly standard for large utility billing systems, with the exceptions being utilities that continue to function on legacy mainframe systems. Many of these legacy systems are in the process of or on the verge of conversion to relational databases with user applications similar to the Basis2 application. Oracle is an industry-leading enterprise database. The database fields and tables are set up to record and maintain a high level of detailed financial data at a transactional level. Basis2 is configured with a large number of interfaces with other systems whereby Basis2 data are exported to files or to other IT systems or outside data are imported and drive changes to Basis2 data. The list of inbound and outbound interfaces as of April, 2014 is found in the table below. Through data integrity testing, our team demonstrated that the database did not have widespread or pervasive data integrity issues. Rather, we identified only a few, isolated and minor instances of such

issues. We were able to hypothesize at that juncture that the reporting issues did not stem from issues around data integrity in the database and looked for other causes of the identified report problems. Thus, in our estimation, the database and application did not demand immediate replacement.

Table 6: Inbound and Outbound Basis2 Interfaces (current as of April 11, 2014 and provided by Basis2 application team)

#	Interface Name	Freq- uency	Internal or External to City	Purpose
INBOUND				
1	Collection Agencies Inbound Interface	Daily	External	Updates from collection agencies regarding changes to customer's accounts that are being pursued by the agencies for collection of overdue receivables.
2	Deeds Inbound Interface	Daily	Internal	Updates to property ownership from the Records department.
3	Digups Inbound Interface	Daily	Internal	Updates from the PWD shutoff system regarding customers whose water service required a dig-up.
4	FTP Site Sweep	Daily	Internal and External	Load files from sFTP directories into inbound staging tables.
5	Handheld Meter Reading Interface Process	Daily	Internal	Meter readings from handheld meter reading devices.
6	ITRON Meter Reading Inbound Interface Process	Daily	External	Meter readings from automated meter reading devices from ITRON.
7	Municipal Court Disposition Inbound	Daily	Internal	Updated case dispositions from the Municipal Court system regarding cases related to overdue water bills. In progress.
8	Municipal Court Hearing Inbound	Daily	Internal	Updated hearing dates from the Municipal Court system regarding cases related to overdue water bills. In progress.
9	Permit Tracking Inbound Interface	Daily	Internal	Information from the PWD Permit Tracking System regarding permits that create new properties with water service or add water service to existing properties.
10	Revenue Payment Processing Interface - POS	Daily	Internal	Point of sale payments from the Revenue department. These include cash, check and money order payments at the window, credit cards, ZipPhone, web payments via ePay, IVR.
11	Revenue Payment Processing Interface - REMITPro	Daily	Internal	RemitPro payments from the Revenue department. These include all payments mailed in.
12	Service Link Inbound Interface	Daily	Internal	Updates regarding meter works orders from PWD's ServiceLink application. This includes installation of new meters, changes to existing meters, installation of ERTs (devices to send meter readings electronically), and removal of meters.

#	Interface Name	Freq- uency	Internal or External to City	Purpose
13	ShrinkIT Inbound Interface	Daily	Internal	Updates from the PWD ShrinkIT shutoff, digup and restore system regarding new or changed meter work orders.
14	Shutoffs Inbound Interface	Daily	Internal	Updates from the PWD shutoff system regarding customers whose water has been shutoff, who have had their water service restored, or who have made payments to prevent shutoff.
15	Stormwater Charge Interface Inbound	Daily	Internal	Load stormwater charges from PWD Stormwater system.
16	Stormwater Only Accounts Inbound	Daily	Internal	Load new accounts and updated account information from PWD Stormwater system.
17	WRAP Inbound Interface	Daily	Internal	Updates from the PWD WRAP system regarding new or changed WRAP payment agreements.
18	ZIPCHECK Inbound	Daily	External	Information from PNC bank regarding customers on the ZipCheck automated payment program including dishonored payments due to closed accounts, frozen accounts or insufficient funds.
19	SWAPP Inbound Account Adjustments	Weekly	Internal	Apply adjustments from PWD's SWAPP (Stormwater Assistance Program). In progress.
20	SWAPP Inbound Account Compliance Verification	Weekly	Internal	Verify that candidate accounts for PWD's SWAPP (Stormwater Assistance Program) are in compliance. In progress.
21	PHL Collection Agency Payment Inbound	Twice Monthly	External	Updates from collection agencies with payments against customers' overdue receivables.
22	ePay replication	Daily, every xx minutes	Internal	Streams-based replication of CIS.PHL_BIL_PRINT_HIST table to ePay online payment system
OUTBOUND				
1	Collection Agencies Outbound Interface	Daily	External	Updates to collection agencies with new customers who are to be pursued by the agencies for collection of overdue receivables.
2	Digups Outbound File	Daily/W eekly	Internal	Information about customers who are candidates to have their meters "dug up" by the PWD shutoff department. PWD runs this interface daily during the shutoff moratorium (December 1st - March 31st) and weekly during the rest of the year.
3	Handheld Outbound	Daily	Internal	Data about scheduled meter readings to be performed by the WRB handheld meter reading unit.
7	ITRON Outbound	Daily	External	Data about scheduled meter readings to be performed by ITRON.
4	Permit Tracking Outbound Interface	Daily	Internal	Updated work order completion status data sent to PWD's Permit Tracking system to update permit status on the PTS database.

#	Interface Name	Freq- uency	Internal or External to City	Purpose
5	PWD Table creation	Daily	Internal	Creation of a summary table that contains customer information used by the PWD applications (WRAP, ServiceLink, Permit Tracking).
6	Shutoffs Outbound File	Daily	Internal	Information about customers who are candidates to have their water service shutoff by the PWD shutoff department.
8	Stormwater Only Accounts Outbound	Daily	Internal	Send error messages to PWD Stormwater system regarding new and updated stormwater accounts.
9	ZIPCHECK Outbound File	Daily	External	Information about customer payment amounts sent to PNC bank for payment through the ZipCheck program.
10	Municipal Court Outbound Interface	Weekly	Internal	Data about customers who are candidates to be sent to the Municipal Court system due to overdue water bills. This is sent via the city's Law Department and consists of 240 cases per week.
11	Sheriff Sale Extract	Weekly	Internal	Data about customers who are candidates for Sheriff Sale provided to the Sheriff Department.
12	Bankruptcy - Outbound Interface	Monthly	Internal	New and updated information about customers who are in the bankruptcy process that is sent to the city Law department.
13	PWD Usage Extract	Monthly	Internal	Summary usage by service and property type.
14	Research Extract - Accounts Receivable	Monthly	Internal	Extracted accounts receivable information provided to the Revenue Research Department and the Controller's Office.
15	Research Extract - Adjustments	Monthly	Internal	Extracted adjustment information provided to the Revenue Research Department and the Controller's Office.
16	Research Extract - Billing	Monthly	Internal	Extracted billing information provided to the Revenue Research Department and the Controller's Office.
17	Research Extract - Demographic	Monthly	Internal	Extracted demographic information provided to the Revenue Research department and the Controller's Office.
18	Research Extract - Enforcement	Monthly	Internal	Extracted collections enforcement information provided to the Revenue Research Department and the Controller's Office.
19	Research Extract - Payments	Monthly	Internal	Extracted payment information provided to the Revenue Research Department and the Controller's Office.
20	Create Half Yearly Liens	Twice yearly	Internal	Post lien fees to customer accounts who meet lien criteria.

In addition to assessing the immediate need for CIS replacement, we assessed the drivers for conversion according to several metrics: user experience, data integrity, system performance, database design and

maintenance requirements. As discussed in detail below, the user experience is generally good and the capabilities of the CIS application are in line with industry standards. User complaints have to do with performance of the system and if resource needs are able to be resolved, facilitating the implementation of recommended tuning and other database maintenance projects, many daily user issues may be resolved under the existing system. User experience would not cause us to recommend replacement of Basis2. The experience of application and database support staff would bolster this conclusion: generally they regard Basis2 as being a robust, flexible system. They recognize that investments are needed to ensure the system's longevity. Likewise, as discussed previously, our assessment did not reveal widespread data integrity issues that would cause us to recommend replacement of Basis2.

When it comes to the final three metrics we used to assess Basis2: system performance, database design and maintenance requirements, our findings are more nuanced. Our team has now worked extensively with the database to develop and deliver management reports. Throughout the development of the reports our developers managed continuing performance issues in order to return query results. These are the same performance issues that the Basis2 application support team also must manage in its day-to-day work. For example, it is known that the payment pattern reports (16 standard periods and 2 to 4 custom periods) each month, require 5 days of processing time to complete. This payment patterns report runtime reflects a tuned query. In our team's experience with billing system databases all over the country over 20 years, we have not encountered performance issues of such magnitude, ones that were not able to be significantly improved through database and query tuning. On the one hand, we believe it is imperative that the key database configuration projects to improve performance be implemented in order to maintain the viability of Basis2. These are: 1) conversion to LINUX, 2) partitioning of tables (though this must be done carefully since some partitions may actually negatively affect performance for some queries while being optimized for others), and 3) data warehousing, purging and back up.

On the other hand, through our work with the database, we have identified some attributes that may present challenges for the long term scalability and performance of the database despite other hardware and software improvements. First, Basis2 exhibits multiple attributes that are appended to the ends of tables. Strong relational databases have multiple connections to other tables. The presence of table attributes lead us to believe Basis 2 started as a flat file database that was modified to make it relational. Second, basis 2 has tables with large numbers of columns, which makes the tables difficult to manage and impacts performance. There are 18 tables¹⁴ under the CIS schema with more than 100 columns defined for the table. The ones that have impacted RFC's reporting work in that list are CIS_ACCOUNTS and CIS_DEBIT_LINES. Third, compared with stronger relational database structures with concise structures and smaller numbers of columns, Basis2 is rangy and complex with many tables with large numbers of columns. Fourth, Basis2 has sequentially sequenced key identifiers (IDs) that limit its performance tuning options. Ideally, databases generate random key IDs that can be evenly distributed throughout the range of

¹⁴ As of July 2015: CIS_LD_CUST_INST, CIS_PROCESS_RESTART, CIS_PROCESS_TEMPLATES, CIS_PROCESS_HISTORY, CIS_RDGP_4371, CIS_READINGS_PROCESSING_6208, CIS_READINGS_PROCESSING, CIS_LD_METER_WOS, CIS_PPLN_DEBIT_LINES, CIS_DEBIT_LINES, CIS_PSB_DEBIT_LINES, CIS_DEBIT_LINES_BUG_2585, CIS_TMG_AGEDDEBT_SUMMARY, CIS_LD_HIST_TRANS, CIS_XT_INTERFACE, CIS_ACCOUNTS, CIS_LD_DEVICES, CIS_TRANSACTIONS, CIS_PSB_TRANSACTIONS, CIS_PPLN_TRANSACTIONS

possible keys for a table. This lends itself to scalability and parallel processing through hash table processing. Basis 2 has sequentially sequenced key IDs that limit options for performance tuning to indexing and partitioning. Partitioning may be limited because reports, processes and user interfaces may have different partitioning requirements. A partitioned structure that helps the performance of one report may not work well with another report. For example, the RFC reporting being done for the rate setting process requirement relies on fiscal year groupings. There may be other reports that would be better served with partitioned ranges of accounts (CUST_ID+INST_ID) or CREATION_DATE. Indexing has been done in the database to some extent already.

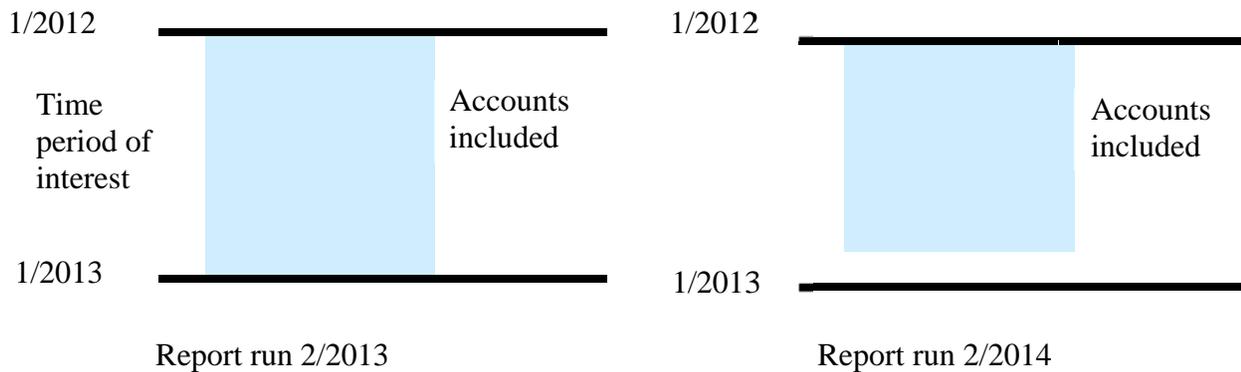
The second set of findings relates to the source of issues related to reporting. Upon examination of the data, we made some observations about the fundamental structure of the data in Basis2 and the impacts upon reporting. First, we observed that financial data for accounts are transactional, providing a complete record of changes to accounts' financial data. The tables that provide these data are the debit lines, credit lines, transactions, and credit-debit reconciliation tables. For some context, for every account, the amount of charges by type for each billing cycle are provided in the debit lines table. These transactions are linked together by certain identifiers such as transactions numbers. These changes to accounts are also designated with the time and date they occurred so that it is clear when each transaction occurred (in fact, many transactions have more than one date and time associated with them – the creation date and the date associated with the accounting day they occurred). In contrast, other types of account data are not maintained within Basis2 on a transactional basis. This means that changes to account characteristics can be made in the system and there is no record of when the change occurred or what the previous data were. A good example is the customer characteristic that determines whether the customer receives the senior citizen discount.

The impact of this distinction between these types of data and the way that they are recorded in the database is significant with regard to reporting. Both types of data, call them transactional (financial) and non-transactional (other), are used as bounding conditions for reports. For example, a query for a report may look at all bills, transactional data, created from July 1, 2012 to June 30, 2013. The query may limit the bills to ones generated for senior citizen discount customers, a non-transactional piece of data. We found that most reports include non-transactional bounding conditions. The issue with these non-transactional bounding conditions for reports is that the database only contains current data, with no record of these data at past points in time. When report queries search back over time, today's conditions for those data are not accurate for past time periods. This causes two issues with reports:

- The reports are not replicable
- The reports inappropriately apply today's conditions to the past

These issues increase in severity the farther back in time the report is run. For a report that looks at the current month, the issues are not very severe. This is the case for the Retail Customer Trends report, which is run monthly and queries the current month's consumption and billing. The monthly reports are never rerun and annual numbers derived for the report are rolled up from the static, monthly reports. On the other hand, reports that are run for past periods of time and then re-run upon request would show changes from report to report, even if run for the exact same parameters. The figure below illustrates this concept.

Figure 3: Impact of non-transactional bounding conditions



We tested the changes over time for a customer characteristic called “customer type” using monthly snapshot data from the Revenue Reporting extract “demographics” table. Over the 12 months we examined, the characteristic changed for a little less than 1% of accounts. So, for that particular characteristic, the change in a year’s time is not very significant, with a small impact upon reporting results, potentially. Other characteristics may change more rapidly. The change over the previous 24, 36, or more months would introduce much more unreliability into the report.

A second feature of Basis2 that has affected reporting to date is that the system is focused on billing and is configured primarily to serve billing-related ends as opposed to accounting or other purposes. The primary difficulty this presents for reporting is that the system is not configured with accounting periods and the ability to close accounting periods. As described in an earlier section, PWD Finance staff had observed that reports run for the same period of billing and collections would differ if run at different times. In part, the differences are owing to the changes in non-financial characteristics just described. The other reason for the changes is that financial transactional changes are applied to accounts as they occur and are not limited as to “accounting periods.” Thus, any period of time for which a report is run may change for any parameter as payments and adjustments are made for billings that occurred within that period. We heard from some long-time staff that in the previous system, Water1, a point-in-time balance for each account was recorded for each financial transaction that was applied to the account. For example, if a payment was recorded for the entire balance on an account, the transaction record would include both the amount of the payment and the new balance (\$0.00) for that account. The Basis2 configuration does not mean that it produces incorrect answers with regard to financial transactional data at any one time (if queried properly). The issue is that it is difficult to reproduce the financial status from a point in time after that time has passed. If standard reports, produced for certain periods could always give managers the data they needed, the Basis2 configuration might not pose a problem. Unfortunately, managers frequently need to ask and answer new questions about the past as they seek to manage the utility most effectively.

3.3.6.1. Current Reports Analysis

As described in an earlier section, RFC received the code for a number of reports that are important to WRB and PWD and, having identified the impact of transactional and non-transactional date and dates in the reports, examined the bounding conditions, or parameters used in the queries for these reports. The critical parameters are identified in the table below. As the previous section describes, the use of non-

transactional parameters for the queries does not, in itself, present issues. If the reports are produced for the immediate past and then are used in static format, as with Retail Customer Trends, they can provide an accurate snapshot of the database for the time period.

Table 7. Critical Parameters in Current Reports

Report Name	As of	Transactional conditions	Non-transactional conditions	Date conditions
Retail customer trends	12/14	CIS_DEBIT_LINES.USEC_CODE CIS_DEBIT_LINES.SRVC_CODE CIS_DEBIT_LINES.SIN_CODE CIS_DEBIT_LINES.TASK_CODE CIS_TRANSACTIONS.FULLY_REVERSED_IND	CIS_ACCOUNTS.ACCT_STAT US CIS_ACCOUNTS.ACCT_KEY CIS_METERS.METER_TYPE_CODE	CIS_DEBIT_LINES. S.TRAN_DATE
Payment Patterns	12/14	CIS_TRANSACTIONS.TASK_CODE CIS_TRANSACTIONS.PPLN_ID CIS_TRANSACTIONS.SCND_TYPE CIS_CREDIT_LINES.RCPT_PAY_CODE CIS_CREDIT_LINES.PAYM_REV_LINE_ID CIS_TRANSACTIONS.FULLY_REVERSED_IND CIS_TRANSACTIONS.TRAN_TO_T_AMNT CIS_TRANSACTIONS.PRIM_TYPE	CIS_INSTALLATIONS.REVU1_CODE CIS_INSTALLATIONS.INST_TYPE_CODE CIS_CUSTOMERS.CUST_TYPE_CODE CIS_ADDRESSES.ADDRESS11 CIS_CUSTOMERS.CUST_KEY CIS_CUSTOMERS.CUST_NAME CIS_ROUNDS.ROUND_KEY CIS_DEBT_COLLECTION.DEBT_COLL_PATH CIS_DEBT_COLLECTION.DEBT_COLL_STAGE	CIS_TRANSACTIONS. TRAN_DATE CIS_TRANSACTIONS. CREATION_DATE CIS_CREDIT_LINES. TRAN_DATE
Settlement Audit	12/14	CIS_TRANSACTIONS.SCND_TYPE		CIS_BANK_SLIP S.SLIP_DATE

Report Name	As of	Transactional conditions	Non-transactional conditions	Date conditions
				CIS_CREDIT_LINES.TRAN_DATE CIS_CRDR_ALLOCATIONS.ALLOC_DATE
Extract - Demographics	12/14		CIS_METERS.LOCN_CODE	CIS_INSTALLATIONS.CREATION_DATE
Extract – AR		CIS_TRANSACTIONS.TRAN_OUTPUTST_IND CIS_DEBIT_LINES.USEC_CODE CIS_DEBIT_LINES.SCND_TYPE CIS_DEBIT_LINES.SRVC_CODE CIS_TRANSACTIONS.TASK_CODE		CIS_TRANSACTIONS.TRAN_DATE
Extract – Payment		CIS_TRANSACTIONS.SCND_TYPE	CIS_ACCOUNTS.MAST_ACCOUNT_HIERARCHY	CIS_BANK_SLIP.SLIP_DATE CIS_CREDIT_LINES.TRAN_DATE CIS_TRANSACTIONS.CREATION_DATE
Extract – Billing		CIS_TRANSACTIONS.TASK_CODE CIS_DEBIT_LINES.SCND_TYPE	CIS_ACCOUNTS.MAST_ACCOUNT_HIERARCHY	CIS_TRANSACTIONS.TRAN_DATE CIS_TRANSACTION.CREATION_DATE
Extract – Adjustments		CIS_TRANSACTIONS.TASK_CODE CIS_TRANSACTIONS.SCND_TYPE		CIS_TRANSACTIONS.TRAN_DATE CIS_TRANSACTION.CREATION_DATE

Report Name	As of	Transactional conditions	Non-transactional conditions	Date conditions
		CIS_TRANSACTIONS.TRAN_TO T_AMNT		ATE
Extract – Enforcement			CIS_CALLS.CALL_TYPE_COD E	CIS_ACCOUNTS. CREATION_DATE

3.3.6.2. Revenue Extracts Analysis

RFC attempted to use the Revenue Reporting extracts during development of cost of service data for PWD. Through testing, RFC became confident in the Demographics extract table, as a comprehensive table with no pre-processing that caused issues for our purposes.

However, the Billing extract that we attempted to use proved unusable for our purposes. In an initial phase, we hoped to use a field in the billing table that indicates the meter size associated with an account. However, we found that this table showed unexpected fluctuations in the number of accounts in the table from month to month owing to some condition that was put on the extract. Since we needed a more comprehensive view for our particular purpose in examining meter size, we were not able to use this table.

We also attempted to use the billing extract to generate consumption amounts by tier for the bill tabulation report needed for the cost of service study. We attempted to pull meter reads from the meter billing extracts to generate the consumption totals by tier. Pulling month by month, we rolled these data up and got similar results to results we got when we queried consumption data directly from Basis2 in the smallest 4 tiers. However, in the largest tier, the two methods yielded very different results: the consumption tabulated from the extracts was much higher than the numbers directly from Basis2. We compared the transactions that comprised the bills for this tier to see what differed. In the extracts, the meter read values were populated in some cases even though the record did not represent water usage. For example, industrial surcharge values, most of which are very large, were placed into the meter read field. As a result the meter read field in the extract table contains data that are not actual consumption data. For bill tabulation purposes, this meant that we could not use the extract table. An example of this case is as follows and is shown in Table 7: for one of the installations, in Basis2 there two almost identical debit lines for water usage each of which is listed as “7,340”. One of them has a dollar amount charge and the other has a charge of 0 and has no description in the description field. However, in the extracts, the two lines are summed for a consumption of 14,680. We noted that the storm and sewer usages are excluded from the consumption total for this installation in the extract, the total bill is the sum of all charges, not just water usage, which we believe is as expected. For the surcharge installation, there is one debit line with identical amounts for the consumption and the charge, we believe is as expected. In the extract, the same information is recorded as a separate line item for this installation.

For the bill tabulation purposes, the extract data could not be used because consumption could not be distinguished from surcharges.

Table 8: Example of consumption and charges data for industrial surcharge customer - from Basis2 and from extract

CIS_DEBIT_LINES						
Debit_Line_ID	CUST_ID	INST_ID	Amount	Consumption	Code	Description
311455402	160451	135845	\$86.21		SEW-SRVC	Sewer Service [R] 1 @ 86.21
311455397	160451	135845	\$ -	7,340	WAT-USAG	
311455401	160451	135845	\$69.05		WAT-SRVC	Water Service [R] 1 @ 69.05
311455398	160451	135845	\$20,506.88	7,340	WAT-USAG	Water Usage Charge [R] 20 @ 3.712; 980 @ 3.02; 6340 @ 2.756
311455399	160451	135845	\$16,525.89	6,310	SEW-USAG	Sewer Usage Charge [R] 6310 @ 2.619
311455400	160451	135845	\$1,321.64	132,164	STM-USAG	Stormwater Usage Charge [R] 132164 @ 0.01
311455403	160451	135846	\$60,841.00	60,841	IND-SUR	Industrial Waste Surcharge [R] 60841 @ 1
EXTRACTS						
	Cust_Key	INST_KEY	Amount	Consumption		
	CU0137031	IN001268457	\$38,509.67	14,680		
	CU0137031	IN001268465	\$60,841.00	60,841		

RFC concluded that while the extract tables may be suited to the Revenue Reporting needs for which they were developed, the only table that could be used for cost of service purposes was the Demographics table. The Demographics table provides a critical monthly snapshot of account data and serves as a stand-in for a “data warehouse” in some respects.

3.3.6.3. Interfund Process

During the project, in order to ensure we understood the treatment of City accounts in Basis2 and the financial system, FAMIS, we documented the process for interfund transfers. It played a crucial role in how City “payments” were considered in collections percentages. This process is described and documented in a later section.

3.3.6.4. FAMIS

One of the key check points for Basis2 reported revenues for the cost of service reports, it was hoped, would be the annual revenues in FAMIS, the financial system. RFC worked to reconcile the revenues reported in the two systems (for the appropriate object codes in FAMIS). To begin, FAMIS contains many object codes for revenue sources that are not reported out of Basis2. Thus the total revenues for the Water Fund as reported in FAMIS far outstrip payments reported in Basis2. Once that difference was accounted for, only the following object codes were considered for reconciliation between the two systems:

Table 9: Object Codes for Reconciliation between Basis2 and FAMIS

Payment Type	Object Code
PENALTY FOR BAD CHECKS	4302
WATER SALES-CURRENT YEAR	8001
CUSTOMERS PENALTY-CURRENT YEAR	8002
FIRE CONNECTION CHARGES-CURRENT YR	8003
WATER SALES-PRIOR YEARS CYCLES	8101
FIRE CONNECTION CHGS-PR YRS CYCLES	8103
CURRENT WATER METER TEST BILLS	8214
RESTORING WATER SERVICE CHARGES	8217
LIENS ON PRIOR YEARS CYCLE BILLING	8218
RESTORING WATER SERVICE-PENALTY CHG	8219
SEWER CHARGES-CURRENT YEAR	8301
SURCHARGES-CURRENT YEAR	8303
STORMWATER CHARGES - CURRENT YEAR	8305
SEWER CHARGES-PRIOR YEARS CYCLES	8401
SURCHARGES-PRIOR YEARS CYCLES	8403
STORMWATER CHARGES - PRIOR YEAR	8405

WRB collects some additional payments for the Water Fund, which are termed “agency receivables” and are billed and collected through a system outside of Basis2 called “Platinum”. It is planned that Platinum functionality will be integrated in to Basis2. These payment types were also excluded from the analysis.

It was expected that the revenues for the selected object codes could be easily reconciled between the two systems because WRB produces a report each month that is generated out of Basis2, referred to as the 5C report, which provides the total dollars in payments for the month and that are then manually entered into FAMIS by Revenue. RFC examined the code that generates these numbers for the purposes of determining the division between current and prior year payments, which is completed via code in Basis2. Prior year payments are ones that are calculated by Basis2 to be allocated to bills that occurred 365 days or more before the date they were received (as measured by the bank slip date). A report similar to the 5C report is generated for agency receivables. The 5C report reflects payments that have been reconciled in Basis2 by WRB Accounting staff.

When RFC was unable to reconcile FAMIS revenues with Basis2 payments for the limited object codes, further information from WRB Accounting explained the potential differences: refunds and dishonored payments (bad checks) are processed through processes that are separate from the monthly entry of payments from the 5C report. The refund process is explained in a later section.

For follow up analysis, we generated all refund (DF task code) transactions from Basis2 from a selected period and then compared the transactions to refund journal entries in FAMIS to determine the offset in

time between the FAMIS entry (which occurs first) and the Basis2 refund transaction (which occurs after the FAMIS entry). From those data, it was possible to see that the FAMIS journal entries generally precede the Basis2 transactions, according to date, by a week or two (generally a week). This time lag seemed reasonable and as expected according to what we had learned about the process for refunds.

RFC reconciled the annual revenues between the two systems within 1%, and has brought to light and documented much about the process by which Basis2 payments come to be reflected as FAMIS revenues.

3.4. RECOMMENDATIONS

3.4.1. Management Reporting

RFC has developed potential solutions to meet the reporting challenges we have described. First, we suggest that the model used for the Retail Customer Trends report should be applied to other monthly reporting needs, where possible. The Retail Trends report is generated monthly with the month's data only. The monthly reports are treated as static data and are never re-generated. Annual data are produced by rolling up the series of static, monthly reports to produce the annual summary. Since the Retail Trends report was developed through a lengthy process, with agreed upon requirements and testing, it appears to fulfill the users' needs and provides a model for report specification development.

Second, we suggest that reports that require analysis of past conditions, should rely on the monthly Revenue Reporting extract "WRAD" or "Demographics" table to categorize customers and installations, not live Basis2 data. Since nearly the beginning of the Basis2 era, large extracts of Basis2 have been produced at the end of most months for use by a group within Revenue for its reporting purposes. There have been a few months with no extracts owing to stability or other issues with the database. The names and descriptions of the extract tables can be seen in Table 6, items 12 through 19 of the outbound interface files. The "demographics" table contains every account that was present in the database as of the extract, along with key data about that account such as the customer status and installation status. As RFC developed reports for the cost of service analysis, we developed a method to categorize past key financial and consumption data by categories contained in the monthly extract tables. This allowed us to provide point-in-time snapshots from past months and years. We found that several of the tables contain pre-processed, rather than raw data from the database and do not recommend their use as reference points, since they were developed with specific purposes that governed the pre-processing and that may differ from PWD's reporting needs.

Third, we suggest that in order to provide reports that approximate closed financial or accounting periods, adjustments and payments that occurred after a period ending but applied to debit or credit balances within that period should be excluded by means of using transaction creation dates to bound reports, instead of other available dates in financial transaction tables. The dates for important transactional tables that we suggest be used are shown in the following table.

Table 10: Dates to be used for bounding conditions to replicate closed periods

Table name	Table description	Suggested field to be used	Other fields (currently used)
CIS_Accounts	Accounts	Creation_Date	
CIS_Customers	Customers	Creation_Date	
CIS_Installations	Service Locations	Creation_Date	
CIS_Transactions	Summary of Debits and Credits	Creation_Date	Tran_Date
CIS_Addresses	Addresses	Creation_Date	
CIS_Debit_Lines	Debit Details	Creation_Date	Tran_Date
CIS_Credit_Lines	Credit Details	Creation_Date	Tran_Date
CIS_CRDR_Allocations	Payment Allocation Details	Alloc_Date	
CIS_Bank_Slips	Bank Deposit Summary	Slip_Date	

Fourth, we suggest that, where possible, instead of completely excluding some types of transactions, customers, or other items from reports, queries should be set up to subtotal the items of interest, separately subtotal the items that are not of interest, and total all items. This approach would give greater transparency to reports. One example might be a report that quantifies collections percentages (like the current Payment Patterns report), where WRB is primarily interested in the collections rate for normal, good-paying customers as an operational metric but PWD may be interested in the overall rate (for bond rating or other reasons). The report would be most transparent if, instead of excluding customers on payment agreements, the report provided a subtotal of collections percentages for ordinary customers, a subtotal for other customers, and a total for all customers.

3.4.2. Basis2 Administration

We recommend that the City hire at least one full time resource dedicated for business analyst/quality assurance (BA/QA) Basis2 support immediately while maintaining current support of the Basis2 support team. Additional BA/QA resources will have a direct impact on efficiency and effectiveness of current Basis2 development staff and will also have a direct impact on the turnaround of the issues/project backlog. If WRB/PWD would like to see an even more aggressive throughput of the current backlog of issues/projects, they should consider hiring two BA/QA staff.

The city should provide a DBA dedicated to Basis2 alone. Having discussed this need with OIT, we recognize that there are significant hurdles to hiring properly qualified DBAs. First, a DBA that could fulfill the needs for supporting Basis2 and the HR database requires 10 or 15 years of experience. However, the salary ranges allowed for the advertised jobs are totally inadequate to attract qualified candidates. OIT has attempted before to hire additional resources without success.

We recommend that within the Basis2 team, the staff enforce Ticket Tracker to capture all work performed.

- Use metrics to measure and communicate impacts of priorities changes. The changes may not be avoidable, but the surprises can be mitigated. Already, there is a very deliberate prioritization process in place that involves key players within WRB and PWD. The impact of changes in priorities for projects

are acknowledged through this process. Adding additional metrics and visibility to the prioritization and communication processes may give even more weight to the existing process.

- Provide organization wide communication regarding the impact of priority and scope changes. When changes occur stakeholders should provide explicit agreement on changing the parameters of the quality triangle before the change is approved.
- Rollout OIT iSupport throughout entire organization.

3.4.3. Basis2 Replacement

Having made an initial finding that Basis2 was a viable system, we were asked by the Department of Revenue to address the question of how long it might be before replacement of Basis2 is required. The decision of whether and when to replace an existing CIS billing system is influenced by a complex number of inputs and requires deliberate and careful consideration. A new CIS implementation is disruptive to the day-to-day operations, requires a substantial capital investment, requires careful planning and coordination among all interfacing entities and carries with it risk of failure. That being said, successful CIS implementations for utilities are a fairly common occurrence and the risks should not deter a utility from pursuing the venture if it is determined it is needed to ensure and/or advance strategic objectives. The City's previous conversion effort was costly in terms of time and effort, however, and as many staff realize, a new implementation should not be undertaken lightly.

To that end, our team has produced a list of items, found in Appendix H, to be considered as a part of any decision process to implement a new system. Our recommendation is that this list would serve as a springboard for the analysis that would precede a conversion project. The purpose of the list is to enumerate the many factors that influence a decision to change systems. These items could be weighted and then scored by a decision-making group. We recommend that the decision-making group should be convened now and meet regularly (maybe twice a year, to start). The group must include an array of stakeholders including leadership, users and database and application support staff from WRB, PWD, OIT, and Revenue. The scoring exercise could be undertaken periodically, providing a living assessment of Basis2. Since technology, needs, and other factors change over time, the scoring will also change. The scoring would be likely to indicate that, as time passes, replacement of the system becomes ever more practical compared with maintaining the current system. At a certain threshold, the group would reach consensus that replacement of the system is recommended. This approach allows for thoughtful assessment of the system under changing conditions and a long planning window that is required to gather the significant capital investment involved.

3.5. COST OF SERVICE REPORT GENERATION

RFC provided support to the Water Department and its rate consultant, Black & Veatch Corporation (B&V), in the development of reporting to support the development of the Cost of Service. B&V provided a data request to which RFC responded. The Department, RFC, and B&V collaborated on the development of the four requested reports. WRB provided review and assistance as well throughout the process. RFC produced a number of drafts of each report, tuning them in response to review comments and lessons learned during the process. In addition to four final MS Excel workbooks, RFC produced a consolidated report digest that provides information on the production of the reports and the differences among them (where applicable). The consolidated digest and report printouts are provided as Appendix D.

4. Customer Service Functions, Credit and Collections

As a critical part of its holistic review the Water Department and Water Revenue Bureau's (WRB) meter to cash operations, the RFC Team conducted an evaluation of the City's Customer Relationship Management and Collections Processes related to water billing and revenue.

4.1. SCOPE

The scope for the analysis of customer service functions and credit and collection activities consisted of the following efforts:

Customer Service Functions

- Map customer service, excluding the call center, and back office processes
- Identify inefficiencies (redundant and/or unneeded activities)
- Identify opportunities for additional efficiency through automation

Credit and Collections (Effective Accounts Receivable Management)

- Catalog and review existing credit and collections policies and practices
- Benchmark credit and collections against peers
- Process mapping for account shut-off and restoration
- Evaluate effectiveness of third-party collections efforts
- Credit and collections gap analysis

4.2. METHODOLOGY

The methodology utilized in analyzing Customer Service Functions consisted of the following:

- Interviews
- Observations
- Process mapping
- Benchmarking
- Analysis

4.2.1. Interviews and Observations

The RFC Team conducted a series of staff interviews and observed staff processes and activities during a three-month period. We interviewed staff in payment processing, customer service, management, finance, and legal roles; obtained detailed information on the pre-existing conditions within PWB and WRB; and learned about new and ongoing initiatives to improve some customer service functions.

As part of the benchmarking process, interviews were conducted with representatives of 14 utilities to understand their credit and collections processes and to receive verification of the cost calculations,

timelines and other computations performed by the project team. The topics covered under the survey were the ones prioritized by the City.

4.2.2. Process mapping and observations

To gain a broad understanding of processes occurring within WRB and PWD and the way those processes work together, the RFC Team participated in high level process investigation. Members of the RFC Team met with PWD and WRB management to learn how the two entities interact, and observed bill mailing, payment processing, assistance program administration, and other processes critical to the overall customer service function. We developed generalized and specific process maps to aid in the discussions around process efficiency and policy adherence.

4.2.3. Benchmarking

The RFC Team (Raftelis Financial Consultants (RFC) and Charles E. Day and Associates(CED) conducted a targeted water industry benchmarking study that includes a number of customer service and collections metrics from a broad cross section of customer service organizations in the water utility sector and of the utilities serving the City of Philadelphia. The intention was to use the results of this study, compared to the detailed findings of the Philadelphia Water Department and the Philadelphia Water Revenue Bureau's processes and performance, to identify potential gaps within WRB and PWD. Metrics from our benchmarking helped identify areas where City customer service and collections activities differ significantly from its peers.

The benchmarking process includes the following steps:

- Identify key processes and metrics
- Assemble peer utility group (utilities of similar size and scope), also the other two utilities serving the City of Philadelphia
- Develop survey instrument
- Administer survey
- Analyze results

The following utilities participated in the benchmarking study, and their specific responses are anonymized in the report hereafter as a condition of participation. The sample consisted of the following 14 utilities in addition to PWD:

- Greater Cincinnati Water Works (OH)
- Baltimore Bureau of Water and Wastewater (MD)
- Boston Water and Sewer Commission (MA)
- Louisville Water Company (KY)
- Nashville Metro Water Services (TN)
- Fort Worth Water Department (TX)
- Austin Water Department (TX)
- Virginia Beach Public Utilities (VA)
- Miami Dade Water and Sewer Department (FL)
- Passaic Valley Water Commission (NJ)
- DC Water (DC)
- Las Vegas Valley Water District (NV)
- Philadelphia Gas Works

- PECO (a subsidiary of Exelon Corporation)
- Philadelphia Water Department

The results of the benchmarking study are included throughout the discussion of PWD and WRB's customer service functions in subsequent sections. The anonymized survey of results that was provided to study participants is found in Appendix E.

4.3. FINDINGS AND CONCLUSIONS

4.3.1. Customer Billing

4.3.1.1. Meter reading interface

The City has transitioned to Automated Meter Reading (AMR) technology to improve the efficiency of the meter reading process and to streamline the import of consumption data into the billing system to calculate bills. This meter reading is done by a third party, ITRON. There is an interface between the meter reading results and the billing system which pulls in data from reads and analyzes that data for a number of exceptions. Exceptions can range from equipment issues, such as non-matching encoder receiver transmitter (ERT) identification numbers, to consumption values that are far too high or too low. The interface also generates estimated reads for those customers for whom neither an automatic read nor a manual read occurred. During an interview with the Accounting Department, RFC learned that many exceptions are regularly reported and that they all require manual investigation and resolution.

At the time of this report, the City has implemented a Zero Reads Project, the goal of which is to identify and resolve any systematic errors in the meters or the meter reading interface leading to thousands of zero reads each month. According to Schumaker & Co.'s *Management Report Study for the Philadelphia Water Department* released just before RFC's evaluation, there are between 5,000 and 10,000 accounts with zero consumption in a given month. These can be attributable to theft, vacancy, or mechanical failure. After two months of zero reads, a service technician visits the site to determine the cause of the zero reads and initiates the appropriate resolution. In cases of theft or mechanical issues, reads in the intervening months are estimated and a bill for the outstanding amount is generated. This particular problem has caused an influx of customer service requests and resulted in an enormous amount of effort for field operations personnel.

4.3.1.2. Bill form

The bill form process is managed in-house at WRB. Bills are designed with input from PWD to highlight important customer information and consumption patterns. Occasionally, bills are redesigned to better align with utility or customer service initiatives. For example, in an effort to promote water conservation, the bill was recently updated to include a graph of monthly consumption in a more prominent position at the front of the tri-folded bill.

4.3.1.3. Printing and Mailing

Water bills are printed and mailed by the City rather than by a contracted third party. Bill printing occurs on a regular schedule following reads, and is done only for those accounts that do not have unresolved

meter read interface-generated exceptions. RFC observed the bill mailing process and interviewed mail room staff regarding the mailing process, costs, and resource intensity.

The mail room receives boxes of printed bills daily. One staff member operates a machine that folds each bill. Another operate a machine that stuffs bills (and any inserts) into an envelope.

At the time of the interview, the mail room had recently converted to a new, more efficient mail sorter, which reads the address through the window of an envelope, encodes that address on the envelope itself, and sorts the mail by zip code. While the previous mail sorting machine performed similar functions, the office's new machine is significantly faster and more efficient, saving staff time in machine operation. Using this new machine saves the PWD approximately \$0.11 per envelope, as estimated by Mailing Center Staff¹⁵, off the stamp price by reducing the US Postal Service's efforts in sorting and distributing envelopes.

During observation of the mailroom, RFC noted that Revenue was in the process of redesigning the water bill. Mail room staff had not, at the time of the interview, heard of this potential change. RFC shared this comment with members of the team at the City working on the bill form change, whereupon communication about the change was immediately enhanced. The mail room staff noted to RFC the need for early involvement in potential changes to facilitate timely procurement of any new materials and programming of the bill folding and envelope stuffing machines.

The issue in question was that the bill design at that time required that the address area was located in a different section of the tri-folded page than a standard #10 envelope can accommodate. Thus, the City was using a customized envelope with a different window placement. Unfortunately, that envelope could only be used on half of the high capacity mail sorter's routes because otherwise it would cause chronic snagging of the belt. This factor limited the efficiency of the new machine to some extent. A #10 envelope, a different configuration than the one newly in use, is most compatible with the existing machinery setup. The mailroom staff's hope was that the bill redesign could allow for the use of a standard envelope to maximize the use of the new machine.

As part of the benchmarking study, the Team surveyed participating utilities' billing staffing needs and costs. PWD/WRB unit staffing levels are estimated at 1.26 full-time equivalents (FTE) per 100,000 bills for billing. That figure can be compared with other reported staffing needs shown in the table below. Collections staffing needs are also included for reference. Although this is a limited comparison, PWD/WRB is close to the lowest in billing staffing and comparable in collections staffing to other urban center utilities.

¹⁵ Discussion with Sean Lomax during mailroom field visit, October 17, 2014

Table 11: Staffing Needs for Billing in Comparable Utilities

	Billing Staffing (FTE per 100,000 bills)	Collections Staffing (FTE per 100,000 bills)
Utility A	1.25	1.79
PWD/WRB	1.26	3.66
Utility B	1.87	3.73
Utility C	4.8	3.62

4.3.2. Payment Processing

RFC observed the Department of Revenue’s back office processes prior to the implementation of several new pieces of machinery and software, including a cashiering system and remittance processing machines. The goal of the exercise was to identify opportunities for efficiency or improvement in the processes in order to translate those into functional advantages once staff were equipped with faster, higher performing machines. If desired by PWD, RFC will perform a similar evaluation once Revenue has acquired and instated the upgraded machinery to facilitate any recommended shifts in workflow.

The City of Philadelphia’s Department of Revenue’s payment processing works to ensure that receipt of customer payments are accounted for and applied to the appropriate account in a timely, accurate, and secure manner. The Department of Revenue processes payments for a variety of different City Departments, including tax, water, permits and licenses. In general, water payments of four major types are processed by WRB and linked to a water account through data contained in the deposit slip. At the end of each transaction day, money collected is sent securely to the bank and a file is transmitted to the Water Revenue Bureau that enumerates each payment. An interface with Basis2 applies the payment amount to each charge in the order required by the City.

While conducting interviews and observing the payment processing roles, RFC noted that the different teams work effectively with the available resources and that the automated process requires very little manual intervention. Aware of the impending upgrades to software and machinery, RFC noted that the primary opportunities here are likely a shift to digital documentation and workflow management, to limit the amount of paper being generated, transferred, and stored, and cross-training within the Department that could save time in processing non-standard payments or exceptions.

Error! Reference source not found. shows a high level view of the process and **Error! Reference source not found.** shows the payment processing steps in greater detail. The following sections include a narrative description of the process.

Figure 4: Overview of Payment Processing

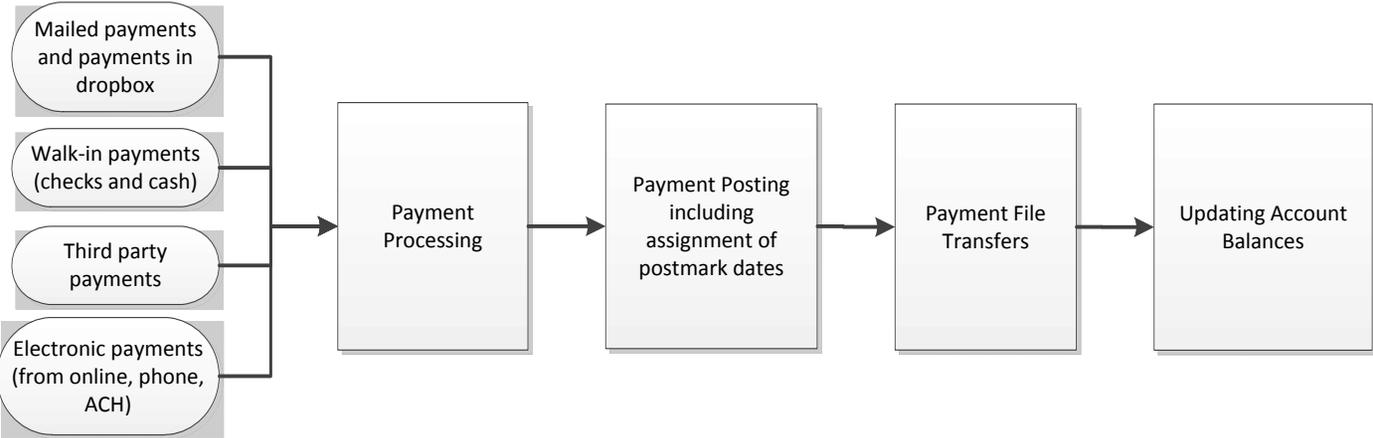
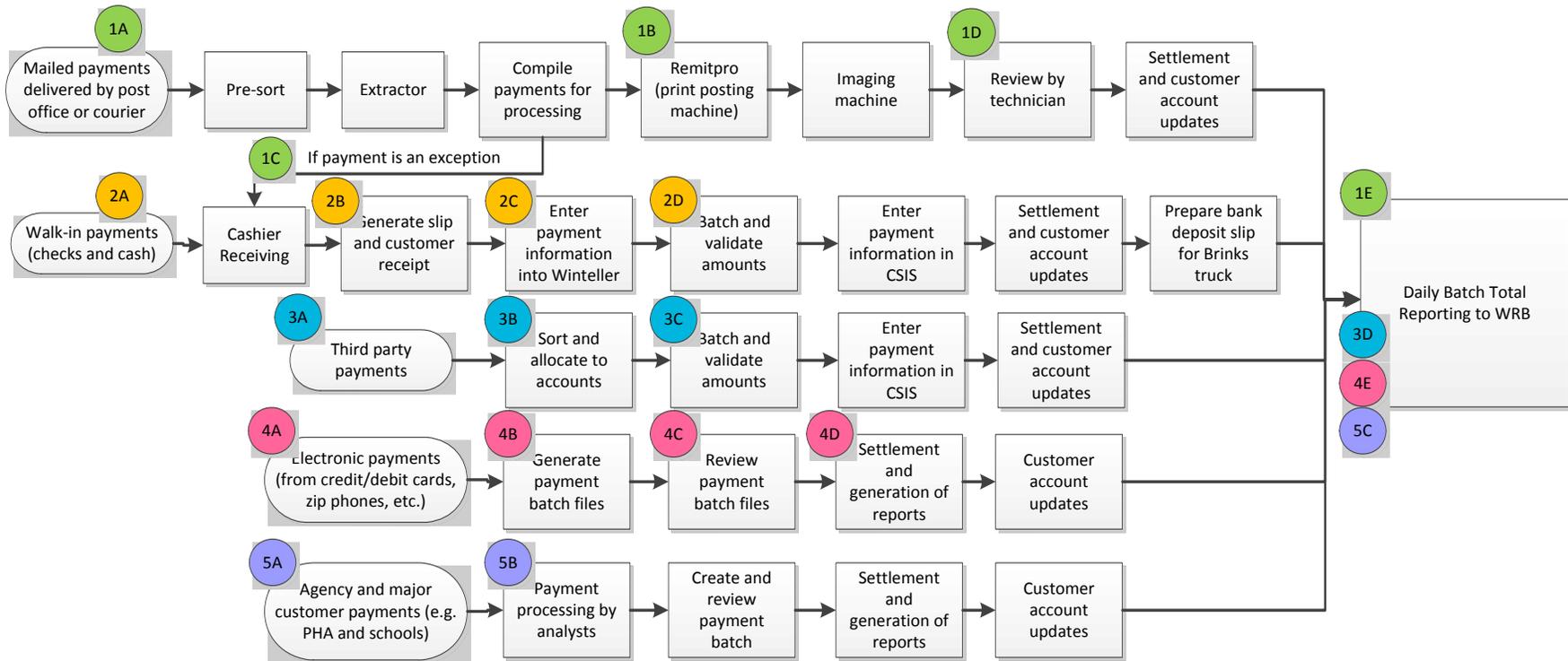


Figure 5: Detailed Payment Processing



4.3.2.1. Payment methods

Payments of various types are received and processed by Revenue. The current sources of payments are mail-in, walk-in, third party (e.g. banks and other payment merchants), electronic (e.g. credit cards or zip phones), and agency or major customer payments (usually interfund transfers). The steps involved in the processing of the payments vary according to the source, and are described below.

4.3.2.1.1. Mail-in Payments

Mailed in payments are mailed checks delivered to the City via courier service from the Post Office. The courier service usually brings in the mailed checks at approximately 6:30 a.m. (1A). The processing of mailed-in checks starts with presorting, or sorting the mail into processing categories. Pieces of mail that are expected to run smoothly through the system are then run through the extractor, which rips the envelopes open, allowing a staff member to remove the payment envelope contents, which includes checks and coupons. The payment envelope contents are then put together in batches to be run through RemitPro (1B), a payment reading and posting machine. The presort exceptions or the payments that cannot be processed by the extractor are compiled and sent to cashiering for manual processing (1C). The cashiering manual process involves making necessary adjustments or printing coupons. For each batch of payments, a “postmark date” is determined. This “postmark date” is shown as the “validation date” in Basis2 for the payment and serves as the date the payment was received. The calculation of the postmark/validation date varies depending on the day of the week. If the payment is received on a Monday the “postmark date” is four calendar days earlier; otherwise the “postmark date” is three calendar days earlier; if the payment is received after a holiday, the “postmark date” is five days calendar earlier. This system is intended to approximate the date a payment was mailed. This is a benefit to the customer implemented in September of 2014, and results in fewer late payments.

Checks and coupons are run in batches through the RemitPro machine, which posts the payment amounts in the system. The RemitPro machine uses an imaging mechanism to complete its payment reading and posting process. Typically, three or four staff members are observing and validating the imaging and electronic account matching process. Those payments that are not able to be processed by RemitPro are also reviewed by a technician (1D) and sent to cashiering for manual processing. Payments that are successfully processed through RemitPro are batched (1E) and included in the end-of-the-day reconciliation and reporting to WRB (see below for information on the settling process).

4.3.2.1.2. Walk-in Payments

Walk-in payments are checks or cash payments brought into the Concourse or one of two remote payment centers (2A). RFC observed payment processing at the Concourse, while information about the remote payment centers can be found in the Schumaker & Co. report.¹⁶

Cashiers process walk-in payments by first receiving the payment and generating a slip and customer receipt (2B). The cashier enters the payment information into WinTeller with the associated account information, including the account number, type, and customer name (2C). Customers requiring service

¹⁶ Schumaker & Co.'s Management Report Study for the Philadelphia Water Department (2013)

restoration are advised to go across the Concourse to WRB and present their payment receipt to get their service restored more quickly. This is faster than the programmatic triggers in Basis2, which could lag by a day. The payments are then batched and the payment amounts validated for reconciliation (2D), as described below.

4.3.2.1.3. *Third Party Payments*

Third party payments are those collected on behalf of the Department of Revenue by banks and other payment authorized merchants (3A). These payments typically relate to multiple customers. The Department of Revenue receives email communication regarding the payments collected. To process them, the payments are sorted and allocated to their respective accounts in RemitPro (3B). The payments are then batched and the payment amounts validated (3C). The batch is used in the end-of-the-day reconciliation and reporting to WRB (3D).

4.3.2.1.4. *Electronic Payments*

Electronic payments are credit and debit card payments received electronically (4A). Processing these payments mainly involves analysis and reporting of the information and are performed by the supervisor in RemitPro. The processing steps include generating the payment batch files (4B), reviewing the payment batch files (4C), and settlement of payments and updating of accounts. For credit card payments, the settlement group sends files separated by the credit card type and the information is compared to what is reported by the bank. A settlement report is generated indicating that the payments are settled (4D). The batch files are used in the end-of-the-day reconciliation and reporting to WRB (4E).

4.3.2.1.5. *Major Customer Payments*

For some major customers with multiple and/or large accounts, Revenue receives payments through direct deposit into the utility fund of a predetermined amount (5A). RFC observed this process for the School District of Philadelphia. The amount of the deposit is determined ahead of time based on the expected charges, and Revenue references a printed schedule to ascertain the amount of money that would be deposited that day. This figure is added independently during the reconciliation process (5B) and the credit posted to individual accounts associated with that customer in Basis2 (5C).

4.3.2.1.6. *Interfund transfers*

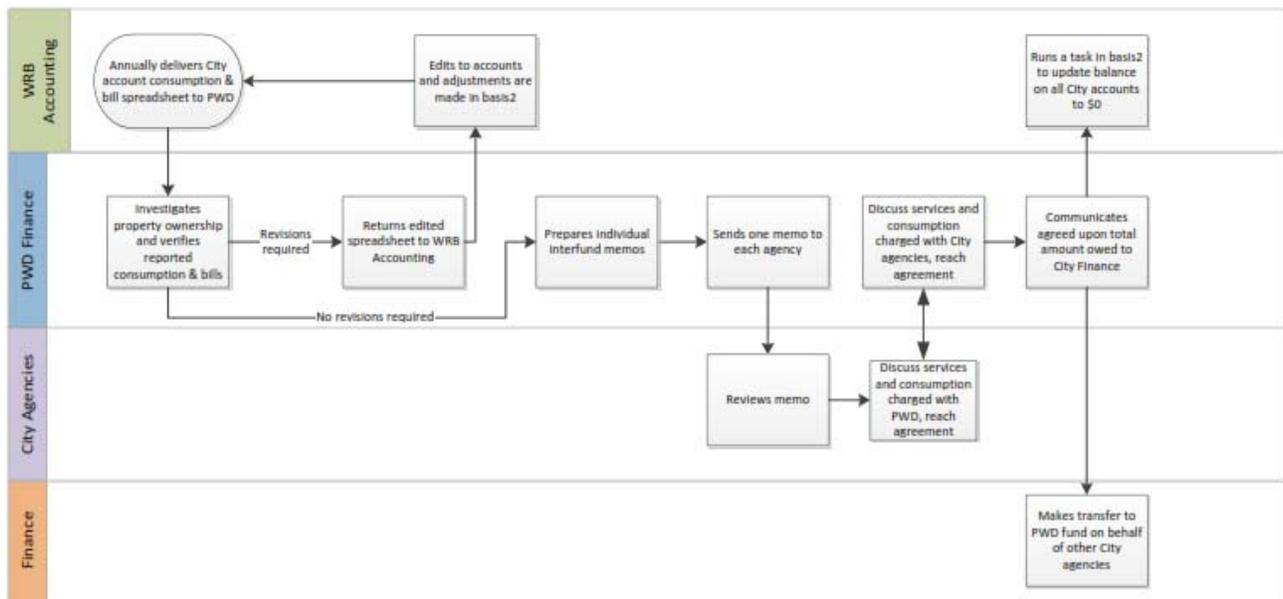
Each entity within the City of Philadelphia government is responsible for paying for water, sewer, stormwater and other services provided by PWD. PWB and WRB have developed a system for managing accounts held by these entities, including communicating bill amounts, accepting payments, and updating account information in Basis2, that is different from the way either standard or other large customer accounts are managed.

On an annual basis, WRB Accounting delivers to PWD a file extracted from Basis2 that lists consumption and billing for all City of Philadelphia water accounts, which are noted with a customer type of "Z". A member of PWD staff investigates whether the property is still owned by the City and whether the consumption and amount due are accurate, based on general assumptions regarding consumption by customer class, meter size, and use, as well as a review of historical consumption on that account and any information about meter testing and calibration throughout the year. If any revisions to the accounts or amounts are required, PWD returns the edited spreadsheet to WRB to transmit billing and consumption

adjustments into Basis2. Once completed, WRB extracts a new file from Basis2 that reflects those changes and returns the revised list to PWD Finance. Using that list as the basis, PWD Finance prepares individual interfund memos detailing consumption-based charges and other costs to be paid by each City entity. Water, sewer, and stormwater costs, as well as costs for other services rendered by PWD (such as repairing inlets or other facility maintenance activities) are included in the memo. One memo is sent to each entity, including the City Zoo, the airport, and General Services.

PWD works with each City department individually to determine whether any adjustments need to be made to the services or amounts represented on the interfund memo. It is uncommon that a department will disagree with consumption-based charges, but there is often some discussion over the other services and charges listed. Once an agreement is reached, the results are communicated to the City's Finance Department, which in turn makes a transfer to the water fund on behalf of each of those external agencies. These transfers show up as "interfund revenues" in FAMIS, the City's accounting application. Independently, to reconcile accounts in Basis2, WRB runs a process that automatically creates a transaction for all City utility accounts with a task code called "interfund transfer" that updates the balance of each to \$0. For the approximately 60 accounts owned by PWD, there is no real money transfer (because it would come from and be deposited to the water fund) but accounts are updated in Basis2 identically to other City accounts. This process is shown in the diagram below.

Figure 6: Interfund Transfer Process



4.3.2.2. **Settling and Daily Reconciliation**

The cashier settling process observed by RFC, in which tellers used the WinTeller application to track and report transactions, was quite laborious in its duplication of paper materials and reliance on manual money and check counting. At that time, the process was about to shift with the implementation of a new cashiering application.

Every day, around 2pm, Revenue begins the daily reconciliation process. Checks and cash payments are packaged and bank deposit slips are prepared for secure pickup. The daily payment report (701 report) is printed by each teller to detail the transactions performed by that teller during the day. Revenue sends each teller's report and yellow copies of the payment slips to the Controller's Office via inter-office mail. For water account payments, the white copies of the payment slips are compiled and sent to WRB to be stored.

All payments are validated and reconciled daily using a debits table, after which files are created for FTP transfer. These tables are imported in Basis2 nightly and, in Basis2, payments are linked with accounts and accounts are credited by the amount of the payment.

4.3.2.3. **Payment application hierarchy**

Receiving uninterrupted water service is the ultimate incentive for customers to keep paying their water bills. Hence, like most utilities, the City uses water service cancellation as the primary consequence for nonpayment or insufficient payment. Because bills often contain charges for more than just water service, WRB and PWD have had to consider how to retain the effectiveness of the water cancellation consequence while ensuring that accounts cannot continue to grow balances indefinitely. To achieve this, payments received are applied to different components of the bill in an order that protects the City's revenue stream.

Payments are applied to customer accounts in the following order:

Water/sewer/stormwater debt:

1. Water/sewer/stormwater sundry invoices (bad check charges, lien fees, etc.)
2. Water/sewer/stormwater penalties and interest
3. Stormwater charges on Water/sewer/stormwater accounts
4. Water and sewer service and usage charges:
 - o Sewer service
 - o Water service
 - o Sewer usage
 - o Water usage
5. Payments against payment agreements

Agency Receivables debt:

6. Meter charges principal
7. Nuisance charges principal
8. HELP loans penalties and interest
9. HELP loans principal

Should the City begin charging penalties and interest to meter and nuisance charges, those will be paid before other agency receivables debt. This payment order does not rely on the age of the receivable debt, only the category of outstanding charges. Under this scheme, a customer that pays some, but not the full

amount, will reduce his account receivable but still be subject to shutoff for nonpayment of the water portion of his bill.

4.3.2.4. Refunds

The utility will issue refunds to customers in certain cases of overpayment that result from meter reading errors or property sales where the customer is no longer using the account. The refund amounts must be over \$1.00 in order for the City to issue a check. Typically, overpayment on an active account for a continuing service will not be refunded, but will be carried as a positive balance on that account and applied to the next bill amount(s).

Customers may request refunds through a form called refund petition, which are routed to the Revenue Refund Unit for processing. The Unit then reviews the forms, verifies the customer's eligibility, and requests approval from WRB. WRB grants approval and returns the petitions to the WRB Refund Unit, where staff record the petitions and approvals in its internal spreadsheet. Revenue routes the petition through Finance for approval. When Finance is in possession of the petition, that group updates FAMIS with a fund debit, characterized as a refund. Finally the petition is sent to Treasury for refund check issuance. Once the check is issued, the Revenue Refund Unit is notified that the check went out and that unit shares the information with the WRB Refund Unit. After this notification that the check is cut, WRB Refund Unit records a DF in Basis2 for the petition, putting a debit against the existing credit in the customer's account. The WRB Refund Unit spreadsheet is updated to reflect the fact that the process has been completed. This process is depicted in the figure **Error! Reference source not found.**, below.

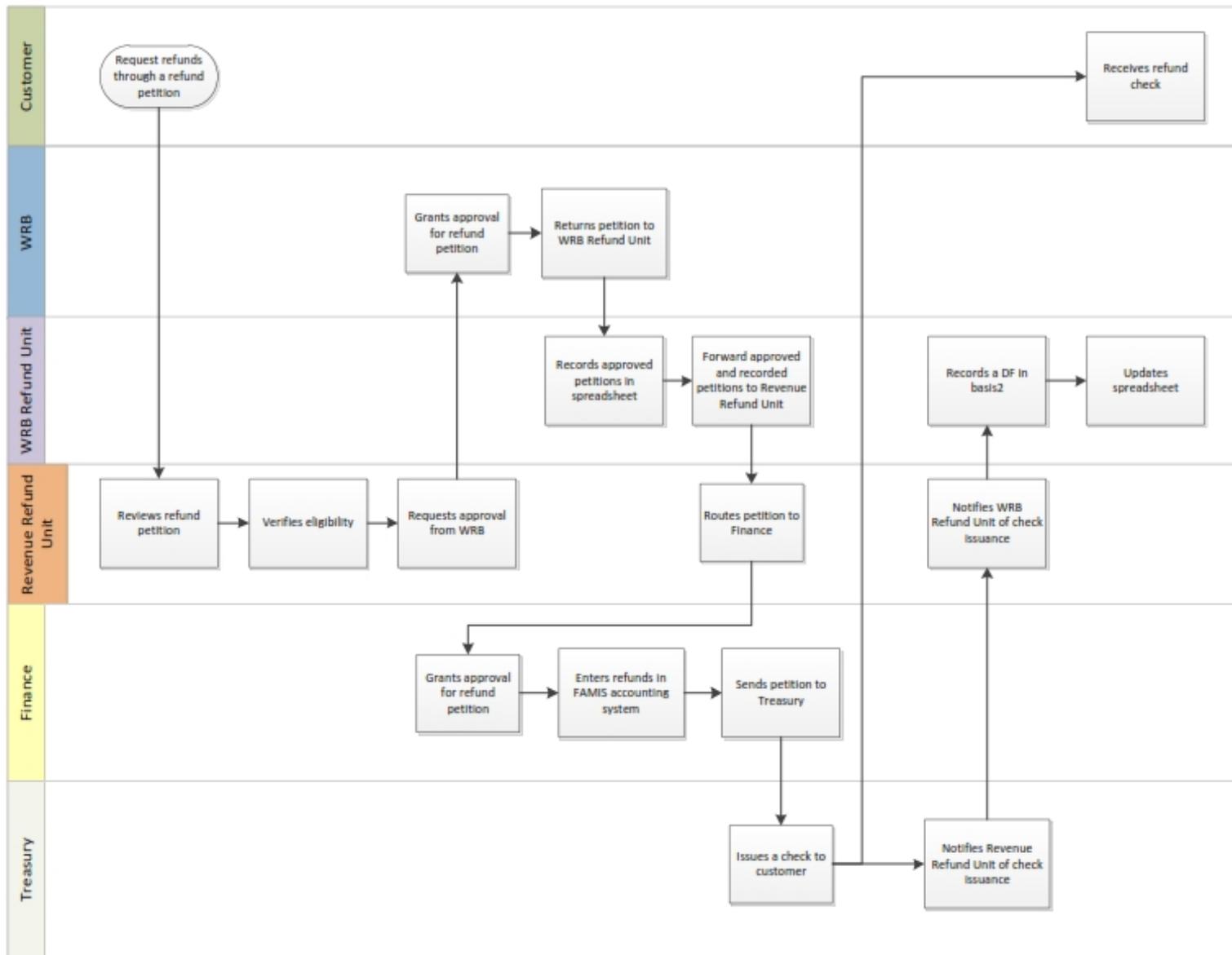


Figure 7: Refund Process

4.3.2.5. Stormwater billing data and Basis2

In order to reconcile the stormwater fees expected to be billed against billing data within Basis2, RFC was provided with a copy of stormwater fees that are maintained by PWD and that represent the anticipated stormwater billings. This copy, dated late June 2013, was provided by PWD in the form of a database table containing water accounts, installations and the final stormwater charges. This table will be referred to as the "PWD table". RFC compared the charges in the PWD table against stormwater fees billed by WRB using a copy of Basis2 accessed via VPN that is dated as of the end of April, 2014.

We found that the vast majority of charges agree between the PWD table and Basis2, representing 94% of the accounts in the PWD table and 86% of the expected monthly charges. Basis2 was found to have debited 99% of the expected fees in the month analyzed, with a number of cases where the fees did not agree between the two databases. Of the cases where fees did not agree, we are able to explain almost all of the differences. For the remainder, 2,726 records, we initially recommended further efforts to reconcile the two sources. These records were provided to PWD and WRB staff, who reconciled these accounts and explained all remaining concerns with the data. This resulted in a complete agreement between the data generated by the stormwater billing system and Basis2. These results are detailed in Appendix F.

4.3.3. Relationship Management

Staff within WRB perform a number of functions that support customer relationship management. They help customers navigate the complex requirements of appeals, adjustments and assistance programs. The call center is excluded from this study. Information about the call center can be found in the Shumaker & Co. report.

4.3.3.1. Adjustments

Adjustments are made to accounts to correct for previous over- or under-billing. For example, if a meter has been reading zero for several months and it is determined that the meter is malfunctioning or has been tampered with, an estimated usage will be used to calculate what *should have* been the bill for each zero read statement. This is entered into the billing system as an adjustment.

Staff within the Account Analysis Unit (AAU) play an important role in the adjustment process. The major function is to conduct thorough reviews of accounts in response to customer inquiries. Staff work from a list of customer inquiries generated in Basis2 as well as inquiries received through the mail. An analyst addresses each inquiry individually and, depending on the nature of the issue, will review consumption, billing, and payment information for that customer. Where high reads are suspected by the customer, the analyst will compare previous reads and determine whether the read in question is higher than a tolerance threshold (at 1.5 times the next highest read). When account analysis results in suspicion of meter tampering, or incorrect or inconsistent data, the analyst initiates a request in Basis2 for the Technical Operations group to review the meter and premise in the field.

If the analyst agrees that an adjustment is in order, he or she initiates a request in Basis2 for the Adjustments Unit within WRB Accounting to further assess and resolve the situation. A final determination is made by the Accounting Unit.

The Accounting Unit receives requests from AAU, WRAP, Intake, or other units regarding accounts that may qualify for substantial financial adjustments. Analysts review each account individually, looking at historical consumption patterns, other data sources (maps, deeds, etc.) and any newly available information from Technical Operations or the meter shop, to determine the necessary adjustment. Where reads and associated bills are deemed to have been too high, customers are issued a credit to their accounts. Where bad reads, tampering, or other circumstances have led to reads and bills being too low, the true amount owed is added to the account and staff will notify customers.

4.3.3.2. **Water Revenue Assistance Program application**

The City has implemented assistance programs for customers who are unable to pay their water bill but show a good faith effort to do so. The RFC Team examined the Water Revenue Assistance Program (WRAP) with respect to its compatibility with the Basis2 system (and data integrity therein) as well as its policy and process consistency, which had come up as a concern by the Public Advocate.

The goal of the program is to keep customers in service while recovering some revenue from consumption for those customers. To qualify for assistance, a customer must be the owner of the property receiving assistance and a household income (based on the number of people) within Federal low income guidelines, and must be delinquent on his or her account.

The process of administering this program is shown in Error! Reference source not found., which details application receipt, review, dispensation, and customer communications. The following is a description of the process presented in chronological stages.

4.3.3.2.1. ***Application Initiation Process***

Customers can request applications by mail or in person, where customer service representatives are available to answer questions. Eligible customers must provide proof of identity, property residence status (owner or tenant), income, expenses, and other information relevant to the application. The information and documentation are then recorded and filed for staff review. Currently, there is no electronic application capability. If applications can be initiated electronically, the process will be more efficient, application completeness can be assured, and staff work hours will be freed up for performing other activities.

4.3.3.2.2. ***Application Receiving Process***

Applications are received either through the mail or in person (1A). After the applications are opened and marked as received (1B), any original copies of critical information (such as original social security cards) are copied and returned to the customer (1C). The applications are then packaged and sorted and separated into new (first time applications) and renewal (annual review applications) batches in preparation for review (1D). They are filed in designated cabinets for each type of application (1E). The cabinets serve as the “inbox” for the processing staff.

4.3.3.2.3. ***Application Review Process***

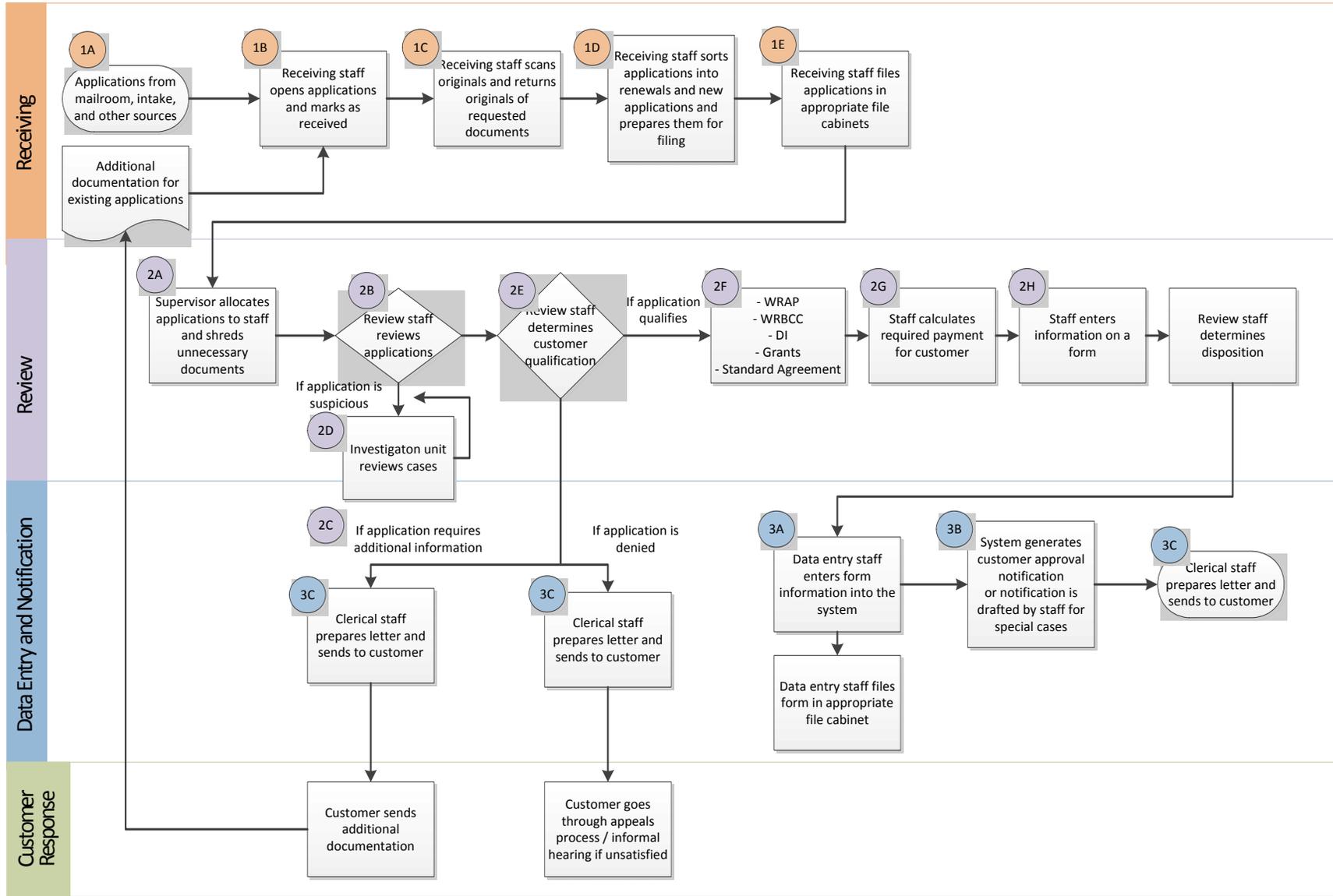
The review of applications involves several steps and multiple staff to complete; this is reflected in **Error! Reference source not found.** where the swim lanes depict the different groups involved in the process. First, when applications are received, they are allocated to staff by a supervisor for review (2A). The review staff checks the applications for completeness and that all required documents are included (2B).

Unnecessary documents are shredded. If an application is incomplete or does not have all required documents, a letter to that end is generated and sent to the applicant (2C). The account status and property meter information on the complete applications are validated using data in Basis2, and those with information needing verification are referred to the Special Investigations Unit if necessary (2D). Next, the applicant's income and expenses are reviewed (if necessary) to determine eligibility (2E). Expenses are reviewed as part of the low income payment agreement application review process, during which the applicant's allowable expenses are calculated and deducted from their income to determine their eligibility. The reviewer determines the disposition of the application, or which assistance program the applicant qualifies for (e.g. standard agreement, WRAP, Water Revenue Bureau Conference Committee (WRBCC), DI, or City grant eligible) (2F) and calculations are made to determine the payment agreement to be offered to the applicant (2G). The review results are then documented on a form (2H) to be used to enter the information into the system by the data entry staff. Though the process results in data entry (below) into the WRAP database, the entire application receipt and review process is driven by a paper-based workflow, where pieces of paper convey important information about an application's status, progression, and final outcome.

4.3.3.2.4. Data Entry and Notification Process

Data entry and notification involves entering the application data and the application review results information into the system and generating letters to the applicants informing them of the decision on their application and the reasons for the decision. Using the forms generated during the review process, data entry staff enter the information into either the WRAP database or directly into Basis2, depending on the dispensation. Qualifying WRAP customer information is entered in the WRAP database while others (WRBCC, DI, and Standard Agreement) are entered in Basis2 (3A). The WRAP system generates approval letters, while clerical staff prepare the denial letters and other letters requiring unique messages to the applicant (3B). The clerical staff obtains the information needed to manually generate the notification letters from the application files and draft letters to communicate those results to the customer (3C). These letters are reviewed and changed, as needed by review staff. Form letters include information about customers' avenue for appealing the decision via informal hearing. Final letters are mailed by clerical staff.

Figure 8. Assistance Application Review Process



RFC obtained information about customer assistance programs from PWD's peer utilities during the benchmarking survey. In general, customer assistance programs are intended to reduce delinquency levels by making bills affordable for targeted customer groups who may have difficulty paying their bills. The following is a summary of the survey customer assistance program findings:

- 60% of the utility sample have a customer assistance program which reduces the utility bill.
- The most common customer assistance program was low income (8), then senior/elderly (3), medical/disabled (2), and emergency (2).
- For most utilities, another agency manages the program (e.g., social service agencies, Low Income Home Energy Assistance Program (LIHEAP) administrators, or Community Services).
- Customer assistance programs are most commonly funded through utility rate revenues. Other funding can come from customer contributions or a portion of non-rate utility revenue (in the case of one utility).

The City's approach to administering assistance programs appears to have developed as different programs were added over time, and limited technological solutions were developed to support them. There are many opportunities for policy framework solutions and process modifications to improve this particular set of processes.

RFC observed a great deal of workflow management using individual pieces of paper (sign-in/out sheets and disposition slips). Staff referenced materials and did calculations to determine program eligibility and outcome outside the WRAP database environment.

4.3.3.3. Payment plans and medical delay request

PWD supplements the WRAP with a medical delay program, which allows customers to delay service shutoff due to nonpayment when a medical emergency makes payment impossible. The customer must notify WRB of a medical emergency and provide an official doctor's note. Customer service staff can enter the information into Basis2 and delay generating a shutoff order by 30 days. Within that time frame, the customer must make sufficient payments towards the water bill or enter into a payment agreement. Customers are only eligible for this delay once per year.

The benchmarking survey revealed that all utilities have medical accounts, typically numbering in the hundreds. PWD has the second highest total number at around 1,000 medical delay accounts. However, the other two local utilities surveyed have similar numbers of medical delay accounts. The documented process includes a sufficient barrier to participation (a doctor's note) and the delay is only for 30 days rather than indefinitely as with some utilities, so this is not an overly concerning scenario as long as the procedure is followed internally. The survey showed that most utilities will shut off medical accounts at the end of the delay period, as PWD does.

4.3.3.4. Billing disputes and appeals

Customers can request an informal hearing from the WRB to dispute their water bills, rejected Water Revenue Assistance Program (WRAP) applications or revoked WRAP status, and water shut off for nonpayment or meter inaccessibility (which is required by PWD for changes, repairs and reads). A customer must call in for an informal hearing request form and complete the form before WRB further investigates an individual case. Once more information about the account is gathered by the informal

hearing officers, many cases are resolved with an adjustment, while the remaining cases are presented by the customer and a written decision is issued by the officers.

If customers are still dissatisfied with the outcome following the informal hearing, they may petition for a hearing with the Tax Review Board. If the disputed amount is over \$10,000, cases are directed to the Tax Review Board and do not go through the informal hearing process. The Tax Review Board is the final authority on billing disputes and appeals.

4.3.3.5. Existing discount programs

Currently there are discount programs for which certain customer groups are eligible. These discounts are separate from the assistance programs offered by WRB as described above. The following types of customers are billed for water and sewer service at a discounted rate: senior citizens, charitable organizations, and the Philadelphia Housing Authority (PHA). Senior citizens and charitable organizations receive a 25% discount while the PHA receives a 5% discount. Senior citizens must be 65 years of age or older with a total household income of \$32,000 or less to qualify for the senior discount. Charitable organizations that qualify include registered charities, churches, nonprofit hospitals, schools, and universities.

4.3.4. Collections

The City relies on Basis2 for progressing accounts through the automated debt collection process. The diagrams in **Error! Reference source not found.** and **Error! Reference source not found.**, provided by PWD, show the flow of that process from initial billing to debt collection at a third party collection agency. A detailed description of critical steps is included below.

Figure 9: Basis2's Automated Debt Collection Process for WRB

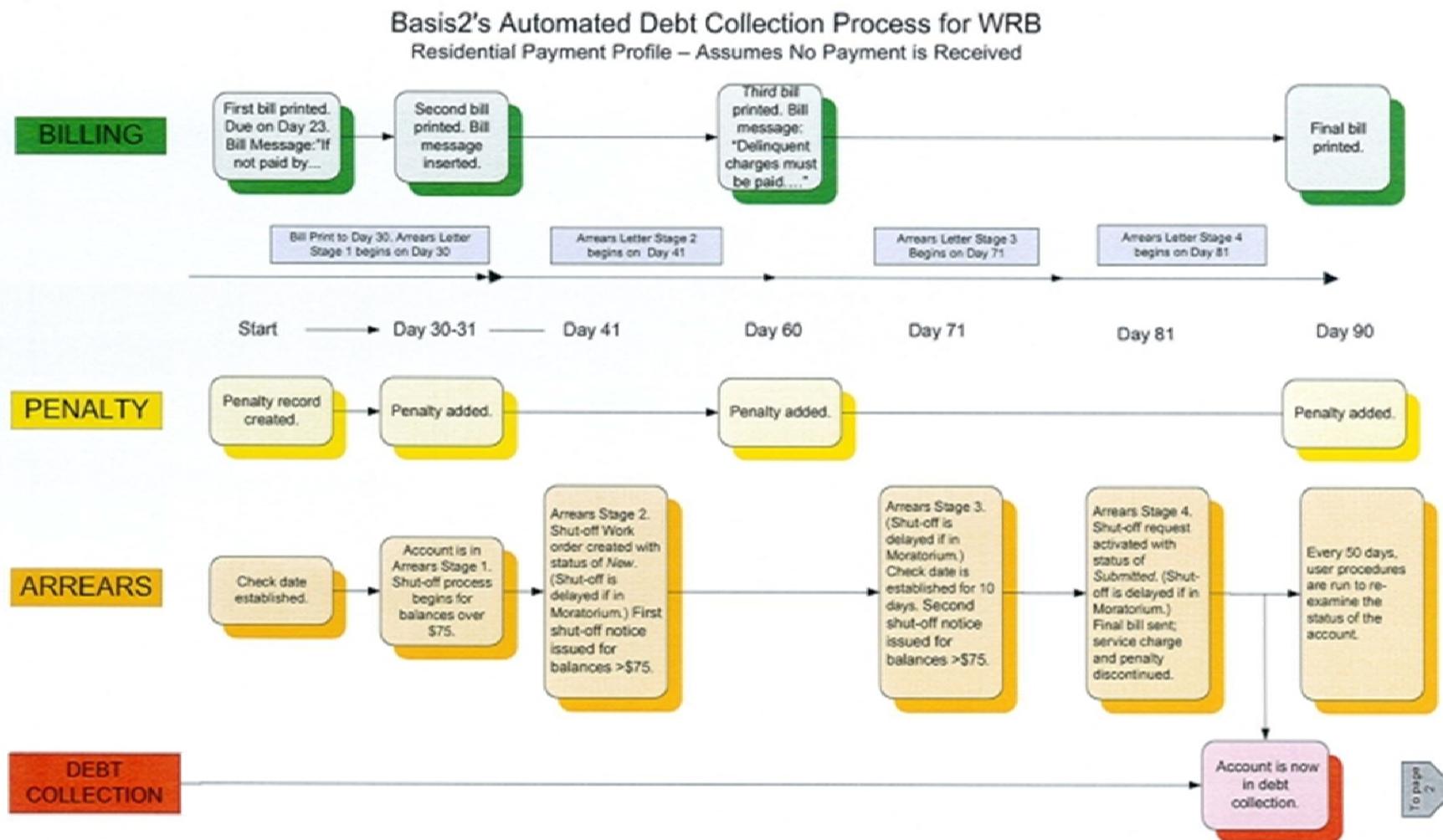
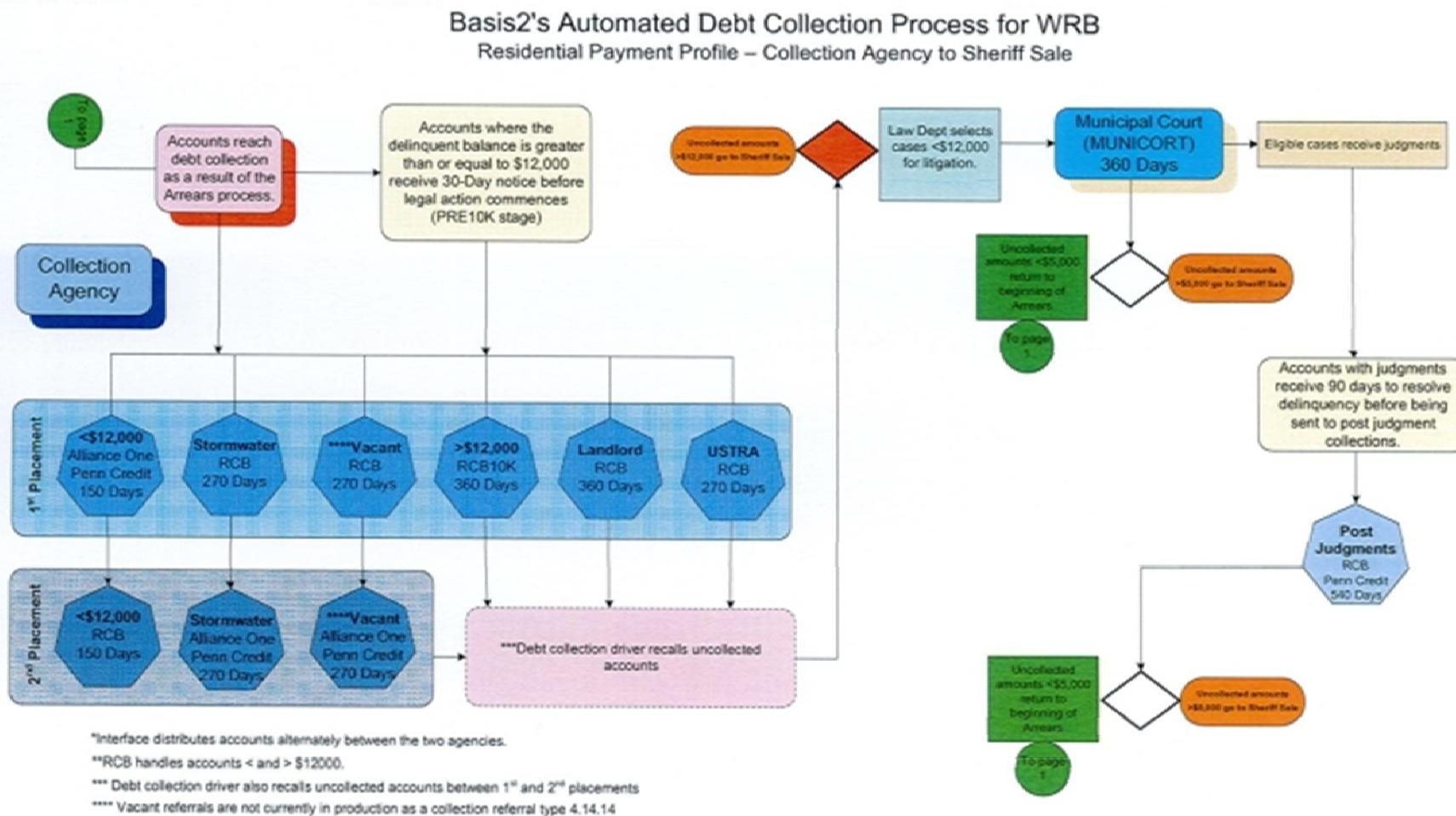


Figure 10. Basis2's Automated Debt Collection Process for WRB, Continued



Revised on 4.14.14 by Idris A. Zahr

4.3.4.1. Service cancellation and restoration process

The Water Revenue Bureau has a detailed timeline and standard operating procedure by which it governs penalty and shutoff actions. Typically, shutoffs occur as a result of customer nonpayment. In that case, 72 days after a bill is printed, if a \$75 delinquent balance has been reached on the first bill or subsequent bills, the first shutoff notice is sent to customers. At that time a representative from the Collections Unit also calls the customer in an attempt to receive payment and avoid service cancellation. If no payment is sent, after another 31 days a second shutoff notice is sent and the customer receives another call from the Collections Unit. Both notices inform the customer that in the case of continued nonpayment, the property is eligible to have water service shut off 114 days after the original bill. Once that time has passed, the property is referred to the PWD Delinquency and Restoration Unit for Shutoff. Shutoff activities are stalled during the moratorium (discussed below), if a bill is in dispute, or if the customer enters into a payment agreement or assistance program.

In other cases such as noncompliance or water theft, water may be shut off on an accelerated timeline.

When water has been turned off for nonpayment, service can be restored once a customer makes a satisfactory payment toward the delinquent balance or sets up a payment plan, and pays the reconnection fee. The customer must make payments over the phone or in person at the City's Revenue Department. For a more timely reconnection, the customer can bring a receipt documenting satisfactory payment to WRB to initiate the process.

Most utilities that were benchmarked have a service shutoff penalty for nonpayment, but there are a wide variety of approaches to using this enforcement measure. The benchmarking survey highlighted the varying timelines and circumstances under which customers are subject to service cancellation. The following approaches are from three of the participating utilities:

- The customer receives a notice 46 days after bill is rendered, if it goes unpaid. If the bill is \$250 or above, the customer receives a turnoff notice. If the bill is below \$250, the customer receives a delinquent notice. A work order is created for turnoff 18 days later (64 days after the initial bill).
- After billing, the customer has 21 days to pay. On day 22, the utility calls to attempt collection on the outstanding amount. On day 26, a late fee of 0.833% is added to the outstanding amount and a past due notice issued. Ten days later, another call is placed to the customer and three days after that, with continued nonpayment, a door hanger is placed at the premises. The customer is charged a \$15 penalty for this. On day 47 a disconnection order is issued, and the service is disconnected in 2 to 21 days depending on work load (49 to 68 days after the initial bill).

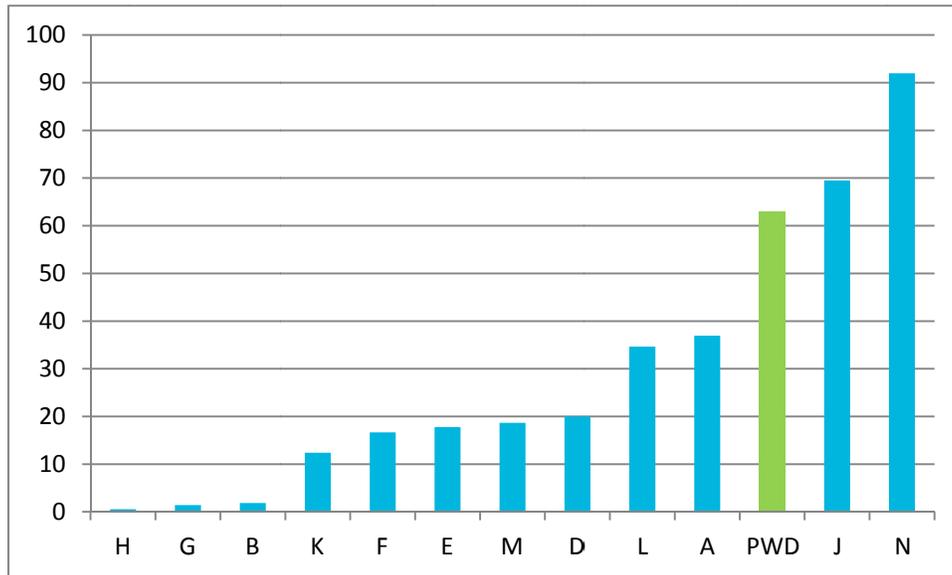
Payment is due 21 days after an account is billed, with a one-day grace period built in. A late charge is applied the next working day. Five working days later a delinquent notice is issued. Five working days later an automated call is placed to the customer. Two working days later, a turnoff order is generated and a nonpayment fee is applied to the account (34 days after the initial bill).

The range of reported times based on shutoff procedures and timelines was 34 to 163 days. As noted below, moratorium periods and other factors can significantly extend this timeline. Some utilities also report staffing shortages that prevent timely service cancellations and limit the effectiveness of the measure. Generally, a long shutoff timeline appears to relate to higher delinquency levels.

The following graph presents the range of service cancellations per 1,000 accounts. The figure for each utility participating in the survey represents a three year average. PWD's figure is an average for the years

from 2005 to 2011, during which there was little variation in the number of shutoffs. Some utilities reported that they are understaffed and backlogged, reducing the number of turnoffs that they would have expected to perform if equipped to do so. The utilities in the benchmarking survey are identified by letter to maintain their anonymity.

Figure 11. Days from Bill to Service Cancellation



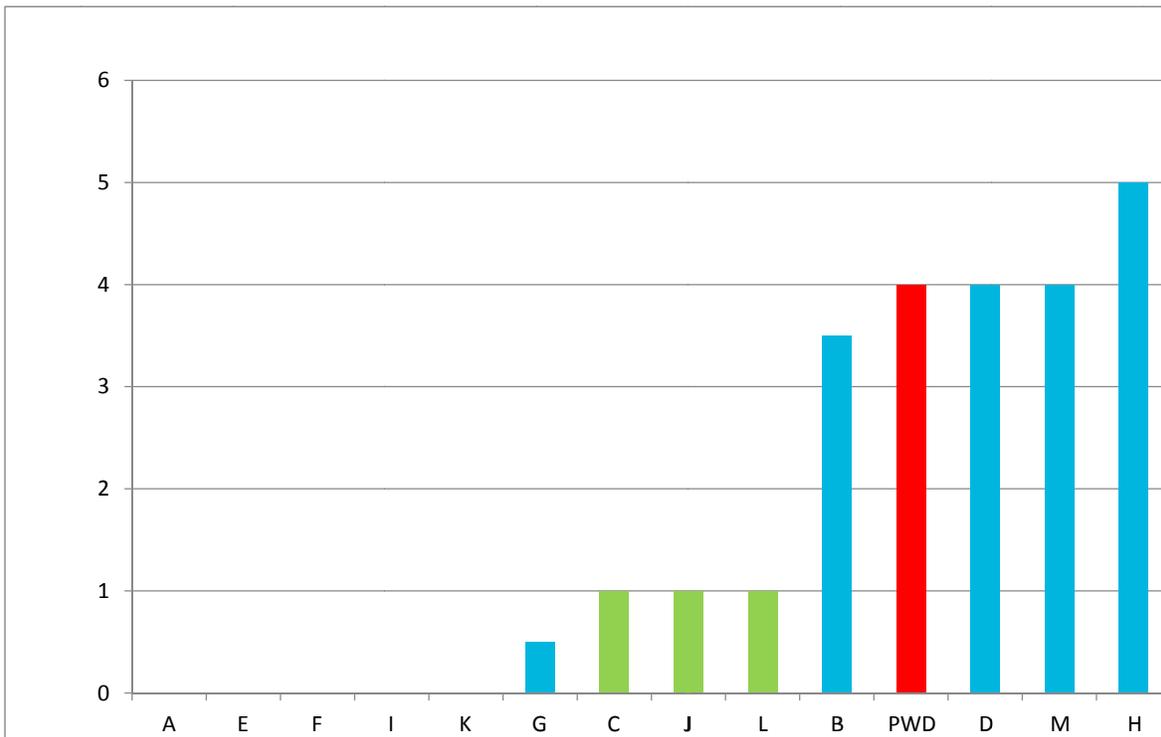
Turnoff levels are higher in electric and gas utilities and also for combined water and power utilities. According to several utilities with low turnoff levels, a history of enforcement and being strict with turnoffs, specifically, seemed to produce a culture of compliance.

4.3.4.2. Moratorium

The City of Philadelphia has an established moratorium period, dating back to 1991, during which water service to its customers is not shut off regardless of payment status by regulation. The City’s moratorium is in place during the winter months of December through March.

The benchmarking survey showed a number of different policies around shutoff moratoria. About a third of the utilities have no such program. Of those that do, the sample includes utilities with moratoria during both cold weather and hot weather periods. The timing of the moratorium period is loosely related to the geography of the utility, where more northern utilities face greater health and safety concerns in the winter months and more southern utilities face greater health and safety concerns in the summer months. Fixed moratorium periods ranged from 2 weeks (the weeks of Christmas and New Year) to 5 months. Two of the utilities have a variable moratorium period driven by the heat index and one driven by freezing weather (temperatures below 32 degrees Fahrenheit). **Error! Reference source not found.** shows the distribution of moratorium durations of the surveyed utilities. Green bars indicate the use of heat or cold indices to drive the moratorium period.

Figure 12. Moratorium Period (in Months)



In Philadelphia, the moratorium has an impact on all aspect of customer service provision and collections processes. Customers continue to be billed for water consumption during that time period, and continue to incur penalties for nonpayment on the same schedule. If patterns of nonpayment continue through the moratorium period, this can result in a high volume of customers subject to shutoffs once the moratorium period ends in the beginning of April. Customers can further forestall shutoff by entering into a payment agreement or assistance program. In the past, this cycle of moratorium dependence and payment agreement or assistance program participation has limited the City’s enforcement capabilities and perpetuated nonpayment among customers.

4.3.4.3. **Zero-read processing**

According to the recent study performed by Schumaker & Co., approximately 5,000 to 10,000 accounts regularly read zero consumption. Two consecutive months of zero reads on an active account triggers an investigation. The City investigated these patterns after the utility transitioned to Automated Meter Reading (AMR) technology. At that time, zero reads were attributable in equal parts to vacancy, theft (intentional meter tampering), and mechanical failure of the meter.¹⁷ In the latter two cases, WRB estimates usage based on historical consumption prior to the beginning of the zero read period and back-bills the customer for the amount owed. In cases of theft, the customer is charged for the full amount of

¹⁷ Personal interview with Steve Junod, April 15, 2015

expected consumption during the time period in question. When mechanical failure has caused the zero read, the customer is only liable for a portion of the expected consumption, and the City absorbs the remainder. Concurrent with usage estimation, WRB generates a work order so field personnel can resolve the problem on the ground. Adjustments Unit staff have set up an informal, internal system to periodically check accounts which have been associated with water theft in the past to ensure that they continue to register consumption. The Water Department's relatively recent zero-reads initiative was implemented in part to disrupt a cycle that is disadvantageous both to customers and WRB and PWD. Customers with long periods of zero reads are identified and back-billed. If the bill is high, customers may need to enter payment agreements. Frequently, customers dispute back bills. Combining the moratorium and dispute processes, customers may delay paying their obligations for a long period of time. Meanwhile, the City is not receiving payment for water and other services and other customers are unfairly bearing the burden for these customers. It is hoped that correcting zero read issues in a more timely manner will result in quicker identification of theft of service and a reduction in customer service issues related to high bills.

4.3.4.4. Third party collections

WRB engages three collections agencies to facilitate collecting on water accounts that have been overdue 145 days or more, and have an outstanding balance greater than \$150. The City has set up arrangements with these collection agencies allowing them to perform dunning and collecting processes, and in some cases initiate legal action. The collection agencies are entitled to a portion of the collected funds, and this amount varies depending on the timing and method of collection. If the customer submits a payment within 7 days after an account is transferred to the collection agency, this payment is considered not to have been collected by the agency, but by the City. In cases where the collection agency has been actively working to collect on an account but the payment is made directly to the City's Revenue Department, the collection agency takes 12% of the revenue. When the agencies directly receive and process the payments, they receive 16% of the revenue.

RFC learned during staff interviews that the City maintains a constructive relationship with its collection agencies, and works towards transferring data, knowledge, and funds between the entities appropriately and efficiently. Collection agencies submit a monthly report on collections vs. referrals, and these reports are used in part to gauge the effectiveness of a particular agency. WRB, PWD, the Law Tax Unit (shared between the Law and Revenue Departments) and the Collections agencies meet quarterly to discuss collections strategies, results, minor issues that have arisen, and best practices. Through these meetings City staff acquire information for internal education and the agencies have the opportunity to collaborate on achieving the highest possible overall collections rate.¹⁸

4.4. RECOMMENDATIONS

4.4.1. WRB and Revenue Best Practices

After collecting data on WRB and Revenue Department practices, and evaluating them against benchmarking survey results and known industry best practices, RFC developed a set of recommendations, discussed herein, that might guide PWD/WRB in its efforts to reduce receivables, delinquencies, and billing and collection costs.

¹⁸ Personal interview with Afuah Payton, October 16, 2014

In general, the survey found that PWD, as compared to its peer water utilities and other Philadelphia utilities, has comparable cashing costs and delinquency rates, but has longer shutoff cycle and moratorium period than most. PWD has the second longest moratorium period and the longest shutoff cycle of the utilities surveyed. Typically, shorter moratorium periods are associated with lower receivables and delinquency rates since customers are not able to receive service without payment for as long. The duration of the City's shutoff period can be viewed as a balance between lowering receivables and delinquency levels and increasing the number of shutoffs (and the associated field work, customer communication, and data maintenance).

PWD also has a more lenient medical delay program for shutoff with high participation as well as numerous different customer assistance programs (though most utilities offer at least one such program). RFC does not necessarily recommend reducing any customer service programs, but recommends tightening the requirements or demanding complete adherence to the requirements so that delinquency does not persist and programs can focus on offering support and flexibility to those customers facing financial hardship. Much of this can be accomplished by updating regulations and standard operating procedures, and effectively communicating the requirements and available options to customers. The City also has the opportunity to investigate further opportunities for efficiency via consolidating customer assistance programs with other City functions, such as social services, or other utility service providers.

An important finding of the survey is that PWD outsources fewer of its customer service functions than its peer utilities. In part, this is because the utility works so closely with other City departments on functions that may otherwise be outsourced, like bill printing, mailing, payment processing, and collections. Despite this partnership, PWD is on the higher side of reported unit billing and collection costs. RFC does not recommend changing the arrangement, as it would have implications for many other City departments who share in the resource pool, but for the City to focus on improving efficiencies and streamlining processes wherever possible. Several suggestions are included in the section below.

4.4.2. Opportunities for Efficiency

4.4.2.1. Limiting Redundancy

Throughout the customer service functions of WRB and the Revenue Department, there are a number of redundant processes where people or systems manage parts of the processes that have already been nearly or completely done by others. For some steps, this is to be expected and is in line with industry standards. For instance, after cashiers reconcile their cash, checks, and reported payments, it is appropriate for a supervisor or another group to verify the results. Still, there are places within the groups where such redundancy is not supportive of PWD and Revenue's goals of excellent customer service and financial responsibility.

After careful review and analysis of the customer service processes within the Revenue Department, in WRB and in payment processing functions, RFC identified several opportunities for improved efficiency and effectiveness. Foremost, the division of labor between different departments, and between individuals within the same department, results in a great amount of redundancy in many customer service processes. The best example of this is found within WRAP application processing, where different individuals open mail, file applications, determine eligibility and log applications, develop customer communication text, and type letters to the customer. Each step in the process requires the individual to review the work performed by the last person, perform his or her specific duty, and transfer the file or information to the next

individual. RFC recommends cross training staff to reduce the processing layers (division of labor) and consolidate steps so that each staff person reviewing applications can process an application from start to finish. This will streamline the process and improve efficiency and accountability.

A similar situation is encountered when customers question their bills. Customers interact with staff at Intake, conveying their issue or concern directly. However, different people in the Account Analysis and Adjustment Units ultimately look further into the issue and render an opinion. With proper training, frontline customer service staff could perform many of these duties and quickly deliver answers to the customer. RFC recommends appropriate oversight to these processes, regardless of whether they are performed by different groups or by a broader cross-section of staff. Reducing redundancy in processes could free up resources to be devoted to quality control and appropriate oversight.

Despite the heavy reliance upon electronic data, there is no robust application log and tracking system, making it difficult both to ensure compliance to internal deadlines as well as to respond to customer inquiries on the status of a WRAP application. Developing such an electronic system, or utilizing available features in the existing applications, could greatly ease these efforts. Cross training staff so that fewer individuals work on a particular application will also improve WRB's ability to track applications and complete processing in a timely manner.

There is some redundancy between the WRAP database and the Basis2 system insofar as both are used to maintain customer and payment information. Basis2 accommodates some types of payment agreements or assistance program requirements, and indeed imports information from the WRAP database regularly, but does not, at this point, support all types of customer service functions. RFC supports the ongoing effort to update functionality of Basis2 application to remove the need for a separate WRAP database. This process is underway as a result of a previous management study performed for the Bureau.

Beyond the redundancies between computer-based systems, WRB also has almost an entirely duplicated paper-based process. Nearly all incoming and outgoing customer communication is paper-based, and this information is all either entered into or reported from one of the many databases or electronic systems in use. RFC strongly recommends creating a digital method for customers to interact with and communicate with the City. One example may be an online WRAP application interface, where appropriate and complete data is collected, organized, and transferred to WRB seamlessly.

Along those same lines, different groups and departments often communicate via inter-office paper mail. During interviews and observations, RFC noticed paper documentation being transferred between departments to convey work orders, adjustment requests, lists of purchased/transferred properties, proof of bill payment, and other pieces of information that are all stored digitally. RFC learned that staff continue to use a paper system because there is no reliable workflow system in WRB. There may be opportunities to implement a workflow management system outside of Basis2, which is already burdened with needed updates and bug fixes. Such a system could be piloted in WRAP application processing, which in many ways reflects the reliance on, and continual transfer of, paper documentation observed throughout the Department.

4.4.2.1.1. Enterprise Content Management

Over the past decade, there has been a rise in the use of enterprise content management (ECM), which refers to the combination of strategies, tools, processes, and skills an organization needs to manage all its information assets over their lifecycle.¹⁹ ECM is an integrated set of solutions for collecting and organizing information such as paper documents, data, reports, and web pages to be used by an organization. ECM varies according to organizational structure and needs, but it generally works to combine the following components to achieve greater system efficiencies:

- **Electronic Document Management** for “digitizing paper documents and offering collaborative editing functionality”;
- **Electronic Record Management** to “preserve static versions of electronic information, potentially for an unlimited time period”;
- **Web Content Management** to manage dynamic versions of electronic information; and
- **Workflow Management Systems** to automate business processes by “coordinating the flow of information among different information systems and by interacting with users.”²⁰

Some of the benefits of implementing ECM include more transparent government, economies of scale for information and record processing, reduced paper use and file storage costs, and an increase in process and workflow efficiency. In particular, the document and record management tools and systems makes it easier for organizations to achieve compliance with rules and regulations, for instance by allowing employees to instantly look up information and answer requests from auditors. The same applies to customer service, as employees can respond to customer needs with consistency and speed by being able to retrieve current and accurate information in the databases directly from their workstations. Organizations can consolidate resources with ECM, with employees spending less time on manual processes and more time on strategic operations and tasks.

There are many city and county governments in the U.S. that have successfully implemented ECM systems. Examples include Loudoun County, Virginia, where the government was able to get rid of 20 legacy systems as a result of switching to ECM in 2007.²¹ The County of San Diego, California also combined their records management and electronic data management system (EDMS) in 2007, and hired a program administrator to oversee their new ECM program. At the time, the county also added 5 new staff members to: revise records policies, inventory and scan stored records, educate all county departments, create intranet website for employees, and assess the EDMS standard to make the organization more robust, especially in the face of disaster recovery and litigation.²²

More recent examples include the cities of Eugene, Oregon and Long Beach, California. The information services department in Eugene implemented an ECM system in 2010, consolidating the document

¹⁹ “Impacts of Implementing Enterprise Content Management Systems,” accessed December 4, 2014, <http://is2.lse.ac.uk/asp/aspecis/20100090.pdf>.

²⁰ “Impacts of Implementing,” 3.

²¹ 2013. “IT Services Cut Costs for Loudoun County.” *American City & County* 128, no. 12: 18. Academic Search Alumni Edition, EBSCOhost (accessed December 5, 2014).

²² Grudman, Rich. 2008. “Mapping an Approach for Successful Content Management.” *Information Management Journal* 42, no. 5: 60-64. Academic Search Alumni Edition, EBSCOhost (accessed December 5, 2014)

management systems being used by different departments and automating tasks to improve document tracking and workflow process efficiency.²³ In Long Beach in 2011²⁴, the city created a read-only public portal for their ECM system to increase transparency and accountability. Their system also has an open architecture that can be integrated with other software, and by simplifying access to information, the city is able to focus more of their efforts on customer service.

RFC recommends that PWD and WRB use an ECM system to reduce their paper application use and improve their workflow management. The Pennsylvania Office of Administration has EDMS standards in place and also offers guidance on determining what kind of ECM structure and design is appropriate for local agencies.²⁵ There are many established vendors to choose from, and there are well-documented implementation procedures and cost-benefit analysis methods to calculate organizational savings from using ECM.

4.4.2.2. Standardization and Improved Replicability

In order to ensure standardization, especially if the groups were to move toward a cross trained staffing approach, RFC recommends the creation or update of formal Standard Operating Procedures (SOPs) to improve consistency in processing and results. This applies to all customer service functions, though some, especially within the Revenue Department, are already highly standardized.

One particular area of opportunity for standardization is in customer communication. At present, staff develop customer communication from an extensive set of situationally dependent paragraphs. RFC observed this in communication templates used in AAU.²⁶ The majority of customer communication, though, is made up of only a small set of messages. WRB should consider a revised approach to developing letters that relies more heavily on prepared messages for the bulk of communication, and allows well-trained customer service staff to communicate other, unique messages.

While observing WRAP processing, RFC noted that there is not a high degree of standardization in determining eligibility for the program. As part of the process, customer service representatives look up income thresholds, calculate income, apply adjustments and take into account other considerations outside of existing software programs. Individual steps in this process could be standardized through the use of fairly simple tools. For example, an income eligibility calculator (which could look as below), could be used, and the results stored, in conjunction with application review.

²³ 2010. "Moving toward a Paperless Office." *American City & County* 125, no. 10: 47. Academic Search Alumni Edition, EBSCOhost (accessed December 5, 2014).

²⁴ 2012. "Fostering Open Government." *American City & County* 127, no. 1: 38. Academic Search Alumni Edition, EBSCOhost (accessed December 5, 2014).

²⁵ Pennsylvania Office of Administration, "Information Technology Policies," accessed June 19, 2015, http://www.portal.state.pa.us/portal/server.pt/community/policies_and_procedures/416/information_technology_policies/210791.

²⁶ Personal interview AAU staff, October 16, 2014

Figure 13. Mock-Up of Assistance Program Eligibility Tool

Application ID:

Enter the number of people in the household:

Enter household income(s) (after taxes) and pay period

\$	300	weekly
\$	1,450	monthly
\$	-	annually
\$	-	annually

Total annual income after taxes: \$ 33,000 annually

Enter other expenses:

\$	56	monthly	utility bill
\$	500	monthly	mortgage/rent

Federal Poverty Guideline for 6 people: \$ 32,570.00

<u>Eligibility</u>	
WRAP	YES
Disposable Income	YES
Grant	NO
WRBCC	NO

The dispensation is then noted on a slip of paper and transferred to the next individual for further processing. Similarly, the Accounting Unit estimates reads in response to erroneous zero reads using historical consumption information, but the methodology for doing so is variable depending on the situation and does not appear to be easily replicable. While RFC does not believe this has caused any problems with adherence to policy, it would be easier for staff and more defensible if there were a standardized approach to determining these important outcomes.

4.4.2.3. Resource Intensity

WRB and the Revenue Department’s heavy reliance on paper is described above as part of a redundant set of processes. It also represents a high cost to the utility in materials (e.g., paper, ink, equipment, or outsourced printing), and in the transferring and storage of paperwork. It is RFC’s chief recommendation that the departments work towards reducing reliance on paper documentation, and instead work on utilizing existing electronic document management systems and readily available (and often inexpensive) electronic interfaces.

4.4.3. Customer Service and Collections

4.4.3.1. Benchmarking

In the ever-changing field of customer service, where technology and business processes are shifting to support more automated, timely, and personalized service, PWD and WRB should consider conducting

regular internal reviews and benchmarking exercises in order to understand and adapt industry best practices.

4.4.3.2. Expanding Opportunities to Facilitate Payment

Many of PWD's water customers make every effort to stay current on their utility bills despite low income status. For those that have not fallen behind on making payments, assistance programs and payment plans are not made available. Rather, these opportunities exist only for customers that have accrued delinquent balances. RFC believes that a more comprehensive program that expands opportunities to facilitate payment may be more appropriate for the population served. The current assistance program initiative is exploring this concern further

4.4.3.3. WRAP Application Processing

The WRAP application process, as observed by RFC, could benefit from a number of alterations to improve efficiency. RFC suggests entirely or partially outsourcing qualification and requalification to another agency that also provides social services based on set criteria. Alternatively, WRB could copy qualification criteria from another utility's (PECO or PGW) local assistance program to streamline processing.

If the responsibility for qualifying customers is maintained, WRB streamline processes to limit redundancy in the workflow. First, the City should establish electronic application processing capabilities, which would greatly reduce processing time and better ensure application completeness. The City should develop a standard procedure or model for calculating agreement payments to increase consistency, and develop a more robust electronic application log in and referencing system to make the search and location of applications more efficient and transparent.

In this process, staff trained on the process more broadly could greatly reduce the processing layers (division of labor) and consolidate steps so that each staff reviewing applications can process an application from start to finish. This would streamline the process and improve efficiency and accountability. RFC advocates for hiring in the future at higher position levels. Higher level staff can be responsible for many pieces of the process, from application review to data entry to customer notification and communication. The transition to this type of workforce could be lengthy, but it will result in a more nimble staff prepared to accommodate changes in the assistance programs or processes.

4.4.3.4. Timeliness of Processing toward Shutoff

Historically, processing service cancellation (shutoffs) has been a slow process, allowing customers the time to enter into payment agreements or fall back on the moratorium after continued nonpayment. This timing issue exacerbates the potential drawbacks of other policy decisions. Adequate staffing is key to timely service cancellations and maintaining that leverage for payment.

4.4.3.5. Moratorium Rationale

Compared with peer utilities, PWD has a lengthy moratorium period. Paired with insufficient staffing to meet the high, extended peaks at the conclusion of the moratorium period, this limits the collection leverage of service cancellation. The City should consider reducing the duration of its moratorium period or, as an alternative, alter the rationale behind this extended period and take other steps to bolster the efficacy of the service cancellation leverage, such as enforcing timely cancellation.

4.4.3.6. **Assistance and Discount Program Rationale**

Currently, WRB customer assistance are targeted toward customers that have become delinquent on their accounts. Other utilities have successfully developed assistance programs that provide discounts to qualifying customers that remain current on their utility bills. This program structure provides meaningful assistance to economically disadvantaged customers and another point of collection leverage for the utility. The City Council has directed PWD and the Revenue Department to develop such a program under Bill 140607. The development process is underway.

4.4.3.7. **Back Office Functions (Insourcing vs Outsourcing)**

The City's back office functions are performed in high volumes. While there is room for improved efficiencies, these functions do make use of new technologies and RFC does not believe that outsourcing that work would result in additional savings beyond simple measures to streamline the existing processes (discussed in more detail above).

5. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

5.1. SYSTEMS AND DATA

Basis2 is in line with industry standard billing systems and is not plagued with essential data integrity issues that threaten its ability to function as a billing system for the City. We concluded that Basis2 does not need to be replaced immediately but that a number of efforts need to be undertaken immediately in order to transform the system into the optimally functioning system the City needs. The plan for achieving these improvements is included in this report. The City should increase resources devoted to the maintenance of Basis2, the recommendations for which are summarized in the following section. Still, Basis2 users noted some minor system bugs, but are generally satisfied with the system's performance and feel empowered to do their work within that environment.

In response to PWD's concerns about the reporting functionality of Basis2, RFC notes that while it is not yet optimized for consistent reporting, there are more primary drivers to the variable results. Importantly, there are significant nomenclature differences between departments (what is intended by the question is not how the question is heard) and departments have inconsistent and inadequate feedback regarding report results or concerns.

5.2. ORGANIZATION AND MANAGEMENT

The team reviewed the staffing and organization of WRB in support of water billing. We determined that the City should provide a DBA dedicated to Basis2 alone. Having discussed this need with OIT, we recognize that there are significant hurdles to hiring properly qualified DBAs. First, a DBA that could fulfill the needs for supporting Basis2 and the HR database requires 10 or 15 years of experience. However, the salary ranges allowed for the advertised jobs are totally inadequate to attract qualified candidates, so a higher salary must be budgeted and established to attract a qualified individual.

We also recommend that the City hire at least one full time resource dedicated for BA/QA Basis2 support immediately while maintaining current support of Basis2 support team. Additional BA/QA resources will have a direct impact on efficiency and effectiveness of current Bases2 development staff and will also have a direct impact on the turnaround of the issues/project backlog. If WRB/PWD would like to see an even more aggressive throughput of the current backlog of issues/projects, they should consider hiring two BA/QA staff.

Finally, we recommend that within the Basis2 team, the staff enforce Ticket Tracker to track capture all work performed and make task prioritization and impact more transparent. Doing so will improve the understanding individuals outside the Basis2 team have of the group's workload, priorities, and expected turnaround time.

5.3. PROCESSES

Customer service and back office processes are essential to the efficient functioning of the utility. At the time of the review, there were a number of opportunities for improvement identified in the observed processes. The primary finding here is that individuals in different departments and units often end up repeating work so they have appropriate (and trustworthy) information to perform their particular function. This can be improved through further standardization of customer service processes such that the information passed between individuals carries a higher level of reliability and usefulness. This could be supplemented with the implementation of an electronic content management solution to better manage files and information being transferred among individuals, units, and departments.

5.4. CHANGING LANDSCAPE AT PWD/WRB

During the course of this review, the City began or continued a number of initiatives, listed in section 2.7, that could impact the processes and performance of WRB and Revenue, as well as the programs and financial performance of PWD.

In sum, these initiatives could improve the data entering Basis2, limit the amount of staff effort spent on persistent customer issues and increase the usefulness of reporting outputs. At the same time, however, they are all likely to further tax the limited technical and other staff resources available.

In the changing landscape of PWD and WRB organization, tools, and initiatives, the specific recommendations contained in this report are intended to provide timely improvements to the people, processes, and systems reviewed during the project period. The broader recommendations are more timeless, and represent the team's thoughts on the ongoing relationship between PWD, WRB, and other parties in the pursuit of increasing efficiencies throughout the utility.

APPENDIX A1. PROJECT CHARTER

CITY OF PHILADELPHIA

PHILADELPHIA WATER DEPARTMENT
& WATER REVENUE BUREAU

*"METER TO CASH"
STRATEGIC REVIEW OF CUSTOMER SERVICE*

**RESULTS OF MARCH 24, 2014 KICK-OFF MEETING
PROJECT CHARTER & SOAR**



SOAR

*Strategic
Inquiry*

STRENGTHS

*What are our
greatest assets?*

OPPORTUNITIES

*What can we
improve or
innovate?*

*Appreciative
Intent*

ASPIRATIONS

*What is our
preferred future?*

RESULTS

*How do we know it
when we see it?*

STRENGTHS

WHAT CAN WE BUILD ON?

- › What is your proudest achievement in this organization?
- › What are you most proud of about this organization?
- › How do we use our strengths to get results?

What are PWD and WRB's most significant strengths?

STRENGTH 1

People in the organization

STRENGTH 2

A collaborative culture

STRENGTH 3

An ability to effectively communicate

OPPORTUNITIES

WHAT ARE OUR STAKEHOLDERS ASKING FOR?

- › How do we make sense of opportunities provided by external forces and trends?
- › How can we best meet the needs of our stakeholders including customers, employees, and community?
- › How can we reframe challenges to be seen as opportunities?

What are PWD and WRB's most significant opportunities?

OPPORTUNITY 1	Build on current technology to improve the customer service experience
OPPORTUNITY 2	Learn about, and take advantage of, innovative ways to reduce the cost of capital
OPPORTUNITY 3	Exploit technology and obtain better information to improve internal processes

ASPIRATIONS

WHAT WOULD WE LIKE TO BE?

- › What do we care deeply about?
- › What are we deeply passionate about?
- › Who are we, who should we become, and where should we go in the future?

What are PWD and WRB's most compelling aspirations?

ASPIRATION 1	To achieve a reputation for extraordinary customer service
ASPIRATION 2	To be known for delivering an excellent product
ASPIRATION 3	To maintain financial stability

RESULTS

HOW DO WE KNOW WE ARE SUCCEEDING?

Considering our Strengths, Opportunities, and Aspirations, what meaningful measures would indicate that we are on track to achieving our goals?

INDICATOR 1	Improved customer satisfaction as measured by surveys
INDICATOR 2	Reduced customer calls and enhanced call center service
INDICATOR 3	Improved collections and reduced accounts receivables

*"METER TO CASH"
STRATEGIC REVIEW OF CUSTOMER SERVICE*



APPENDIX A2. INTERIM PROJECT UPDATE

CITY OF
PHILADELPHIA

**PHILADELPHIA WATER DEPARTMENT
& WATER REVENUE BUREAU**

“METER TO CASH” STATUS UPDATE

May 28, 2014



AGENDA

Project Activity

Preliminary Synthesis

Initial Opportunities

Project Timetable

Next Steps

PROJECT ACTIVITIES

- » Project initiation
- » Public advocate meeting
- » Compilation of related initiatives
- » **Reporting and Basis2 interviews**
- » **Customer service and collections interviews**
- » Data acquisition & system access
- » Tactics tracker
- » Begin data audit

PROJECT ACTIVITIES

- » Project initiation
- » Public advocate meeting
- » Compilation of related initiatives
- » **Reporting and Basis2 interviews**
- » **Customer service and collections interviews**
- » Data acquisition & system access
- » Tactics tracker
- » Start data testing in Basis2

INTERVIEWS

- » **Revenue Accounting**
- » **Technical Operations**
- » **Operations**
- » Adjustment billing
- » Financial reports/group billing
- » Accounts receivable audit
- » TRB Process
- » Informal hearing
- » Revenue collections (manager)
- » Basis2
- » Tax sale/sheriff sale
- » Intake
- » WRAU
- » AAU

RELATED INITIATIVES

- 1 **Field service review**
- 2 **Establish data definitions**
- 3 **Tax data warehouse for case management**
- 4 **Stormwater returned mail**
- 5 **On-going Basis2 enhancements**
- 6 **Customer self-service (enhancement to phone system)**
- 7 **Water compliance checks (together with tax compliance)**
- 8 **Cashiering system**
- 9 **Overhaul of bills and standard letters**
- 10 **Basis2 upgrade**
- 11 **Mediation with Public Advocate**
- 12 **Assistance programs**
- 13 **WRAP database migration to Basis2**
- 14 **Annual close out of WRAP database - process revisions**
- 15 **Requests by accounting to meter shop to have occupancy status recorded for zero usage visits**
- 16 **PWD to take credit cards at the door at shut off**
- 17 **Land bank creation**
- 18 **Platinum system migration to Basis2**
- 19 **Zero bill project (joint PWD, WRB)**
- 20 **Policy on Shut off for tenants (the 24-hour rule)**
- 21 **Recertification for the senior discount program**
- 22 **Payment patterns report revisions**
- 23 **Business case development for Basis2 data warehouse and business intelligence tools**

PRELIMINARY SYNTHESIS

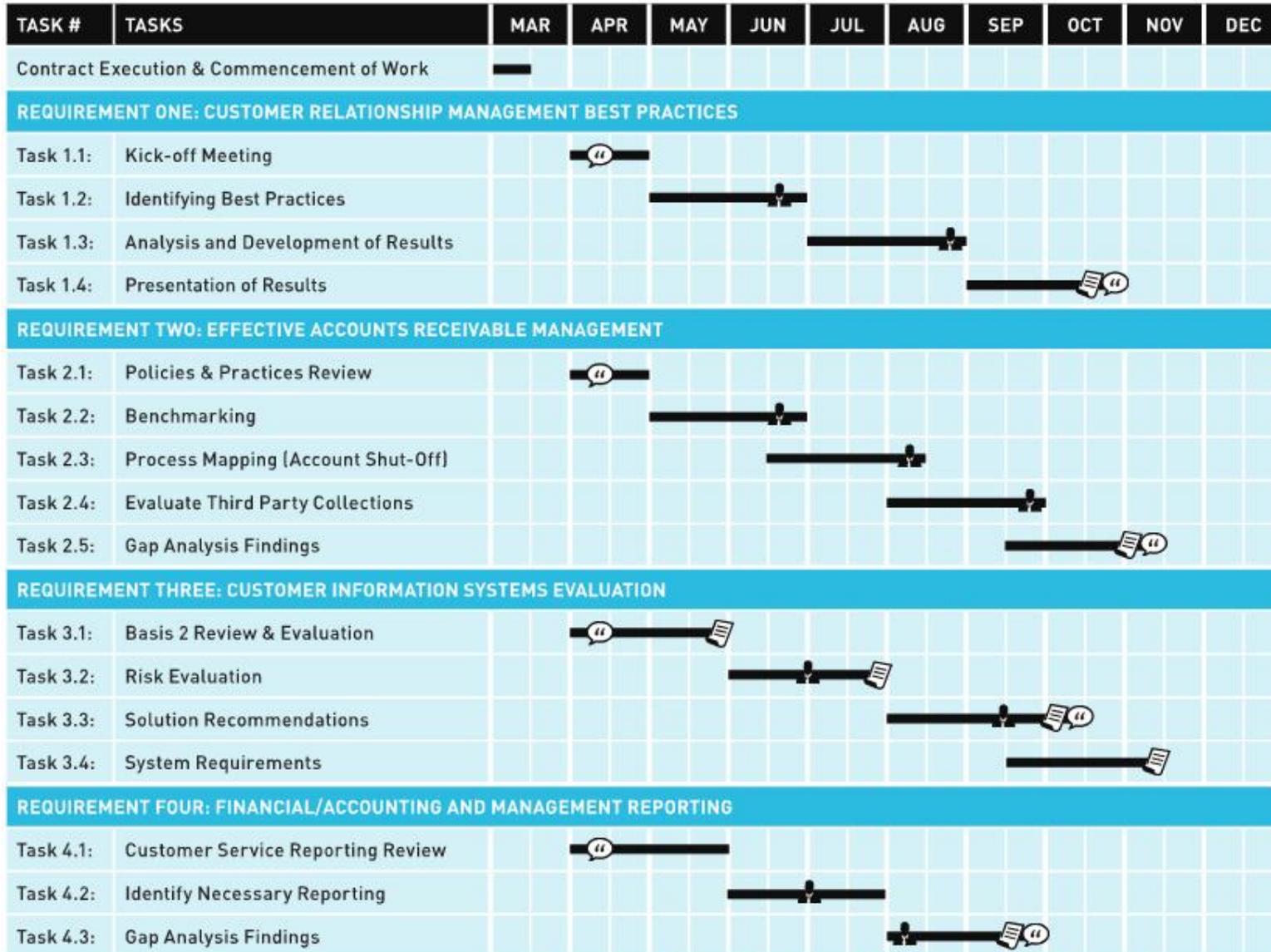
- » Basis2 users are satisfied.
 - CIS, transactions, and account histories functions
- » Highly systemized processes
- » Checks in place (first glance)
- » Not optimized yet for consistent reporting
- » Nomenclature differences and feedback between departments
- » Policy framework for collections dominates discussions about change

INITIAL OPPORTUNITIES

» For discussion:

- Use of uniform tool for calculating adjustments
- WRAP database fiscal year closeout
- Basis2 data warehouse and BI (fast track)
- WRAP eligibility determinations
- Pilot paperless processes/digital records mgt
- Explore customer service paths – slow lane and fast lane
- Collections strategic direction

PROJECT TIMETABLE



NEXT STEPS

Over the next two days:

- » Obtain direction from this group
- » Meeting with B&V to discuss their review of WRAP
- » Meeting with Schumaker to discuss project coordination
- » Meeting with WRB Adjustments

Over the next few weeks:

- » Additional data analyses, interviews, stakeholder follow-up
- » Establish protocol for Best Practices benchmarking

Over the next few months:

- » Process mapping
- » Assess effectiveness of customer service functions
- » Identification of further enhancement opportunities
- » Transition to implementation of recommendations

APPENDIX B. BASIS2 USER STORIES

I. Introduction

In support of the Basis2 data review and evaluation, RFC also conducted a parallel assessment of systems and processes through structured interviews of Basis2 end users of all types, from frontline users to management. The interviews explored how users interact with Basis2, how the system supports interaction with other users (workflow management), and how well the system is perceived to support staff duties. By conducting a series of interviews and relying on a cross-section of users, RFC assembled an account of the capabilities, everyday use, and shortcomings of the Basis2 system. This account includes both the intended uses and processes of Basis2 as well as the undocumented policies and processes that staff use within, as well as outside, the system, the latter being the result of its inability to support some procedural needs. Staff members' appreciation for the system and their limited points of irritation with the current processes quickly become evident through this approach, and are documented herein.

On April 24, 2014 and October 16, 2014, RFC interviewed end-users of Basis2 performing tasks in support of a variety of Water Revenue Bureau functions. Following is the list of interviewees.

- Mike Lorello, WRB Accounting
- Wenda McCowan-Chaney, WRB Accounting Adjustments
- Natalie Robbins, WRB Water Revenue Assistance unit
- Pat Garwood, WRB Technical Operations
- Shalona Brown, WRB Intake
- Renee Felder, WRB Account Analysis Unit

In each interview, RFC asked WRB staff to describe their function within the organization, their regular tasks, how they use Basis2 to support those tasks, and whether and how other systems and processes are used (in conjunction with or in place of Basis2).

User Stories

Water Revenue Assistance Unit

Water Revenue Assistance Unit (WRAU) staff manage the Bureau's assistance programs for customers experiencing financial or other hardships.

Work Processes

Staff receive hard copies of assistance applications and document their receipt before applications are divided between first-year and annual review categories, and are filed for later review. Staff review applications in the order they were received and determine for each which assistance program a customer is eligible. Staff take several factors into consideration for this determination, or dispensation. First, a staff member will compare income information with eligibility criteria. The reviewer will also consider a customer's consumption and payment history which are found in Basis2. Should anything in the review seem questionable, the WRAU reviewer may submit a request via Basis2 to the Technical Operations group for meter re-reading or to check for tampering. Application processing will remain on hold until a response is received from that group. WRAU reviewers are responsible for checking Basis2 for responses from other groups on customers with outstanding applications.

Once a determination is made, the reviewer will attach a paper form to the application and file it for data entry in the WRAP database. Staff use both hard copies of forms and a separate Water Revenue Assistance Program (WRAP) database to track application receipt, review and dispensation. Nightly, Basis2 is updated with payment agreement status information from the WRAP database.

Basis2 Use

Functionality

The WRAU use of Basis2 is mostly limited to reviewing account or customer histories and interacting with the Technical Operations group. When using Basis2 to communicate with other groups, there is still a great deal of manual effort involved in tracking the status of an application as well as determining whether the other group(s) have satisfactorily fulfilled the request.

Staff relies much more heavily on the WRAP database for finding detailed information about a customers' assistance application and payment plan history.

Reliability

With limited use of Basis2, staff had few specific issues with data completeness or reliability. Rather, staff noted that the entire system seems to be nonfunctional for a period of time (estimated at 10-15 minutes) several times per day.

Drawbacks

Basis2 is limited in its ability to store relevant assistance and payment agreement information. This necessitates the use of an additional system. Neither system offers document management, so staff are entirely reliant on hard copies and fellow staff members' adherence to documenting and filing protocol. Basis2 does provide some workflow management functionality, but, as described, the process is not fully automated. Additionally, staff noted that the interface used for reviewing and responding to requests can be changed or overwritten, so the history of requests and responses is not fully reliable.

WRAU staff need access to both Basis2 and the WRAP database to process applications. If either system is down, staff are unable to perform this important part of their duties.

Other Systems

WRAU staff use several systems in addition to Basis2. The WRAP database, described above, is used to track applications, dispensation, and payment agreements. Basis2 pulls in a limited subset of updated information from the WRAP database nightly.

Staff also regularly use PhilaDox to verify property ownership through deeds. They sometimes use PWD Service Link Loader as part of the account review process to retrieve information about an ERT change or another service order that may influence interpretation of the consumption numbers being displayed in Basis2. If a dispensation results in water service restoration or stopping service cancellation, staff convey that information to the appropriate group using a program called ShrinkIT, which is accessible to technicians from their mobile devices. On occasion, staff look back into the Water1 program for account information prior to 2008.

Account Analysis Unit

Staff within the Account Analysis Unit (AAU) fulfill several important Bureau customer service functions. The major function is to conduct thorough reviews of accounts in response to customer inquiries. Staff

also update property ownership information in Basis2 weekly with deed information. This group also manages senior citizen discount information and communicates with customers regarding liens and other penalties.

Work Processes

Staff work from a list of customer inquiries generated by Basis2 as well as inquiries received through the mail. An analyst addresses each inquiry individually and, depending on the nature of the issue, will review consumption, billing, and payment information for that customer. Where high reads are suspected by the customer, the analyst will compare previous reads and determine whether the read in question is higher than a tolerance threshold (at 1 ½ times the next highest read). When account analysis results in suspicion of meter tampering, or incorrect or inconsistent data, the analyst initiates a request in Basis2 for the Technical Operations group to review the meter and premise in the field.

Analysts may offer credits or penalty waivers up to \$200. If the analyst agrees that an adjustment is in order, he or she initiates a request in Basis2 for the Accounting group to further assess and resolve the situation. Final determination is made in Accounting.

To update property ownership information, an analyst works through a list generated from deed transfers and manually updates the owner/customer field for each account in Basis2.

Basis2 Use

Functionality

The AAU works almost entirely within Basis2. Typically, customer inquiries are related to high reads, payment posting, service cancellation, and penalties or fees. Basis2 stores and displays information relevant to these topics on several different screens. Staff can view general account information (type of account, address, and customer), consumption history, bill and payment history, debt history (city grants, liens, age of debt), deposit information, and customer contact information (including that for additional property owners).

Basis2 also includes some important data from the previous Water1 system, including the account number, which is a 16-digit number that includes codes for route, street, address, and number of meters.

AAU staff receives service requests via Basis2 call logging as well as initiates requests for the Technical Operations and Accounting groups. Typically, requests to Technical Operations involve verification of tenant/residency status and installation type. Requests to Accounting are accompanied by an adjustment recommendation and rationale.

Reliability

Staff noted no issues in the reliability of the data stored or presented in Basis2. Staff did note that the program is regularly very slow to load and is occasionally out of service.

Within Basis2, one user can delete the previous comments or calls of another user. While the program does track activity, only the last user's name is displayed so there are limited auditing capabilities. In addition, the field itself is not audited and so changes can be lost easily and the field can be intentionally or unintentionally altered by authorized users.

Drawbacks

Basis2 is used heavily for interdepartmental communication by AAU staff. However, because these entries can be deleted or overwritten, staff duplicate communication by documenting requests on paper forms and delivering them daily to the appropriate groups.

Other Systems

AAU analysts use Water1 to calculate average usage prior to the Basis2 timeframe. Some representatives use the export functionality of Water1 while others manually read and enter these data. Staff also use the ShrinkIT system to forestall service cancellation while a bill is in dispute.

Technical Operations

The Technical Operations Unit is responsible for field verification of account and customer statuses as well as for manually reading of meters when necessary. Most staff are in the field and are coordinated by a staff member at the office. This staff member uses Basis2 for some tasks.

Work Processes

Each day, the Technical Operations coordinator compiles daily requests (about 20-30 accounts) from Basis2 calls and from a variety of other sources, including the Informal Hearing Unit, the Tax Review Board, and directly from Bureau leadership. Some customers call or email the coordinator directly. Each request is researched and the coordinator fills out a paper form for field staff to take with them. The coordinator schedules field staff for each request, giving priority to those necessary for informal hearings. Once field technicians conduct their work and make necessary notes on the form, the coordinator collects the forms and enters data back into Basis2. The coordinator also communicates results with customers and may submit other requests in Basis2 that did not originate there (for example, if a customer contacts Technical Operations directly but the AAU also needs to be consulted for high reads and adjustment recommendation). Technical Operations maintains a hard copy of work forms and gives another copy to the department that requested service. There is one technician in this unit that fulfills service cancellation and restoration requests through ShrinkIT.

In addition to field work, the Technical Operations Unit fulfills several other customer service functions when they are contacted directly by customers. The group can mail out WRAP or senior citizen discount applications, update information in Basis2, and help with resolving returned mail address errors.

Basis2 Use

Functionality

Technical Operations uses Basis2 only for the limited functionality of transferring work requests between departments and communicating the results of those requests.

Reliability

Staff in Technical Operations noted that Basis2 seems to be unreliable in unfavorable weather conditions such as rain and snow.

Drawbacks

Basis2 does not function adequately as a workflow management system for this group, since its requests come from a variety of sources. Because much work must be done outside of Basis2, the work done within the system is duplicated with paper forms as well.

Other Systems

Technical Operations also uses ShrinkIT for service cancellation or restoration work orders and Microsoft Outlook for scheduling and communicating with external parties. These programs do not interface with Basis2.

Intake

The Intake Unit serves as frontline customer service for walk-in customers at the Municipal Services Building or at two satellite offices. Intake Unit staffing is often supplemented with staff from WRAU.

Work Processes

Intake staff handle a variety of phone and in-person customer inquiries. Often, staff explain assistance programs and protocol to customers, and can supply them with WRAP applications or refer them to the Law Department. For customers seeking service restoration, Intake can print a bill and refer the customer to cashiering. Once the customer brings back a receipt showing payment of the balance and the service restoration fee, Intake staff use ShrinkIT to enter a service restoration request or to stop service cancellation.

Intake staff use Basis2 to communicate with other groups and the WRAP database to enter customer information and note when an application has been distributed.

Basis2 Use

Functionality

Intake uses Basis2 only for the limited functionality of reviewing customer information and transferring work requests to other departments.

Reliability

Staff described inconsistencies with the timing of payment agreement breaches. Sometimes a breach happens (and is flagged) the day after a payment is due and other times the account is not flagged as being in breach of the agreement for months after the payment due date.

Drawbacks

Staff described several instances where they direct customers to other departments. Basis2 could be more effective at updating account information in real time to avoid giving customers the run-around.

Other Systems

In addition to Basis2, Intake staff use the WRAP database and ShrinkIT.

Accounting

The Accounting Unit conducts financial auditing of individual accounts and enters adjustments to accounts as necessary in response to incorrect meter reads (frozen, offline, not registering, backwards, incorrect ERT number, or double-counted) or in response to identified tampering and suspicious readings.

Work Processes

The Accounting Unit receives requests from AAU, WRAP, Intake, or other units regarding accounts that may qualify for substantial financial adjustments. In addition, the group receives exception reports from

Basis2 that identify accounts or meters for which the readings are inconsistent or suspicious and daily reports of meters being changed by Itron (meter vendor) or the City's meter shop.

Analysts review each account individually, looking at historical consumption patterns, other data sources (maps, deeds, etc.) and any newly available information from Technical Operations or the meter shop, to determine the adjustment necessary. Where reads and associated bills are deemed to have been too high, the customer is issued a credit to their account. Where bad reads, tampering, or other circumstances have led to reads and bills being too low, the true amount owed is added to the account and staff notify the customer.

At the time of the interview, the Accounting Unit was about three months behind in processing accounts and meters in the various reports due to the City's transmitter replacement efforts.

Basis2 Use

Functionality

The Accounting Unit uses Basis2 functionality to view historical consumption and customer information. They also receive a portion of service requests through Basis2. Importantly, this group uses Basis2 to edit account information, including reversing and reissuing bills with the corrected amount due after adjustments.

Reliability

Accounting staff noted only small issues with Basis2 functionality. First, the search functionality requires a different convention than either the old billing system or other City systems (for example, requiring "AV" rather than "AVE"). Older data is not accessible through Basis2 so Water1 must be used. Staff did not voice any concerns about the reliability of the data in Basis2. Any discrepancies determined by the Accounting Unit seem to be the result of meters, transmitters, or customer interference.

Drawbacks

Basis2 exception reports seem to only capture a portion of those accounts requiring special attention from the Accounting Unit. Staff track work requests and statuses in several different spreadsheets and must remember to check on or follow up with requests.

Other Systems

In the course of researching accounts, staff use Water1, PhilaDox, and external resources like Google Maps. Often, calculations are done in Water1 or in a separate calculator or spreadsheet program and results only are carried into Basis2.

Summary

From the user stories, RFC understands that Basis2 provides the necessary customer information system functionality or interfaces with other existing systems allowing staff to carry out the full spectrum of customer relationship management processes. Staff noted several opportunities for improvements in system reliability and process efficiency. Most notably, nearly all interviewees referenced the frequency with which Basis2 becomes nonfunctional; this occurs on a daily basis. Several users also noted concerns about the reliability of data stored in Basis2 in that many fields are editable by users and appear not to be completely auditable (i.e. the system logs only the most recent editor). While users did not express discontent with the need to use supplemental systems and paper processes, RFC recognized these as

opportunities for improvements in efficiency. For example, WRAP applications are submitted as paper documents and their review and approval is a paper process, the results of which are entered into a separate software application with only minimal relevant information being integrated into Basis2. Staff regularly make use of Basis2 functionality to view different types of information about an account (customer, meter, property, payment history, etc.) and to communicate with other departments. In general, the concerns discussed did not significantly limit staff ability to carry out their respective duties.

APPENDIX C. BASIS2 REPORTING

Introduction

Raftelis Financial Consultants, Inc. (RFC) and Miitek reviewed and identified gaps between existing reporting and reporting needs to effectively manage day-to-day customer service. RFC and Miitek were given a copy of basis2 that was created on June 30, 2014 and also given access to the billing system on July 24, 2014 to analyze the basis2 environment. We identified a number of items that should be revised in the data and reporting to improve the accuracy and consistency of reports used to support decision-making within the organization. The items can be divided into two categories and are described within the body of this assessment: 1) changes to reporting scripts; and 2) improvements to the basis2 database. We propose the following gap closing strategies for these items:

- Ending the use of non-transactional bounding conditions in reporting scripts
- Adding indexes to basis2 core tables to improve performance
- Partitioning of basis2 core tables to improve performance

basis2 Review and Data Evaluation

Data Integrity

Duplication

We found cases of duplicate data in the billing system created through the use of temporary or staging tables for extracts, reports and interfaces. Temporary tables are typically used to simplify the logic required to code for interfaces and extracts; however, in many cases it has resulted in inefficient coding, performance issues and the production of multiple copies of data that already exists in a usable format.

Outliers

We checked for outliers and invalid data by systematically running queries on Primary and Foreign Key relationships and came up with the following results:

- Found no invalid customer IDs referenced in the accounts table
- Found 30,419 customer IDs with no Accounts rows. None of these customers were found to have any transactions associated to them.
- Found two address IDs referenced in the customers table that do not exist in the addresses table ('1144923' and '1164837')
- All non-null master account IDs referenced in the customers table exist in the accounts table
- All application IDs referenced in the accounts table are valid applications IDs in the applications table.
- All customer IDs referenced in the accounts table are valid in the customers table.
- All installation IDs referenced in the accounts table are valid in the installations table.
- All mail address IDs referenced in the accounts table are valid in the addresses table.
- All payment plan IDs referenced in the accounts table are valid in the payment plans table.
- All referenced transfer accounts IDs referenced in the accounts table are valid account IDs
- All combinations of customer ID and installation ID referenced as a pair in the accounts table are unique except for 2 accounts: (1) cust_id='395718' and inst_id='378261'; and (2) cust_id='950007' and inst_id='378265'

- All owner customer IDs referenced in the installations table are valid customer IDs in the customer table.
- All property address IDs referenced in the installations table are valid address IDs in the addresses table.
- All tenant customer IDs referenced in the installations table are valid customer IDs in the customers table.
- All transactions in the transactions table have a valid customer ID there are no transactions that lack a customer ID.
- All transactions in the transactions table have a value installation ID.
- The account balance saved on the account table does not always match the sum of transaction balances in the transactions table. This finding coincides with the information provided early on in the analysis where it was mentioned that delinquent amounts are not represented by the account balances stored on the accounts.
- There are 432 installations associated with more than 1 meter. There are 2 installations associated with more than 2 meters. In the cases where multiple installations are associated with more than 1 meter, in most cases one of the meters has a description or field noting the term "NOTIONAL."

Null or Blank Values

We found instances of null or blank values, which is typical for utility billing systems. System generalization and flexibility of functionality leads to some areas not being adopted for use by the business, and it is common to see unused table columns.

Data Performance

Tools

Oracle SQL Developer was the tool provided for querying the PWQA database. The tool is functional but has limits that can only be overcome through the use of Toad with the DBA module. Query development and monitoring for performance efficiency is better executed in Toad than in Oracle SQL Developer.

Reporting SQL code

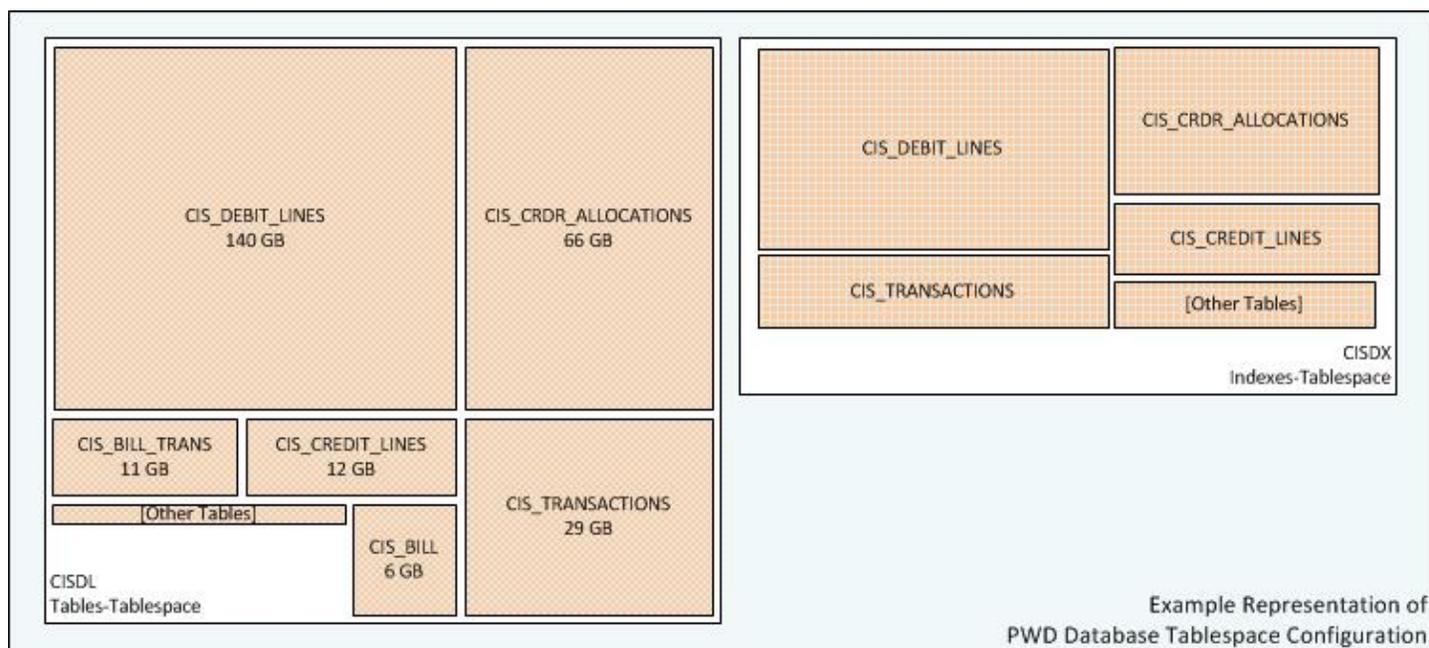
We came up with the following suggestions when reviewing the reporting SQL code:

- Use "TRUNCATE" instead of "DELETE" for removing rows of data. Using "TRUNCATE" might save some processing time and prevent issues with rollback segments.
- Using direct queries instead of temporary tables to speed up performance. PL/SQL can be a very flexible and powerful medium for reporting when it is utilized to its fullest extent. Temporary tables are an inefficient use of Oracle resources and are rarely required to accomplish a task.

Tablespaces

The RFC team identified clear opportunities to improve the PWD database tablespace configuration and structure, which are crucial to having an efficient and high performing CIS application backend. Table “objects” are stored in an Oracle tablespace, which is a defined allocation of one or more files designated to store data within the tables and their associated indexes. Table indexes are defined on table columns to help speed up the process of accessing data through SQL queries, and can also be stored in a tablespace. The PWD database has four tablespaces: CISDX for indexes; CISDL for the tables depicted in the figure below; CISDM for tables with transactional information such as accounts, customers, installations, and addresses; and CISDT for the bill lines table.

The figure below shows the CISDL and CISDX tablespaces, the two largest tablespaces that contain the major historical tables that RFC has been analyzing. The orange boxes represent the larger database tables residing in the basis2 database, and the size of the boxes roughly depict the space “shared” among the larger tables. The larger the table or index, the more effort it will take to reorganize the individual object in the tablespace as a whole.

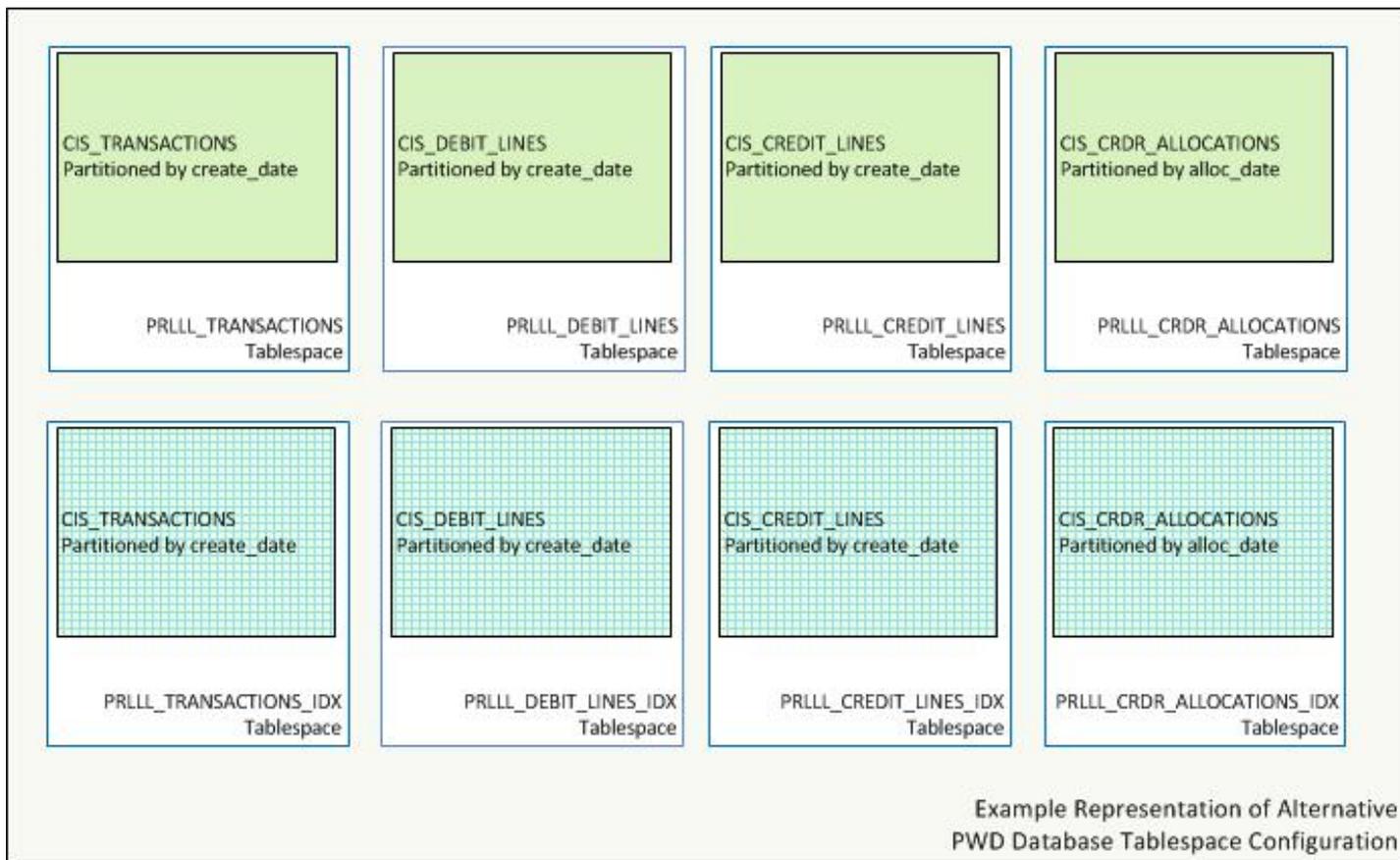


The tables and associated indexes have been organized into separate tablespaces, which is good practice as the cardinal rule of database configuration. The overlying issue is that all of the large tables share one tablespace, meaning that they share the same disk volume area. The same goes for the large indexes so that the tablespace files where these objects are stored share the same disk array controller. Some downsides of grouping large Oracle objects together in the same tablespace are:

- If any part of the tablespace gets corrupted, then the whole tablespace needs to be recovered. There is a higher risk that more than one table will be corrupted, and that there will be greater data loss for a large tablespace failure. It will also take longer to recover the data.

- When large tables are stored together in the same file groups, it is more difficult to monitor database input output (I/O) and get detailed analytics on a table-by-table or index-by-index basis to figure out how to enhance database performance.
- When larger tables are all stored in the same tablespace, it is more time-consuming to reorganize the table storage configuration, which will become necessary as tables continue to grow in a CIS application environment.

The figure below depicts an alternative framework for organizing a large database such as PWD’s basis2 environment. All large tables and indexes are separated into their own tablespaces with an option for partitioning if it is deemed viable after in-depth analysis. There may be cause to further separate indexes into their own tablespaces if they are accessed frequently enough. To properly determine the most advantageous use of table and index partitioning, there needs to be a thorough analysis of all basis2 application and reporting code. If database partitioning is done without thorough code analysis, it could end up hindering instead of enhancing performance.



*Box sizes for each table are not to scale.

**The partitioning of the *create_date* and *alloc_date* columns is only meant as an example and is not what should actually be done.

Changing the database tablespace configuration could offer the following immediate improvements:

- **Easier database administration organization.** Separating large tables makes it easier to manage growth, reorganize tables, and add partitioning if partitioning is determined to enhance performance. When indexes are stored on separate disks away from their associated tables, this allows for better performance and easier recovery should either the table or index disk become corrupted.
- **Better database analytical reporting.** By separating large tables into their own tablespaces and file systems, it is easier to track I/O at the data file and tablespace level. Tracking at this level makes it easier to pinpoint performance bottlenecks and determine what resources to use (e.g., speedier disks or faster network connections) to resolve these bottlenecks.
- **Input/Output (I/O) Balancing.** In the utility CIS application world, there are multiple sources that access the database environment in multiple capacities. Analyzing where all those access points are and organizing the database accordingly will help improve performance.

In summary, the PWD basis2 database configuration can be improved by taking the following actions:

1. Separate large tables into their own tablespace.
2. Separate large table indexes into their own tablespaces. Some index storage could be grouped together, but the larger indexes that are accessed more frequently may merit their own tablespace altogether.
3. If possible, store the table and index tablespaces on separate disk volumes or controllers. This will reduce data access contention and lead to enhanced performance.
4. Partitioning of the larger tables and/or indexes could present a huge overall reporting performance improvement, but partitioning can only be done after a detailed analysis of all application and reporting code. This option may be difficult without access to all basis2 proprietary SQL or detailed recommendations from the basis2 vendor.

Storage

Partitioning

There is no indication that partitioning of tables is utilized in this database. It is possible that the configuration of the PWQA database is not the same as the production database -- that information has not been provided, however. When all performance tuning options are exhausted within the coding of reports or interfaces, partitioning of the database is typically a last chance effort to enhance performance. Before partitioning is attempted, the following steps should first be executed:

- Ensure that the PL/SQL coding is the most efficient code possible. All queries should use the best index for the selection task.
- Tables and indexes should be in separate tablespaces on separate disk controllers if possible.
- Tables with hundreds of millions of rows may merit their own tablespaces with separate tablespaces for their indexes.

Hardware

To improve performance, adding faster disks and more RAM seems to be the most cost-effective option. The workstation provided for our research was the only hardware example available, and it is installed with the minimum configuration suggestions for Windows Server 2008 R2 and Oracle PL/SQL Developer. In general, the minimum required is typically half of what is needed by a power user. For example, if

Microsoft and Oracle state that the minimum is 2GB of RAM, it means that a developer should actually have 4GB of RAM or more. The research workstation memory is at 65% capacity when idle, which indicates that the workstation does not have enough memory. Currently we have no information on the server RAID configuration.

Indexes

We found that in general, the indexes are in separate tablespaces from the tables, which is a good practice. For larger tables such as transactions, bills, and debit and credit lines, it may be beneficial to separate out the larger and more frequently used tables and indexes into their own tablespaces so that Oracle can select data more efficiently for reporting purposes.

Joins

According to systems support personnel, there are several reports or extracts that have very long processing times – in particular, there is one report that takes days to run. With proper SQL tuning for a database with less than one million accounts, reports should not take longer than 4 hours to run. Most reports that take an inordinate amount of time to run do so because of inefficient coding practices or inefficient use of database resources. Fixing PL/SQL code and query join criteria is typically the first step in cutting down processing time.

Main Tables

RFC was informed by staff about the key tables used and referred to the entity relationship diagram to analyze the basis2 environment. RFC accessed the tables on July 24, 2014, looked through the reporting code to identify the key tables, and examined each of them in detail. We reviewed the data structure and data in each table as described below.

CIS_Accounts

In the CIS_Accounts table, there are 101 fields with sufficiently descriptive names. The keys are all integer values, which is good practice, and appropriate data types appear to be used. The spare “attribute” fields are all large text fields, which is not ideal. For the 28 non nullable fields, defaults are specified for most but not all of them. The table is not well normalized and there are lots of unused fields. There are 20 check constraints with valid value domains, 7 triggers, CISDM tablespace, and no partitions.

The following 10 indexes are in the customer information system accounts table:

Index	Unique?	Fields
CIS_ACCT_PK	UNIQUE	ACCT_ID
CIS_ACCT_IX01	NONUNIQUE	INST_ID, SUPPLY_TYPE
CIS_ACCT_IX02	NONUNIQUE	MAIL_ADDR_ID
CIS_ACCT_IX03	NONUNIQUE	ARREARS_CHECK_DATE
CIS_ACCT_IX04	NONUNIQUE	CURRENT_PROCESS_ID
CIS_ACCT_IX05	NONUNIQUE	DD_NEXT_DATE
CIS_ACCT_IX06	NONUNIQUE	REFUND_ELIGIBLE_IND
CIS_ACCT_IX10	NONUNIQUE	ATTRIBUTE10
CIS_ACCT_UK01	UNIQUE	CUST_ID, INST_ID, SUPPLY_TYPE
CIS_ACCT_UK02	UNIQUE	ACCT_KEY

There are 857,722 records and 810,192 unique customers. All accounts have a customer ID and the customers with largest number of account records are:

CUST_ID	CUST_NAME	Records
38173	PHILADELPHIA HOUSING AUTHORITY	7,607
38032	CITY OF PHILADELPHIA	6,979
7	REDEVELOPMENT AUTHORITY	4,925
4	Revenue Collections Bureau Inc	1,604
544332	GEORGE BROOKS	1,596
3	NCO Financial Systems Inc	1,266
38293	SCHOOL DISTRICT OF PHILA	1,176
39714	P D O T	591
39672	DREW DEMARCO	578
42690	PHILADELPHIA HOUSING AUTHORITY	553

There are 635,125 unique installations, and all accounts have an installation ID. The Installations with the largest number of account records (likely due to customer changes) are:

INST_ID	Records
163089	9
262628	9
567157	9
565756	9
484235	9
12279	8
577923	8
28540	8
126457	8
181692	8

There are 750,739 unique mailing addresses and all accounts have a mail address ID. The addresses with the largest number of account records are:

MAIL_ADDR_ID	ADDRESS1	Records
318885	YORK ST	6,278
1329302	PENROSE FERRY RD	6,139
7	1234 MARKET ST FL 10	4,903
321280	17TH ST	1,595
809938	440 N BROAD ST	649
135948	WATER ST	636
792137	12339 ACADEMY RD	576
1243591	SOUTH ST	332
803168	1009 W MONTGOMERY AVE	233
796893	WALNUT ST	216

The total number of records for each account status are:

ACCT_STATUS	Records
C	595,973
D	261,675
A	49
I	25

Account status changed the most in the following months:

YEAR	MONTH	Records Updated
2007	12	76,582
2010	6	30,397
2011	10	22,577
1998	6	17,979
1998	7	16,980
1998	5	16,600
1998	8	14,034
1998	9	13,054
1998	4	12,806
1998	10	12,376

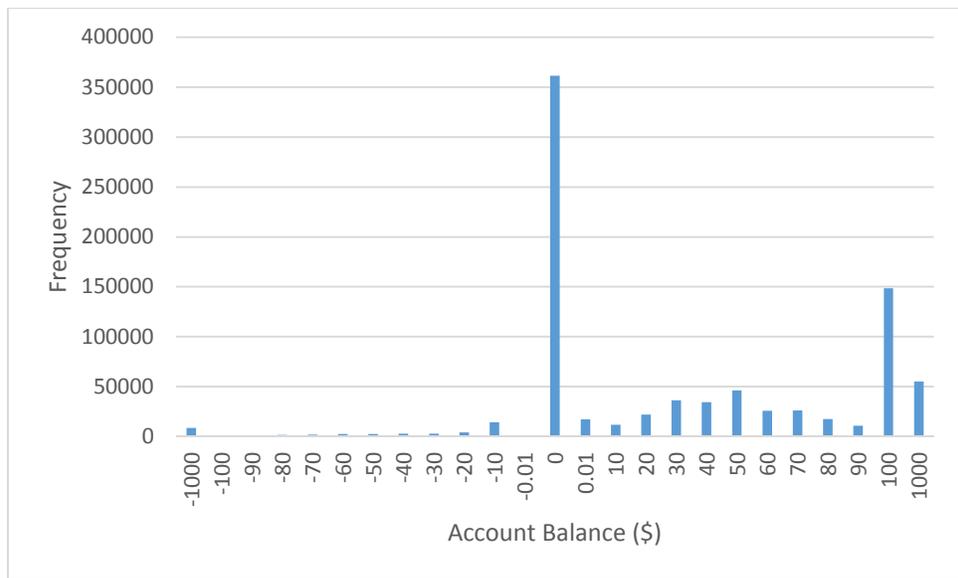
An average of 2,945 accounts were created per month excluding the first month, SWO months, and the last two months:

YEAR	MONTH	Records Created
2007	12	576,513
2010	6	39,269
2011	10	24,009
2008	5	4,241
2008	6	4,226
2010	8	4,204
2010	3	3,933
2013	10	3,919
2008	3	3,916
2008	1	3,912

Here are the total records broken down by payment profile code:

PAY_PROFILE_CODE	Records
RES-STD	612,510
COM-STD	67,629
USTRA	64,893
COM-STM	50,019
RES-STM	38,999
RES-GRP	16,173
COM-GRP	6,969
SURCHRG	349
COM-HOLD	138
WRBCC	20
RES-HOLD	11
PLN-STD	9
AGENCY	2
LAWXMPT	1

Here is a histogram of the account balances shown for each account:



There are 579,697 records with consolidated billing and 278,025 records without:

CONSOLIDATED_BILL_IND	Records
Y	579,697
N	278,025

Following is the breakdown of records by master account hierarchy:

MAST_ACCT_HIERARCHY	Records
N	843,653
S	13,946
M	123

We found 573,951 unique Water1 account numbers (Attribute10), and there were no duplicates in that field.

CIS_Addresses

In the address table, there are 61 fields with sufficiently descriptive names. The keys are all integer values, which is good practice, and the appropriate data types appear to be used. Many fields are all large text fields, which is not ideal. There are 6 non nullable fields where the defaults are not specified. The table is not well normalized and there are many unused fields. There are 2 triggers, CISDM tablespace, and no partitions.

The following 10 indexes are in the addresses table:

Index	Unique?	Fields
CIS_ADDR_PK	UNIQUE	ADDR_ID
ADD_SUSTR_IDX	NONUNIQUE	SUBSTR("ADDRESS6",1,10)
CIS_ADDR_IX01	NONUNIQUE	LOWER_ADDRESS1
CIS_ADDR_IX02	NONUNIQUE	SOUNDEX_ADDRESS1
CIS_ADDR_IX04	NONUNIQUE	LOWER_ADDRESS2
CIS_ADDR_IX05	NONUNIQUE	SOUNDEX_ADDRESS2
CIS_ADDR_IX06	NONUNIQUE	POSTAL_CODE
CIS_ADDR_IX07	NONUNIQUE	ADDR_EXTERNAL_ID
PHL_ADDR_IX01	NONUNIQUE	ADDRESS6
PHL_ADDR_IX02	NONUNIQUE	LOWER_ADDRESS6

There is a total of 1,052,800 records, 302,061 of which are not in CIS_Accounts; 413,658 of which are not in CIS_Installations; and 412,094 of which are not in CIS_Customers. There are also 46,507 address records that are not referenced by any of those three tables.

The breakdown of records by address style is as follows:

ADDR_STYLE	Records
INREGION	806,388
MISTY	160,898
OUTREGN	54,974
PO-BOX	30,540

An average of 3,079 addresses were created per month excluding the first month, SWO months, and the last two months:

YEAR	MONTH	Records Created
2007	12	726,582
2010	6	38,623
2008	1	25,023
2011	10	24,247
2010	8	24,212
2011	11	17,474
2008	5	4,087
2014	4	3,795
2013	10	3,626
2011	3	3,618

Addresses are spread across many fields and are not consistent in format. There are upper case and lower case fields and the address point location is stored under the MAP_REFERENCE field. LINE1 and LINE2 are possibly the simplest representations of the address for each record.

The postal codes with the most accounts are:

POSTAL_CODE	Records
19140	33,831
19134	33,410
19143	33,371
19132	30,231
19124	28,948
19121	28,314
19146	27,373
19148	26,639
19120	26,128
19133	24,006

The Line 1 addresses that appear the most are:

LINE1	Records
2012 CHESTNUT ST	11,523
1234 MARKET ST FL 10	3,711
440 N BROAD ST	1,376
1401 JOHN F KENNEDY BLVD FL 10	1,139
INVALID INSTALLATION	970
12339 ACADEMY RD	962
5429 CHESTNUT ST STE M114	748
3476 STATEVIEW BLVD	643
4542 N 11TH ST	569
7267 RISING SUN AVE	562

The Line 2 addresses that appear the most are:

LINE2	Records
PHILADELPHIA PA 19140	33,030
PHILADELPHIA PA 19143	32,830
PHILADELPHIA PA 19134	32,434
PHILADELPHIA PA 19132	29,533
PHILADELPHIA PA 19124	28,116
PHILADELPHIA PA 19121	27,298
PHILADELPHIA PA 19146	26,050
PHILADELPHIA PA 19148	25,956
PHILADELPHIA PA 19120	25,605
PHILADELPHIA PA 19133	23,171

CIS_Customers

In the customers table, there are 91 fields with sufficiently descriptive names. The keys are all integer values, which is good practice, and the appropriate data types appear to be used. The spare “attribute” fields are all large text fields, which is not ideal. There are 16 non nullable fields and defaults are specified for very few of them. The table is not well normalized and there are many unused fields. There are 4 check constraints with valid value domains, 1 trigger, CISDM tablespace, and no partitions.

The following 5 indexes are in the customers table:

Index	Unique?	Fields
CIS_CUST_PK	UNIQUE	CUST_ID
CIS_CUST_IX01	NONUNIQUE	CONCESSION_CODE1
CIS_CUST_IX02	NONUNIQUE	LOWER_SORTING_NAME
CIS_CUST_IX03	NONUNIQUE	ADDR_ID
CIS_CUST_UK01	UNIQUE	CUST_KEY

There is a total of 840,611 records, 30,419 of which are not in the CIS_Accounts table.

The customers with the most records are:

CUST_NAME	Records
PHILA HOUSING AUTHORITY	1,348
CITY OF PHILA	1,011
INVALID CUSTOMER	843
HUD	811
FANNIE MAE	774
FEDERAL NATIONAL MORTGAGE ASSOCIATION	715
PHILADELPHIA HOUSING	644
CITY OF PHILADELPHIA	527
LOGAN ASSISTANCE CORP	463
FEDERAL NATIONAL MORTGAGE ASSOC	397

An average of 2,676 customers were created per month excluding the first month, SWO months, and the last two months:

YEAR	MONTH	Records Created
2007	12	579,916
2010	6	38,904
2011	10	23,761
2008	6	3,942
2008	5	3,919
2010	3	3,712
2013	1	3,704
2013	10	3,678
2010	8	3,659
2009	7	3,631

The customer type codes are as follows:

CUST_TYPE_CODE	Code Desc	Records
4	Regular	803,077
D	Senior Citizen	22,349
Y	Fire Meter	6,918
C	Charity	2,729
Z	City of Philadelphia	2,218
A	PHA	1,698
H	Special Handling	510
N	Hospitals and Universities	392
S	Schedule	271
P	Commonwealth of PA	158
E	Board of Education	120
G	Federal Government	107
L	City Property	40
W	Well	19
4CR	Regular Clair	4
4RN	Regular 4RN for ISP	1

840,487 records do not have a master account required indicator while 124 records do.

MAST_ACCT_REQD_IND	Records
N	840,487
Y	124

The master metered customers with the most sub accounts are:

CUST_NAME	Records
PHILADELPHIA HOUSING AUTHORITY	7,607
SCHOOL DISTRICT OF PHILA	1,176
DREW DEMARCO	578
TEMPLE UNIVERSITY	340
OCF REALTY LLC	332
SEPTA	309
UNIVERSITY OF PENN	234
GREATER GRAYS FERRY II PHA	188
PECO	182
RICHARD ALLEN LP - PHA	182

The most common customer addresses are:

LINE1	Records
Guarantor Address Unknown	28,002
625 W NORRIS ST	14
1617 S 55TH ST	9
1344 S WILTON ST	9
1543 E WALNUT LA	8
185 W RUSCOMB ST	8
1129 SPRUCE ST	8
7748 TEMPLE RD	8
4301 GRISCOM ST	8
1752 N TANEY ST	7

No customer accounts were marked with a low income indicator - all have the value 'N.'

In the table, Attribute1 is employment, Attribute2 is employer, Attribute3 is gender, Attribute 4 is marital status, and Attribute13/14/15 is the customer phone number.

CIS_Installations

In the installations table, there are 68 fields with sufficiently descriptive names. The keys are all integer values, which is good practice, and the appropriate data types appear to be used. The spare "attribute" fields are all large text fields, which is not ideal. There are 11 non nullable fields and defaults are specified for very few of them. The table is not well normalized and there are many unused fields. There are 3 check constraints with valid value domains, 6 triggers, CISDM tablespace, and no partitions.

The following 7 indexes are in the installations table:

Index	Unique?	Fields
CIS_INST_PK	UNIQUE	INST_ID
CIS_INST_IX01	NONUNIQUE	OWNER_CUST_ID
CIS_INST_IX02	UNIQUE	INST_TYPE_CODE, INST_ID
CIS_INST_IX03	NONUNIQUE	PROP_ADDR_ID
CIS_INST_IX04	NONUNIQUE	TENN_CUST_ID
CIS_INST_IX05	NONUNIQUE	INDIRECT_INST_ID
CIS_INST_UK01	UNIQUE	INST_KEY

There is a total of 639,247 records, 4,122 of which are not in the CIS_Accounts table. All of the prop_addr_id records were found in the CIS_Addresses table. There are 12,830 records where owner ID differs from tenant ID.

An average of 167 installations were created per month excluding the first month, SWO months, and the last two months:

YEAR	MONTH	Records Created
2007	12	569,670
2010	6	36,195
2011	10	21,006
2012	1	622
2010	7	603
2009	11	602
2011	2	385
2013	11	291
2012	8	282
2013	12	271

The breakdown of records by installation type code is as follows:

INST_TYPE_CODE	Records
11	476,600
12	49,952
24	34,107
16	24,828
13	24,398
21	10,284
10	8,870
19	2,217
20	1,793
08	1,092
18	922
15	922
17	782
09	653
22	610
26	442
14	363
23	344
25	53
33	15

The records with non-bill status are as indicated in Revu1_code:

REVU1_CODE	Records
	533,149
NB5	42,839
NB9	23,676
NB3	20,302
NB2	12,180
NB6	5,487
NB7	911
NB8	703

Attribute14 is for special installation types, and there are many duplicate fields in the attributes

CIS_Transactions

The transactions table has 88 fields with sufficiently descriptive names. The keys are all integer values, which is good practice, and the appropriate data types appear to be used with only a few all large text fields. There are 20 non nullable fields with no defaults specified. The table is not well normalized and there are many unused fields. There are 9 check constraints with valid value domains, 3 triggers, CISDL tablespace, and no partitions.

The following 12 indexes are in the installations table:

Index	Unique?	Fields
CIS_TRAN_PK	UNIQUE	TRAN_ID
CIS_TRAN_IX01	NONUNIQUE	CUST_ID, INST_ID, SUPPLY_TYPE
CIS_TRAN_IX02	NONUNIQUE	GRP_XFER_TRAN_ID
CIS_TRAN_IX03	NONUNIQUE	BANK_SLIP_ID
CIS_TRAN_IX04	NONUNIQUE	BURP_ID
CIS_TRAN_IX05	NONUNIQUE	DEBT_COLL_ID_1
CIS_TRAN_UK01	UNIQUE	TRAN_KEY
PHL_TRAN_IX51	NONUNIQUE	TRAN_OUTST_IND, PRIM_TYPE, CUST_ID, INST_ID
PHL_TRAN_IX52	NONUNIQUE	CUST_ID, INST_ID, SUPPLY_TYPE, TRAN_OUTST_IND
PHL_TRAN_IX53	NONUNIQUE	CUST_ID, INST_ID, SUPPLY_TYPE, CREATION_DATE

Index	Unique?	Fields
PHL_TRAN_IX54	NONUNIQUE	CUST_ID, INST_ID, SUPPLY_TYPE, SCND_TYPE
PHL_TRAN_IDX001	NONUNIQUE	BILL_KEY, CUST_ID, INST_ID

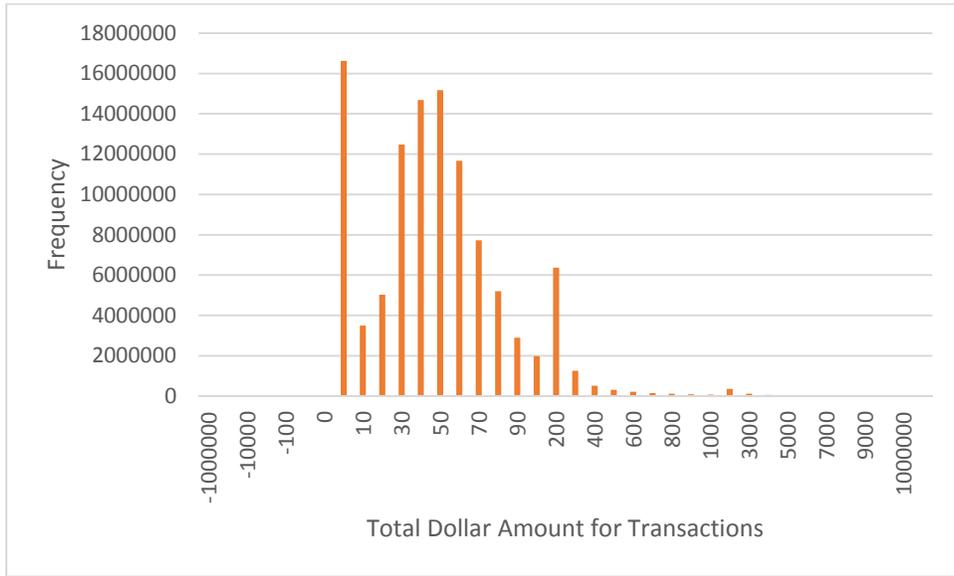
There are 112,284,197 records in the table. On average, 1,190,465 transactions were created per month from 2007 onwards excluding last two months:

YEAR	MONTH	Records Created
2006	11	2,005,418
2007	5	1,605,532
2007	4	1,589,550
2007	8	1,575,639
2007	3	1,557,198
2007	1	1,495,758
2006	12	1,474,196
2007	10	1,471,545
2013	4	1,455,922
2007	11	1,436,127

The task codes with the most records include:

TASK_CODE	Records
BILL	46,736,607
REMITPRO	20,269,698
PNLTYINT	15,315,719
ZP	8,460,936
PNLTY-MG	4,918,030
POS	3,476,919
ZC	2,276,302
ARBALDB	2,126,102
DE	1,826,675
LN	1,350,914

The Supply_type field is 'WATER' for all records. The following histogram presents the frequency of dollar values for transactions within this table:



CIS_Debitlines

The debit lines table has 146 fields with sufficiently descriptive names. The keys are all integer values, which is good practice, and the appropriate data types appear to be used with only a few all large text fields. There are 22 non nullable fields with few defaults specified. The table is not well normalized and there are many unused fields. There are 11 check constraints with valid value domains, 2 triggers, CISDL tablespace, and no partitions. The table is ten times slower to query than the CIS_Transactions table.

The following 7 indexes are in the debit lines table:

Index	Unique?	Fields
CIS_DBLN_PK	UNIQUE	DEBIT_LINE_ID
CIS_DBLN_IX01	NONUNIQUE	CUST_ID, INST_ID, SUPPLY_TYPE, TASK_CODE
CIS_DBLN_IX02	NONUNIQUE	TRAN_KEY
CIS_DBLN_IX51	NONUNIQUE	REFUND_CHQ_NO
CIS_DBLN_IX52	NONUNIQUE	REFUND_ACCOUNT_OR_CARD_NO
CIS_DBLN_UK01	UNIQUE	TRAN_ID, LINE_NUM
PHL_DBLN_IX01	NONUNIQUE	METER_ID

There are 248,921,749 total records and all records have a transaction in CIS_Transactions. On average, 2,701,195 debit lines were created per month from 2007 onwards, excluding the last two months:

YEAR	MONTH	Records Created
2011	7	4,775,091
2010	7	4,332,555
2013	1	3,735,922
2013	7	3,482,782
2009	7	3,390,914
2013	4	3,367,142
2011	8	3,223,550
2012	10	3,199,670
2012	4	3,171,330
2014	3	3,170,115

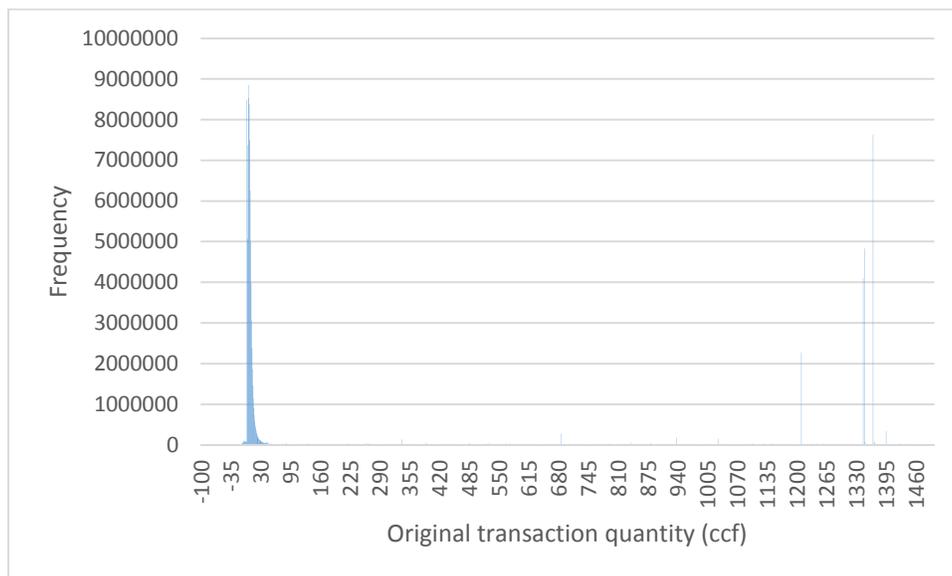
The most frequent transaction IDs are:

TRAN_ID	Records
116334244	962
116906167	910
97825574	860
73774606	854
80843224	847
98921044	828
105043798	823
111237884	809
108951458	809
71325676	806

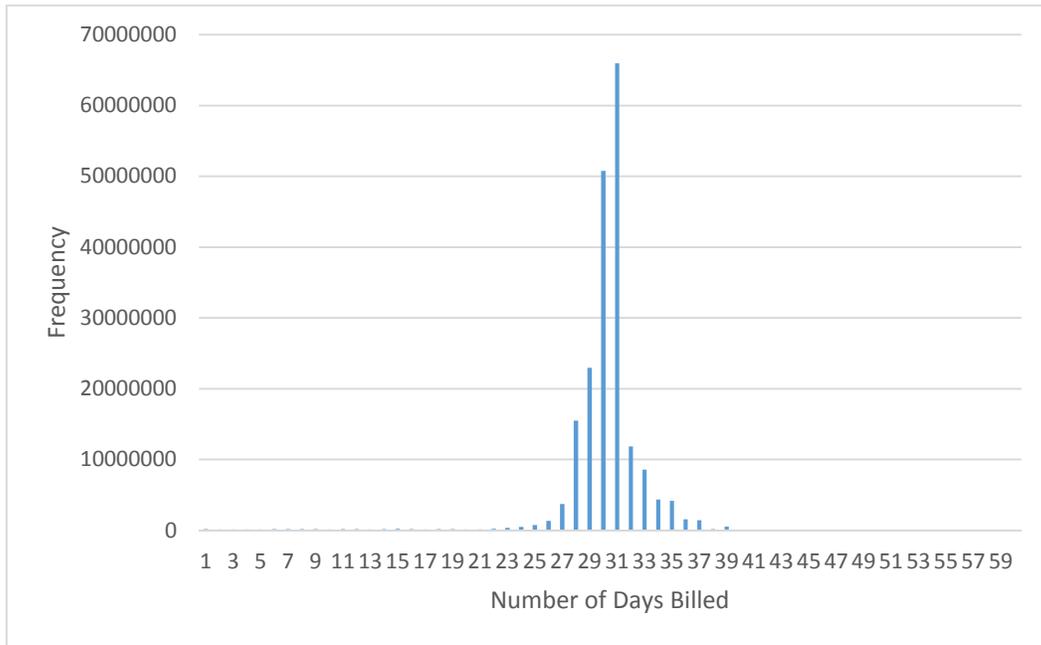
The task codes with the most records are:

TASK_CODE	Records
BILL	206,069,488
PNLTYINT	24,490,276
BALTR	5,518,924
PNLTY-MG	4,918,030
ARBALDB	4,210,858
DE	1,827,934
LN	1,350,914
NOLETTER	208,714
REC-TFR	64,415
BC	62,841

The Supply_type field is 'WATER' for all records.



The following histogram shows the number of occurrences by number of days billed.



CIS_Creditlines

The credit lines table has 69 fields with sufficiently descriptive names. The keys are all integer values, which is good practice, and the appropriate data types appear to be used, although there are numerous large text fields. There are 22 non nullable fields with few defaults specified. The table is not well normalized and there are many unused fields. There are 2 check constraints with valid value domains, 2 triggers, CISDL tablespace, and no partitions. The table is four times faster to query than the CIS_Transactions table.

The following 7 indexes are in the credit lines table:

Index	Unique?	Fields
CIS_CRLN_PK	UNIQUE	CREDIT_LINE_ID
CIS_CRLN_IX01	NONUNIQUE	CUST_ID, INST_ID
CIS_CRLN_IX02	NONUNIQUE	TRAN_KEY
CIS_CRLN_IX51	NONUNIQUE	RCPT_CHQ_REF, RCPT_CHQA_NO
CIS_CRLN_IX52	NONUNIQUE	RCPT_CARD_NO
CIS_CRLN_IX53	NONUNIQUE	AGENT_REF
CIS_CRLN_UK01	UNIQUE	TRAN_ID, LINE_NUM

There are 40,359,932 total records and all records have a transaction in CIS_Transactions. An average of 444,565 credit lines were created per month from 2007 onwards, excluding the last two months:

YEAR	MONTH	Records Created
2007	5	714,951
2007	4	712,888
2007	8	698,898
2007	3	661,730
2009	9	659,216
2006	11	653,428
2007	11	652,090
2007	10	651,964
2007	6	642,373
2007	1	627,068

The most frequent transaction IDs are:

TRAN_ID	Records
63281448	389
75526487	380
63281980	327
109502426	245
75526484	230
63282219	202
63282220	159
63281709	154
63281984	140
105848327	130

The task codes with the most records are:

TASK_CODE	Records
REMITPRO	20,317,280
ZP	8,511,547
POS	3,524,332
ZC	2,276,302
WEB	1,043,538
CE	1,040,545
BALTR	568,044
15WRITE	567,258
PW	405,589
BILLREV	402,525

The Supply_type field is 'WATER' for all records.

CIS_CRDR_Allocations

The CRDR allocations table has 39 fields with sufficiently descriptive names. The keys are all integer values, which is good practice, and the appropriate data types appear to be used with no large text fields. There are 15 non nullable fields with no defaults specified. The table is not well normalized and there are many unused fields. There are no check constraints with valid value domains, 1 trigger, CISDL tablespace, and no partitions. The table is many times slower to query than the CIS_Transactions table.

The following 4 indexes are in the CRDR allocations table:

Index	Unique?	Fields
CIS_ALLC_PK	UNIQUE	CRDR_ALLOC_ID
CIS_ALLC_IX01	NONUNIQUE	CUST_ID, CREATION_DATE
CIS_ALLC_IX02	NONUNIQUE	CREDIT_LINE_ID
CIS_ALLC_IX03	NONUNIQUE	DEBIT_LINE_ID

There are 268,957,267 total records and all records have a credit in CIS_Credit_Lines and a debit in CIS_Debit_Lines. On average, 3,134,312 CRDRs were created each month from 2008 onwards, excluding the last two months:

YEAR	MONTH	Records Created
2007	12	307,48,046
2011	7	14,966,976
2008	1	6,504,691
2011	8	4,232,406
2009	9	3,566,816
2013	7	3,556,831
2013	4	3,477,077
2012	4	3,449,560
2010	8	3,409,704
2013	5	3,400,441

CIS_Billlines

The bill lines table has 71 fields with sufficiently descriptive names. The keys are all integer values, which is good practice, and the appropriate data types appear to be used with only a few all large text fields. There are 11 non nullable fields with few defaults specified. The table is not well normalized and there are many unused fields. There are 8 check constraints with valid value domains, 2 triggers, CISDT tablespace, and no partitions. The table is many times faster to query than the CIS_Transactions table. This table appears to be cleared every month.

The following 5 indexes are in the bill lines table:

Index	Unique?	Fields
CIS_BLLN_PK	UNIQUE	BILL_LINE_ID
CIS_BLLN_IX01	NONUNIQUE	PROCESS_ID, LINE_NUM
CIS_BLLN_IX02	NONUNIQUE	BILL_KEY
CIS_BLLN_IX03	NONUNIQUE	TRAN_ID
CIS_BLLN_IX04	NONUNIQUE	CURRENT_PROCESS_ID, BILL_KEY

There are 3,792,091 total records and all records have a transaction in CIS_Bill_Trans. All records also have a mail_addr_id, but not all records have credit_line_ids or debit_line_ids.

Bill_line creation, mostly bill_lines from the current month:

YEAR	MONTH	Records Created
2014	4	2,605,274
2012	9	98,499
2013	6	79,653
2013	12	78,975
2013	1	78,464
2014	1	77,491
2012	11	75,480
2013	2	50,315
2013	5	42,489
2013	11	42,347

CIS_Bill_Trans

The bill transaction table has 55 fields with sufficiently descriptive names. The keys are all integer values, which is good practice, and the appropriate data types appear to be used with only a few all large text fields. There are 15 non nullable fields with few defaults specified. The table is not well normalized and there are many unused fields. There are 7 check constraints with valid value domains, 5 triggers, CISDL tablespace, and no partitions.

The following 10 indexes are in the billing transaction table:

Index	Unique?	Fields
CIS_BLTR_PK	UNIQUE	TRAN_ID
CIS_BLTR_IX01	NONUNIQUE	BILL_ID
CIS_BLTR_IX02	NONUNIQUE	CUST_ID
CIS_BLTR_IX03	NONUNIQUE	TBP_OUTSORT_CODE
CIS_BLTR_IX04	NONUNIQUE	PPLN_ID
CIS_BLTR_IX05	NONUNIQUE	BILL_RND_CTS_ID
CIS_BLTR_IX06	NONUNIQUE	CURRENT_PROCESS_ID
CIS_BLTR_IX07	NONUNIQUE	METER_GRP_RDG_ID
CIS_BTRN_IX99	NONUNIQUE	CUST_ID, INST_ID, SUPPLY_TYPE
CIS_CLTR_IX98	NONUNIQUE	METER_GRP_ID

There are 49,377,253 total records, 2,640,649 of which have no reference in CIS_Transactions. On average, 550,357 billing transactions were created each month from 2007 onwards, excluding the last two months:

YEAR	MONTH	Records Created
2011	8	647,393
2013	4	630,786
2013	1	627,702
2013	12	626,427
2014	3	625,467
2012	3	622,231
2012	10	615,629
2013	3	604,454
2011	3	603,244
2010	7	592,886

CIS_Bills

The bills table has 23 fields with sufficiently descriptive names. The keys are all integer values, which is good practice, and the appropriate data types appear to be used with only a few all large text fields. There are 11 non nullable fields with few defaults specified. The table is not well normalized and there are many unused fields. There are no check constraints with valid value domains, no triggers, CISDL tablespace, and no partitions.

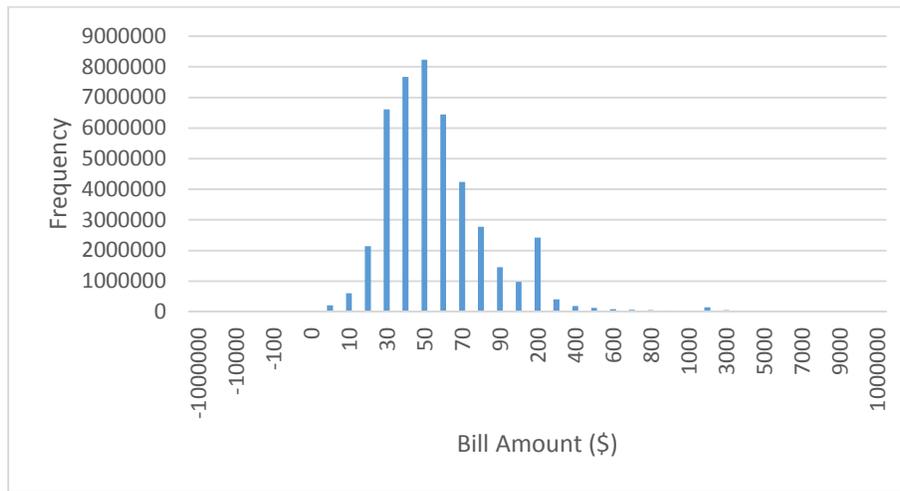
The following 2 indexes are in the bills table:

Index	Unique?	Fields
CIS_BLLS_PK	UNIQUE	BILL_ID
CIS_BLLS_UK01	UNIQUE	BILL_KEY

There are 45,779,244 total records. On average 509,471 bills were created per month from 2007 onwards, excluding the last two months:

YEAR	MONTH	Records
2013	1	586,143
2013	3	585,721
2013	12	585,371
2014	3	585,122
2013	4	583,823
2012	3	583,562
2012	10	575,228
2011	3	563,512
2011	8	554,417
2013	7	551,133

The histogram below presents a frequency of bill amounts found in this table:



Temporary Tables

Temporary tables are created by many of the basis2 scripts. These tables are prefixed with “PHL”. Many of these tables have no indexes. Some of the PL/SQL code we were given for review indicates that the “delete” command was used instead of “truncate” for removing rows of data in tables such as phls0038 and phls0042. In addition, some of the extract SQL we reviewed references assumed views that are not accessible by the CIS user provided for research purposes (e.g., Stm_PP_Cursors.sql).

Scripts

We analyzed the monthly extracts to find out what information they pull from basis2 relevant to accounts and billings, payments, and other billing processes. Since some reports are generated from these extracts, we also assessed whether they are accurately summarizing and capturing the data for reporting purposes. We list the extract tables that the scripts generate, describe what the scripts do, what data they use, and mention existing limitations of the scripts below.

We recommend that PWD continue to run extracts in the future while also developing a more comprehensive solution such as data warehousing for data management. We also recommend that non-transactional information (e.g., account changes, customer type, installation type) be logged so that there is a record for each account history.

PHLS0038 – Demographic extract

This extract creates a table named phl_stgou_research_wrtd. The demographic extract is indexed and pulls data from CIS_Accounts, CIS_Installations, CIS_Customers, CIS_Addresses, CIS_METER_WOS, and CIS_METERS. The extract excludes records with a CIS_METERS.locn_code of 'NOTIONAL,' and performs cleanup on fields.

PHLS0042 – Accounts Receivable extract

For the accounts receivable extract, a table named phl_stgou_research_arm is created. The extract is indexed and pulls data from CIS_Transactions, CIS_Accounts, CIS_Customers, and CIS_Installations. The extract includes those records where the CIS_TRANSACTIONS.tran_outst_ind equals 'Y,' and assembles charges from cis_debit_lines where the CIS_Transactions.prim_type equals 'D' and the Task_Code is 'BILL'. The following fields are summed up for each account: sewer service, water service, industrial surcharge, fire service, lien fee, penalty fee, invoice, and miscellaneous invoice. The extract also assembles credits from cis_credit_lines where the CIS_Transactions.prim_type equals 'C.'

PHLS0058 – Payments extract

For the payments extract, a table named phl_stgou_pay_control_extract is created.

PHLS0059 – Billing extract

For the billing extract, a table named phl_stgou_research_mtrbill is created. The extract combines data from CIS_Transactions, CIS_Accounts, CIS_Customers, CIS_Installations, and CIS_Debit_lines.

PHLS0060 – Adjustments extract

For the adjustments extract, a table named phl_stgou_ajustments is created. The extract combines data from CIS_Transactions, CIS_Accounts, CIS_Customers, and CIS_Installations for accounts where the task_code in ('BILLREV') equals 'BILL' and nvl(r3.ifce_refn,'~!^') equals 'REBILL.'

PHLS0077 – Enforcement extract

For the enforcement extract, a table named `phl_stgou_research_enf` is created. The extract has 3 indexes and combines data from `CIS_Calls` and demographic data from the demographic extract.

**APPENDIX D. CONSOLIDATED DIGEST FOR
REPORTS 1 THROUGH 4 GENERATED
FOR COST OF SERVICE**

Summary Digest for Cost of Service Reports

Revised December 14, 2015

Background

In support of the Philadelphia Water Department’s Cost of Service and Rate Study and ongoing management reporting, Raftelis Financial Consultants, Inc. (RFC) initially generated four reports from a copy of the basis2 customer information system dated June 30, 2014 and from one set of the monthly extracts from basis2, the Demographics table. These reports were developed in accordance with the **Rate Study Report Requirements Memorandum**, dated March 20, 2015, developed by the City’s rate consultant, Black & Veatch (B&V) in accordance with various discussions with the Water Department, B&V, RFC and WRB. As of June 2015 RFC has completed the following reports:

- 1A) Summary of Accounts, Usage, and Usage Charge Billings Report
- 1B) Summary of Accounts, Meter Size, and Service Charge Billings Report
- 1C) Summary of Accounts and Stormwater Charge Billings Report
- 2) Tiered Usage Bill Tabulation Report
- 3) “Stormwater Only” and “Non-Stormwater Only” Collection Factor Report
- 4) Customer Category Payment Pattern Summary Report

In July 2015, RFC obtained a copy of the basis2 customer information system dated June 30, 2015 and ran the following reports using the same specifications:

- 1A) Summary of Accounts, Usage, and Usage Charge Billings Report
- 1B) Summary of Accounts, Meter Size, and Service Charge Billings Report
- 1C) Summary of Accounts and Stormwater Charge Billings Report
- 3) “Stormwater Only” and “Non-Stormwater Only” Collection Factor Report

Herein, Reports 1A, 1B, 1C, and 3 reference the updated reports based on FY2015 data, and Reports 2 and 4 reference the original reports based on FY2014 data. The final report specifications are detailed in Table 2 and in the digest sections for each report. A comparison of report development methods is provided below in Table 1.

Table 1

	Reports 1A, 1B, 1C	Report 2	Report 3	Report 4
Draft version	5	4	5	5.4.1
Specifications revised?	Yes	Yes	Yes	Yes
Use of extracts	Yes	No	Yes	Yes
Billings	From Debit lines	From Debit Lines	From Transactions	From Transactions
Multi-year back billings included	Yes	No	Yes	Yes
Includes credit adjustments	No – billings are from debit lines	No – billings are from debit lines	Yes	Yes
Bounded by creation date?	Yes	Yes	Yes	Yes

Table 2

Report	Description	Run Parameters	Output	Notes
1A: Summary of Accounts, Usage, and Usage Charge Billings Report	<p>Summary CROSSTAB report of the number of accounts, bills, usage, and usage charge billings information</p> <p>Columns: Service Type Rows: Customer Category</p>	<p>a. From Date* b. To Date* * Creation Date of the bill</p>	<p>a. Service Type b. Customer Category c. Summation Parameters</p> <ul style="list-style-type: none"> • # of Accounts • # of Original Bills Issued • Billed Water Usage (Ccf) • Water Usage Charges • Sewer Usage Charges • Sewer Surcharges <p>d. Subtotals for each Service Type e. Subtotals for each Customer Category f. Grand Totals</p>	<p>Crosstab categories: 1. Service Type 2. Customer Category</p>
1B: Summary of Accounts, Meter Size, and Service Charge Billings Report	<p>Summary CROSSTAB report of the number of accounts, bills, meter size, and service charge billings information</p> <p>Columns: Service Type Rows (Level 1): Customer Category Rows (Level 2): Meter Size</p>	<p>Same as 1A</p>	<p>a. Service Type b. Customer Category c. Summation Parameters</p> <ul style="list-style-type: none"> • # of Accounts • # of Original Bills Issued • Water Service Charges • Sewer Service Charges <p>e. Subtotals for each Service Type f. Subtotals for each Customer Category g. Subtotals for each Meter Size h. Grand Totals</p>	<p>Crosstab categories: 1. Service Type 2. Customer Category 3. Meter Size</p>
1C: Summary of Accounts and Stormwater Charge Billings Report	<p>Summary CROSSTAB report of the number of accounts and stormwater billings information</p> <p>Columns: Service Type Rows: Customer Category</p>	<p>Same as 1A</p>	<p>a. Service Type b. Customer Category c. Summation Parameters</p> <ul style="list-style-type: none"> • # of Accounts • Stormwater Charges <p>d. Subtotals for each Service Type e. Subtotals for each Customer Category</p>	<p>Crosstab categories: 1. Service Type 2. Customer Category</p>

Report	Description	Run Parameters	Output	Notes
			f. Grand Totals	
2: Tiered Usage Bill Tabulation Report	<p>Summary of the billed volume and billed volume charge for the tier blocks:</p> <ul style="list-style-type: none"> • 0-2,000 cf • 2,001-100,000 cf • 100,001-2,000,000 cf • Over 2,000,000 cf <p>And separated into two reports for:</p> <ol style="list-style-type: none"> 1. All accounts excluding Wholesale, City Government & PWD Accounts 2. City Government accounts only excluding PWD Accounts 	Same as 1A	<p>a. Customer Category</p> <ul style="list-style-type: none"> • # of Bills stopping in block • Sum of Billed Usage for the block • Sum of Water Usage Charge for the block <p>b. Subtotals for each Customer Category</p> <p>c. Grand Totals for each of the above</p>	Group By hierarchy: 1. Customer Category
3: "Stormwater Only" and "Non-Stormwater Only" Collection Factor Report	Provide total billings and total collections for each FY	Same as 1A	<p>a. Stormwater Only</p> <ul style="list-style-type: none"> • Total Billings in FY • Amount Collected in FY • Amount Collected Ever • Collection Percentage 	Group By hierarchy: 1. Stormwater Only 2. Non-Stormwater Only
4: Customer Category Payment Pattern Summary Report	<p>Summary of total user fee billings (service and usage charges only) and amount of payments received in each "payment duration" block.</p> <p>Presents data for the following customer categories and includes customers with payment agreements (City Government, Wholesale, and PWD excluded):</p> <ul style="list-style-type: none"> • Non-Stormwater Only • Stormwater Only 	<p>Payment Pattern Report is needed for bills issued in:</p> <ol style="list-style-type: none"> a. FY 2010 (July 1, 2009 through June 30, 2010) b. FY 2011 (July 1, 2010 through June 30, 2011) c. FY 2012 (July 1, 2011 through June 30, 2012) 	<p>a. Customer Category</p> <p>b. Gross Billing Amount for payment duration blocks (see Section 4)</p> <p>c. Total Payment Amount</p> <p>d. Subtotals by Customer Category</p> <p>e. Grand Total for each of the above</p>	Group By hierarchy: 1. Customer Category

The following tables are referenced in multiple reports:

Table 3. Service Type

Service Type Code	Service Type Values
1	Water, Sewer, Stormwater
2	Water Only
3	Stormwater Only
4	Sewer and Stormwater
5	Water and Stormwater
6	Sewer Only
7	Water and Sewer
8	RFSS, All Services
9	RFSS, No Sewer

Table 4. Customer Category, Customer Type, and Installation Type Mapping

Report Customer Categories	basis2 Customer Type Code	basis2 Customer Type Description	basis2 Installation Type
General Service	4, G, P, W	4 – General Service G – Federal Government P – State Government W – Wells	
Residential**	4	General Service	08, 10, 11, 12
Commercial**	4, G, P	General Service	09, 13, 14, 15, 16, 17, 18, 21, 22, 23, 24, 25, 26, 33
Industrial**	4	General Service	19
Public Utilities**	4	General Service	20
Wells	W	General Service	20
PHA	A	P.H.A	
Charities & Schools	C, E	C - Charity/Non-Public Schools E -Public Schools	
Senior Citizens	D	Senior Citizens Discount	
Hand Bill	H	Hand Bill	
City Leased	L	City Leased	
Hospital/University	N	Hospital/University	
Scheduled	S	Scheduled	
Fire Service	Y	Fire Service	
City Government	Z	City Government	
Ground Water			

**At the current time, the '4' customer type is divided into customer categories by installation type as shown in the right column

Table 5. Meter Size

Code	Meter Size Values
R	5/8
Z	3/4
Q	1
P	1.5
X	2
O	3
W	4
N	6
V	8
E	10
T	12
A	
B	
Y	

Credit and debit adjustment task codes

For all reports, the following credit and debit adjustments have been included in the queries. As noted in table 1, however, Reports 1A, 1B, 1C, and 2 rely on the debit lines table to generate the totals for charges to accounts. Since these reports rely on debit lines, no credit adjustments are included in Report 1 or 2 numbers. All report numbers exclude penalties, which are transactions under a different task code than any of those described in the table below.

Table 6

CREDIT ADJUSTMENTS		DEBIT ADJUSTMENTS	
Task Code	Description	Task Code	Description
BILLREV	Bill Reversal	REFZC	Refund – Zip Check
ARBALCR	Receivables Opening Balance (Credit)	AA	15 Year Credit Writeoff
ARCREDIT	Agency Receivable Credit	BC	Bank Charge (Bad Check)
AW	Satisfied Pay Agr Penalty Waiver	DA	Debit Billing Adjustment
BX	Cancel Bad Check Charge	DCC	Debit Court Costs
CA	Credit Billing Adjustment	DE	Debit Entry
CB	Discharge of Bankruptcy Balance	DF	Refund (Debit Fund)
CD	Senior Citizen Adjustment	DM	Miscellaneous
CE	Credit Entry	FC	Fire Service Charge Adjustment
CG	Credit City Grant	DISONR	Payment Dishonor
CI	Credit Transfer when already one CT	PPLNDRAL	Payment plan debit adjustment
CL	Credit to Principal of paid lien	DI	
CM	Miscellaneous	DQ	
CT	Credit Transfer	DT	
CW	Credit Waiver of Paid Penalty	DISNOFEE	
LEGALADJ	Legal Settlement Adjustment	GG	

CREDIT ADJUSTMENTS		DEBIT ADJUSTMENTS	
LNCANCEL	Lien fee cancellation	REFCASH	Refund – Cash
LR	Open Bal Waiver due to Sheriff Sale	REFCRED	Refund – Credit
VC	Vacancy Claim		
PW	Penalty Waivers		
CS	Sherriff settled lien release		
PPLNCRAL	Payment plan credit setup allocation		
CZ			

1A, 1B, 1C) Customer Accounts and Billing Summary Reports, Draft 5

These three reports are intended to provide bills, accounts, consumption amounts and usage charges by service type and customer category; bills, accounts, service charges by service type and meter size; and bills, accounts, and stormwater usage by service type and customer category. (Although the memorandum report specifications asks for “services” instead of “service type,” RFC was able to provide the reports using the coded “service type” as originally desired for Report 1.)

Run Parameters

This report is developed for individual fiscal years for all accounts excluding wholesale accounts, and city accounts are listed separately. Data were developed for three fiscal years, 2012, 2013, 2014 and 2015. The reports are based upon transactional financial information stored in basis2 and excludes fully reversed transactions. The service type, customer type and installation type data are used to categorize transactions using the demographics table from the Revenue Reporting monthly extracts.

Output

Number of Accounts (months) and Number of Accounts (fiscal year)

For these reports, an account of interest to be counted was a unique customer at a location (installation) combination, an account, with a “bill” type transaction in a certain month. The bill transaction is the indicator of activity for that account (customer + installation combination). The report provides one field for the sum of all accounts of interest for the year as well as the sum of all accounts of interest for the year divided by 12 months (the “average” for the year).

In report 1C, the accounts of interest comprise a subset of all accounts of interest. Stormwater only accounts are those with a service type of '3' (stormwater-only) and a meter size of 'A' (no meter). This definition is that same as that used by WRB for reporting purposes. These attributes are stored in the demographics table from the Revenue Reporting monthly extracts. Again, for this subset of accounts, accounts of interest were those with a “bill” transaction in a certain month.

Number of Original Bills Issued

The number of original bills issued is defined as a subset of all bill transactions. Bill transactions include original bills and rebills. Rebills are flagged as such in one field of the bill transaction record. Only bill transactions not coded as rebills were counted as “original bills issued” in reports 1A, 1B, and 1C.

Billed Water Usage (Consumption)

Billed water usage is developed from the debit lines table (CIS_DEBIT_LINES.tran_qty). Quantities in this field are stored in CCF units and are multiplied by 100 to get cubic feet.

Water and Sewer Usage Charges

Charges were developed by summing relevant charge types from the debit lines table column CIS_DEBIT_LINES.line_tot_amt multiplied by the CIS_DEBIT_LINES.acct_sign value. Water and Sewer usage charges are identified by the debit lines table general ledger code (CIS_DEBIT_LINES.revenue_glif_code) values of ‘WAT-USAG’ for Water Usage Charges and ‘SEW-USAG’ for Sewer Usage Charges.

These are summed by service type and Customer Category for report 1A. All charges summed by service type and Customer Category are provided in a raw data tab.

Consistent with the other reports developed for this effort, these charges represent gross billings inclusive of rebills and adjustments of the types listed in table 6. These adjustments are the ones currently used by the Water Revenue Bureau in its Payment Patterns report. Due to the fact that

charges and consumption were derived from the Debit Lines table in basis2, only debit adjustments are included in reports 1A, 1B, and 1C.

Water and Sewer Service Charges

Similar to water and sewer usage charges, water and sewer service charges were summed for service type by Customer Category and meter size. The calculation of charges is as described in the previous subsection.

Stormwater Charges

Finally, stormwater charges were summed for stormwater accounts by service type and Customer Category, where stormwater accounts are defined as described in this memo and where charges are defined as described in the *Water and Sewer Usage Charges* subsection

Report Output

The query results were formatted and rolled up in accordance with the report requirements memo. Raw data were also provided.

Handling of Exclusions & Subtotals

City accounts were identified via the customer type Z. The PWD accounts comprise around 60 accounts designated in a spreadsheet provided by PWD and are a subset of Z accounts.

Wholesale customers were not included: these customers do not generate transactions of the 'BILL' task code type.

Penalties are not included. Penalty transactions are under a different task code type.

Fully reversed transactions are excluded, since they are fully replaced by new, modified billings.

Contents of Excel Workbook titled miipwd_BvRpt1_abc_v2015.02.xlsx

The contents of the spreadsheet provided with this digest are as follows:

Worksheet Name	Contents
Rpt1A v5 2015.02	Report 1A as requested. Water and sewer usage charges by service type, Customer Category. Accounts of interest and bills by service type, Customer Category.
Rpt1A pwd v5 2015.02	Report 1A as run for PWD accounts. These totals can be subtracted from Rpt1A v5 to remove the influence of PWD accounts.
Rpt1B v5 2015.02	Report 1B as requested. Water and sewer service charges by service type, Customer Category, meter size. Accounts of interest and bills by service type, Customer Category, meter size.
Rpt1B pwd v5 2015.02	Report 1B as run for PWD accounts. These totals can be subtracted from Rpt1B v5 to remove the influence of PWD accounts.
Rpt1C v5 2015.02	Report 1C as requested. Stormwater charges for stormwater accounts by service type, Customer Category. Accounts of interest and bills by service type, Customer Category, meter size.
Rpt1C pwd v5 2015.02	Report 1C as run for PWD accounts. These totals can be subtracted from Rpt1C v5 to remove the influence of PWD accounts.
Raw t1 v02	For each extract month: number of bills, sum of billings, sum of consumption for each type of charge by service type, Customer Category, and meter size.

Worksheet Name	Contents
Raw t1 PWD v02	The subset of raw t1 that represents PWD accounts. These totals can be subtracted from Raw t1 to remove the influence of PWD accounts.
Raw t2 v02	For each extract month: number of accounts, bills, rebills, sum of billings for each type of charge by service type, Customer Category, and meter size.
Remaining tabs	SQL code.

Change Log

Version	Change	Effect (if known)
Draft 2015.02	Ran existing v5 report using basis2 extract from June 30, 2015	Additional year of data; minor impacts to prior years explained by query criteria

2) Bill Tabulation Report, Draft 4

The tiered usage bill tabulation report is intended to tally the number of bills, volume of water usage, and total water charges within each tier of the current rate structure by Customer Category. PWD, RFC, and B&V held a call on February 12, 2015 to review a comparison of the first draft Bill Tabulation Report, during which the team identified some specifications for this draft not explicitly mentioned in the Memorandum. The bill tabulation was further revised to reflect specifications for billings and for PWD accounts used during the development of other reports.

Run Parameters

This report is developed for individual fiscal years for all accounts excluding City, wholesale, and PWD accounts. The current report includes only a single fiscal year, 2014, and is only based on data stored in basis2 without the use of revenue reporting extracts containing historical information on customer types. This approach was agreed to by PWD and RFC in January 2015, given time constraints for developing the report and only after RFC provided information on the small degree of customer type changes that occurred in the period of interest. In this draft, transactions that were fully reversed are now excluded.

Output

Customer Category and Installation Type

The bill tabulation report was developed by Customer Category by combining the transactional information on volume and charges from the CIS_DEBIT_LINES table with customer information from the CIS_CUSTOMERS table in basis2. Queries were also developed to provide detail in a similar manner by installation type for the general service category customer types of 4, G, P, and W.

Count of Bills

The count of bills was developed by counting the number of unique 'BILL' task code transactions excluding rebills over the specified time period.

Sum of Billed Usage and Sum of Water Usage Charges

The sum of billed usage numbers were developed by totaling the volume numbers in the TRAN_QTY field (stored in CCF) multiplied by 100 to achieve CF, while usage charges were a product of the ACCT_SIGN and LINE_TOT_AMNT fields. These numbers were developed for 'BILL' task code debit lines of the water usage type occurring in the specified fiscal year in the specified tier adjusted as follows: These billings represent gross billings inclusive of rebills and adjustments of the types listed under debit adjustments in table 6. These adjustments are the ones currently used by the Water Revenue Bureau in its Payment Patterns report. Due to the fact that charges and consumption were derived from the Debit Lines table in basis2, only debit adjustments are included in report 2.

Report Output

The query results were formatted and rolled up in accordance with the report requirements memo.

Handling of Exclusions & Subtotals

During the review meeting on February 12, 2015, B&V identified the existence of unexpectedly high volumes in residential categories. RFC discovered that this anomaly was owing to the fact that bills were generated that span several fiscal years' worth of usage. The team agreed that these bills produce anomalies in the report. RFC noted that it was not able to partition current year usage from prior year usage for these cases. The team agreed, for this report, only to include those transactions that

represented the fiscal year of interest. To limit the report, this requirement was translated into a report parameter where the PERIOD_FROM_DATE fell within at least 60 days of the beginning of the fiscal year.

City accounts were identified via the customer type Z. PWD accounts were separated from other City accounts based upon a list provided by the City that reflected the accounts as of the end of fiscal year 2014. These two subsets of accounts are totaled separately as requested in the memorandum.

Wholesale customers were not included: these customers do not generate transactions of the 'BILL' task code type.

Fully reversed transactions are excluded, since they are fully replaced by new, modified billings.

[Contents of Excel Workbook titled Bill_Tabulation_Draft4.xlsx](#)

The contents of the spreadsheet provided with this digest are as follows:

Worksheet Name	Contents
Report	Primary Report in format requested by B&V
Comparison-B&V-RFC V3	Comparison between B&V's most recent bill tab and Draft4. This format follows a comparison done by B&V on Draft1 of the bill tab but replaces Draft1 figures with Draft4 figures
Customer Types	Count, usage and charges by block by customer type
GeneralService_InstallationType	Count, usage and charges by block by installation type for the general service category customer types of 4, G, P, and W.
PWD_CustomerTypes	Count, usage and charges by customer type for PWD accounts only
PWD_InstallationType	Count, usage and charges by installation type for PWD accounts only
Wholesale	Information about the wholesale customers showing customer ID, account ID, customer type code, and installation type code for each and reiterating that these customers are billed using task code 'WW' rather than 'Bill' and are thus programmatically excluded from the bill tab report
SQL	Copy of code used to generate the report

[Change Log](#)

Version	Change	Effect
Draft3	Source for PWD account numbers modified – from a January 2015 WRB source to a late 2014 PWD source	PWD number of accounts decreased
Draft 3	Usage and billings modified. Billings and associated consumption is now the net of rebills, bill reversals and adjustments as agreed upon by RFC, PWD, and B&V for collections factor and other reports.	Usage and billings increase
Draft 3	SQL code modified to include the entire fiscal year through 11:59:59 PM of June 30, whereas earlier code could have excluded a portion of June 30 since timestamp not used.	Usage and billings increase

Version	Change	Effect
Draft 4	SQL code modified to include more adjustment task codes.	Usage and billings increase
Draft 4	SQL code modified to exclude fully reversed transactions	Usage and billings decrease

3) Collection Factor Report, Draft 3

The collection factors report compares the billings generated by PWD against the amount of revenue collected within the same fiscal year, or beyond. As agreed to with the Department, RFC has calculated an additional collection factor for the collections on billings for a fiscal year that occurred from July 1 of each fiscal year through the end of the first month of the next fiscal year (July 31 of the next fiscal year).

Run Parameters

This report is developed for individual fiscal years for all accounts excluding wholesale accounts. City and PWD accounts are listed separately. Data were developed for three fiscal years, 2012, 2013, 2014 and 2015, and the report was based upon transactional financial information stored in basis2. The customer type data are used to categorize transactions using the demographics table from the Revenue Reporting monthly extracts.

Output

Billings

The collection factors report was developed by Customer Category by combining the transactional information on billings from the CIS_TRANSACTION table in basis2 with customer information from the demographics table from monthly extracts. The amount of billings was determined by singling out transactions with a 'BILL' task code to be tied to customer types using customer and installation IDs and were a product of the ACCT_SIGN and TRAN_TOT_AMNT fields.

These billings represent gross billings inclusive of rebills and adjustments of the types listed in table 6. These adjustments are the ones currently used by the Water Revenue Bureau in its Payment Patterns report. Both credit and debit adjustments are included in report 3 as the billings are derived from the CIS_TRANSACTION table.

Billings Collected (Ever)

Collection numbers were first developed by identifying the debit lines that have been collected and allocated at any point in time. These billings are identified as a subset of the overall billings by their presence in the credit debit allocation table, CIS_CRDR_ALLOCATIONS, within basis2. Those fiscal years further back in time have a greater level of collections due to having had more time for payment and collections enforcement. Note that this collection factor also includes pre-payments.

Billings Collected (FY)

A further subset of collections was developed to highlight billings that were collected and allocated within the same fiscal year. These payments are identified within the CIS_CRDR_ALLOCATIONS table by their allocation date (alloc_date) of the same fiscal year for which the billings were developed. Each fiscal year shows a similar level of same year collections.

Billings Collected (12 month)

A final subset of collections was developed in accordance with reporting needs for bond transactions for billings that were collected and allocated for the fiscal year plus one additional month of collections. For example for fiscal 2012, the period would be July 1, 2011 through July 31, 2012. These payments are identified within the CIS_CRDR_ALLOCATIONS table by their allocation date (alloc_date) of the 13-month period of interest from the beginning of one fiscal year for which the billings were developed through the end of the first month of the next fiscal year (July 31). This factor was developed for fiscal years 12 and 13 only, since the database from which the reporting is generated is dated as of June 30, 2014, the last day of fiscal year 2014.

Stormwater Only Accounts

For the purposes of this report, stormwater only accounts are those with a service type of '3' (stormwater-only) and a meter size of 'A' (no meter). This definition is that same as that used by WRB for reporting purposes. These attributes are stored in the revenue reporting extracts and so are pulled from the extracts to represent the historically accurate information on stormwater only accounts.

Handling of Exclusions & Subtotals

City accounts were identified via the customer type Z.

PWD accounts are a subset of City accounts and were separated from other City accounts in Draft 3. The PWD accounts comprise around 60 accounts designated in a spreadsheet provided by PWD.

Collections numbers are provided for all customer categories less City, for City accounts less PWD accounts, and additional collection factors are provided with allowances for non-PWD City accounts where payment may occur in later fiscal years, but are counted in the same fiscal year.

Wholesale customers were not included: these customers do not generate transactions of the 'BILL' task code type.

Penalties are not included. Penalty transactions are under a different task code type.

Contents of Excel Workbook titled [Collection_Factors_20150914_v2015.02.xlsx](#)

The contents of the spreadsheet provided with this digest are as follows:

Worksheet Name	Contents
Report 20150923	Primary Report, based on 2015 data, in format requested by B&V.
Report 20150511	Primary Report, based on 2014 data, in format requested by B&V.
FY15	Billings, collections (ever) and collections (same FY) and collections (FY+1 month) numbers developed by month by customer type for fiscal year 2015.
FY14	Billings, collections (ever) and collections (same FY) and collections (FY+1 month) numbers developed by month by customer type for fiscal year 2014.
FY13	Billings, collections (ever) and collections (same FY) and collections (FY+1 month) numbers developed by month by customer type for fiscal year 2013.
FY12	Billings, collections (ever) and collections (same FY) and collections (FY+1 month) numbers developed by month by customer type for fiscal year 2012.
Remaining tabs	SQL code.

Change Log

Version	Change	Effect (if known)
Draft 2015	Ran existing report using basis2 extract from June 30, 2015	Additional year of data; billings decline and collections increase in prior years because more bills are fully reversed

4) Customer Category Payment Pattern Summary Report, Draft 5.4.1

The Customer Category payment pattern report is intended to compare the total user fee billings against the amount of payments received in a variety of payment duration blocks. This report is intended to align with the methodology used WRB's payment pattern report with a few modifications to the report definitions to align it with the other rate study reports.

Run Parameters

This report is developed for individual fiscal years for all accounts excluding wholesale accounts. City and PWD accounts are listed separately. Data were developed for three fiscal years, 2010, 2011 and 2012, in accordance with the Requirements Memorandum. This report was based upon transactional financial information stored in basis2 combined with data on service type, Customer Category, and meter size from the Revenue Reporting extracts demographic table.

Output

Billings

The Customer Category payment patterns report was developed by Customer Category by combining the transactional information on billings from the CIS_TRANSACTIONS table in basis2 with customer information from the demographics table from monthly extracts. The amount of billings was determined by singling out transactions with a 'BILL' task code to be tied to customer types using customer and installation IDs and were a product of the ACCT_SIGN and LINE_TOT_AMNT fields.

These billings represent gross billings inclusive of rebills and adjustments of the types listed in table 6. These adjustments are the ones currently used by the Water Revenue Bureau in its Payment Patterns report. Both credit and debit adjustments are included in report 4 as the billings are derived from the CIS_TRANSACTIONS table.

Payments (All)

Collection numbers were first developed by identifying the debit lines that have been collected and allocated at any point in time. These billings are identified as a subset of the overall billings by their presence in the credit debit allocation table, CIS_CRDR_ALLOCATIONS, within basis2. Those fiscal years further back in time have a greater level of collections due to having had more time for payment and collections enforcement. Note that this collection factor also includes pre-payments. Also note the alignment between this metric and the collections (ever) metric in report 3.

Pre-Payments

A further subset of collections was developed to highlight billings that were collected and allocated prior to the fiscal year in question. These payments are identified within the CIS_CRDR_ALLOCATIONS table by their allocation date (alloc_date) of any date prior to the fiscal year for which the billings were developed. Pre-payments represent a small but significant amount of collections that occur due to overpayment of prior bills.

Payments by Block

Further subsets of collections were developed in accordance with the rate study Reporting Memorandum to cover the periods of 0-12 months, 12-24 months, 24-36 months and 36+ months for each fiscal year. These payments are identified within the CIS_CRDR_ALLOCATIONS table by their allocation date (alloc_date) falling within the fixed time period representing each time block. As a result, these payment blocks do not use rolling payment periods relating to individual payments, but rather fixed periods relating to the fiscal year. These blocks were developed to show payment trends over time

and do not include 36+ months for FY12 since the database from which the reporting is generated is dated as of June 30, 2014, the last day of fiscal year 2014.

Stormwater Only Accounts

For the purposes of this report, stormwater only accounts are those with a service type of '3' (stormwater-only) and a meter size of 'A' (no meter). This definition is that same as that used by WRB for reporting purposes. These attributes are stored in the revenue reporting extracts and so are pulled from the extracts to represent the historically accurate information on stormwater only accounts.

Handling of Exclusions & Subtotals

City accounts were identified via the customer type Z.

PWD accounts are a subset of City accounts and were separated from other City accounts in Draft 5. The PWD accounts comprise around 60 accounts designated in a spreadsheet provided by PWD.

Collections numbers are provided for all customer categories, all customer categories less City, and for PWD accounts separately. PWD accounts can be removed from other City totals by subtracting values shown in the PWD data tabs. Stormwater-only accounts were also shown separately from all other accounts by using the definition described above.

Wholesale customers were not included: these customers do not generate transactions of the 'BILL' task code type.

Penalties are not included. Penalty transactions are under a different task code type.

Contents of Excel Workbook titled [miipwd_BvRpt4_5.4.1.xlsx](#)

The contents of the spreadsheet provided with this digest are as follows:

Worksheet Name	Contents
Summary	Primary Report in format requested by B&V.
Non vs SW	Information on collections by time block for stormwater only and non-stormwater only accounts as requested by B&V.
Rpt4 v5.4.1 (All)	Detailed reporting of billings and collections by time block categorized by Customer Category and month.
Rpt4 v5.4.1 (Stormwater Only)	Detailed reporting of billings and collections by time block categorized by Customer Category and month for stormwater only accounts.
Rpt4 v.5.4.1 (PWD)	Detailed reporting of billings and collections by time block categorized by Customer Category and month for PWD accounts.
Remaining tabs	SQL code.

Rpt1a v5 2015.02

		FY12			
Service Type	Customer Type	fy12 # of Accounts	Months	fy12 # of Accounts	fy12 # of Original Bills Issued
01-Water,Sewer,Stormwater	01-General Service-Residential		5119708	426642	5145532
01-Water,Sewer,Stormwater	02-General Service-Commercial		397189	33099	398598
01-Water,Sewer,Stormwater	03-General Service-Industrial		12835	1070	12869
01-Water,Sewer,Stormwater	04-General Service-Public Utilities		1148	96	1153
01-Water,Sewer,Stormwater	05-P.H.A		72748	6062	72819
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools		26907	2242	27101
01-Water,Sewer,Stormwater	07-Public Schools		4700	392	4730
01-Water,Sewer,Stormwater	08-Senior Citizens Discount		229766	19147	230878
01-Water,Sewer,Stormwater	09-Hand Bill		3249	271	3258
01-Water,Sewer,Stormwater	10-City Leased		589	49	596
01-Water,Sewer,Stormwater	11-Hospital/University		4213	351	4263
01-Water,Sewer,Stormwater	12-Scheduled		24	2	24
01-Water,Sewer,Stormwater	13-Fire Service		1072	89	1076
01-Water,Sewer,Stormwater	14-City Government		11681	973	11942
02-Water Only	01-General Service-Residential		4312	359	4506
02-Water Only	02-General Service-Commercial		2811	234	2891
02-Water Only	03-General Service-Industrial		190	16	196
02-Water Only	04-General Service-Public Utilities		11	1	14
02-Water Only	05-P.H.A		680	57	732
02-Water Only	06-Charity/Non-Public Schools		187	16	188
02-Water Only	07-Public Schools		555	46	558
02-Water Only	08-Senior Citizens Discount		7	1	7
02-Water Only	09-Hand Bill		98	8	100
02-Water Only	10-City Leased		55	5	58
02-Water Only	11-Hospital/University		337	28	343
02-Water Only	13-Fire Service		25793	2149	25885
02-Water Only	14-City Government		528	44	532
03-Stormwater Only	01-General Service-Residential		163217	13601	163826
03-Stormwater Only	02-General Service-Commercial		368598	30717	371602
03-Stormwater Only	03-General Service-Industrial		176	15	181

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Service Type	Customer Type	FY12		
		fy12 # of Accounts	Months	fy12 # of Original Bills Issued
03-Stormwater Only	04-General Service-Public Utilities	14085	1174	14138
03-Stormwater Only	05-P.H.A	11145	929	11469
03-Stormwater Only	06-Charity/Non-Public Schools	537	45	537
03-Stormwater Only	07-Public Schools	925	77	930
03-Stormwater Only	08-Senior Citizens Discount	146	12	146
03-Stormwater Only	09-Hand Bill	124	10	131
03-Stormwater Only	10-City Leased	45	4	45
03-Stormwater Only	11-Hospital/University	1497	125	1506
03-Stormwater Only	12-Scheduled	8	1	8
03-Stormwater Only	13-Fire Service	1732	144	1912
03-Stormwater Only	14-City Government	10723	894	10843
04-Sewer and Stormwater	01-General Service-Residential	169	14	173
04-Sewer and Stormwater	02-General Service-Commercial	19	2	19
04-Sewer and Stormwater	03-General Service-Industrial	27	2	27
04-Sewer and Stormwater	04-General Service-Public Utilities	2	0	2
04-Sewer and Stormwater	06-Charity/Non-Public Schools	6	1	6
04-Sewer and Stormwater	09-Hand Bill	167	14	170
04-Sewer and Stormwater	11-Hospital/University	0	0	0
05-Water and Stormwater	01-General Service-Residential	12410	1034	12856
05-Water and Stormwater	02-General Service-Commercial	2688	224	3030
05-Water and Stormwater	03-General Service-Industrial	188	16	206
05-Water and Stormwater	04-General Service-Public Utilities	16	1	17
05-Water and Stormwater	05-P.H.A	498	42	581
05-Water and Stormwater	06-Charity/Non-Public Schools	225	19	253
05-Water and Stormwater	07-Public Schools	319	27	393
05-Water and Stormwater	08-Senior Citizens Discount	107	9	108
05-Water and Stormwater	09-Hand Bill	87	7	101
05-Water and Stormwater	10-City Leased	197	16	204
05-Water and Stormwater	11-Hospital/University	204	17	249
05-Water and Stormwater	13-Fire Service	14978	1248	18572

Rpt1a v5 2015.02

Service Type	Customer Type	FY12			
		fy12 # of Accounts	Months	fy12 # of Original Bills Issued	
05-Water and Stormwater	14-City Government		714	60	740
06-Sewer Only	01-General Service-Residential		5	0	5
06-Sewer Only	02-General Service-Commercial		0	0	0
06-Sewer Only	03-General Service-Industrial		2	0	6
06-Sewer Only	04-General Service-Public Utilities		0	0	0
06-Sewer Only	06-Charity/Non-Public Schools		5	0	5
06-Sewer Only	09-Hand Bill		21	2	21
06-Sewer Only	13-Fire Service		0	0	0
06-Sewer Only	14-City Government		0	0	0
07-Water and Sewer	01-General Service-Residential		279	23	289
07-Water and Sewer	02-General Service-Commercial		92	8	95
07-Water and Sewer	03-General Service-Industrial		1	0	1
07-Water and Sewer	05-P.H.A		20	2	21
07-Water and Sewer	06-Charity/Non-Public Schools		32	3	32
07-Water and Sewer	07-Public Schools		0	0	0
07-Water and Sewer	08-Senior Citizens Discount		4	0	4
07-Water and Sewer	09-Hand Bill		1	0	3
07-Water and Sewer	11-Hospital/University		4	0	4
07-Water and Sewer	13-Fire Service		11	1	11
07-Water and Sewer	14-City Government		26	2	26
08-RFSS, All Services	01-General Service-Residential		0	0	0
08-RFSS, All Services	02-General Service-Commercial		0	0	0
08-RFSS, All Services	03-General Service-Industrial		0	0	0
08-RFSS, All Services	04-General Service-Public Utilities		0	0	0
08-RFSS, All Services	05-P.H.A		0	0	0
08-RFSS, All Services	08-Senior Citizens Discount		0	0	0
08-RFSS, All Services	13-Fire Service		0	0	0
08-RFSS, All Services	14-City Government		0	0	0
09-RFSS, No Sewer	01-General Service-Residential		0	0	0
09-RFSS, No Sewer	02-General Service-Commercial		0	0	0

Rpt1a v5 2015.02

		FY12		
Service Type	Customer Type	fy12 # of Accounts Months	fy12 # of Accounts	fy12 # of Original Bills Issued
10-Unknown	01-General Service-Residential	1757	146	2205
10-Unknown	02-General Service-Commercial	4053	338	4463
10-Unknown	03-General Service-Industrial	165	14	174
10-Unknown	04-General Service-Public Utilities	81	7	99
10-Unknown	05-P.H.A	29	2	40
10-Unknown	06-Charity/Non-Public Schools	19	2	25
10-Unknown	07-Public Schools	2	0	2
10-Unknown	08-Senior Citizens Discount	1	0	1
10-Unknown	09-Hand Bill	459	38	466
10-Unknown	10-City Leased	1	0	2
10-Unknown	11-Hospital/University	24	2	27
10-Unknown	13-Fire Service	2	0	3
10-Unknown	14-City Government	147	12	162

Rpt1a v5 2015.02

		FY12		
Service Type	Customer Type	fy12 Billed Water Usage	fy12 Water Usage Charges	fy12 Sewer Usage Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	3408255200	108120954.6	75208775
01-Water,Sewer,Stormwater	02-General Service-Commercial	1177068500	31935410.06	24834697.63
01-Water,Sewer,Stormwater	03-General Service-Industrial	87023600	1965794.61	1582482.52
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	6848700	186147.46	141306.38
01-Water,Sewer,Stormwater	05-P.H.A	176472400	4729404.03	3701618.28
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	160383100	3307070.67	2634682.76
01-Water,Sewer,Stormwater	07-Public Schools	54342700	1104153.56	900522.07
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	106252200	2591028.48	1765786.47
01-Water,Sewer,Stormwater	09-Hand Bill	537732700	11224692.93	7239271.73
01-Water,Sewer,Stormwater	10-City Leased	5156100	139594.01	89146.81
01-Water,Sewer,Stormwater	11-Hospital/University	270768900	5201713.02	4206804.57
01-Water,Sewer,Stormwater	12-Scheduled	11500	376.89	254.36
01-Water,Sewer,Stormwater	13-Fire Service	10799500	289940.76	229741.65
01-Water,Sewer,Stormwater	14-City Government	446245200	10691368.56	9838021.72
02-Water Only	01-General Service-Residential	392200	12178.54	0
02-Water Only	02-General Service-Commercial	759200	20810.19	9210.31
02-Water Only	03-General Service-Industrial	0	0	0
02-Water Only	04-General Service-Public Utilities	0	0	0
02-Water Only	05-P.H.A	0	0	0
02-Water Only	06-Charity/Non-Public Schools	3800	91.52	62.57
02-Water Only	07-Public Schools	111200	2279.86	1842.2
02-Water Only	08-Senior Citizens Discount	0	0	0
02-Water Only	09-Hand Bill	0	0	0
02-Water Only	10-City Leased	111400	3096.09	2432.09
02-Water Only	11-Hospital/University	11800	286.7	194.8
02-Water Only	13-Fire Service	3168900	77978.84	1222.72
02-Water Only	14-City Government	327600	9065.92	7247.93
03-Stormwater Only	01-General Service-Residential	5173100	162961.66	6349.27
03-Stormwater Only	02-General Service-Commercial	4507500	117618.58	6710.41
03-Stormwater Only	03-General Service-Industrial	2911400	72951.84	0

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		FY12		
Service Type	Customer Type	fy12 Billed Water Usage	fy12 Water Usage Charges	fy12 Sewer Usage Charges
03-Stormwater Only	04-General Service-Public Utilities	0	0	0
03-Stormwater Only	05-P.H.A	0	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	114300	2554.63	114.56
03-Stormwater Only	07-Public Schools	0	0	0
03-Stormwater Only	08-Senior Citizens Discount	44100	1088.03	54.66
03-Stormwater Only	09-Hand Bill	5196400	126492.78	0
03-Stormwater Only	10-City Leased	633500	16667.44	0
03-Stormwater Only	11-Hospital/University	14600	349.36	0
03-Stormwater Only	12-Scheduled	0	0	0
03-Stormwater Only	13-Fire Service	1500	67.45	6.07
03-Stormwater Only	14-City Government	10800	350.01	0
04-Sewer and Stormwater	01-General Service-Residential	9000	292.3	1710.83
04-Sewer and Stormwater	02-General Service-Commercial	0	0	0
04-Sewer and Stormwater	03-General Service-Industrial	0	0	204465.12
04-Sewer and Stormwater	04-General Service-Public Utilities	0	0	4122.44
04-Sewer and Stormwater	06-Charity/Non-Public Schools	0	0	1283.56
04-Sewer and Stormwater	09-Hand Bill	0	0	504529.16
04-Sewer and Stormwater	11-Hospital/University	0	0	0
05-Water and Stormwater	01-General Service-Residential	7601100	244848.82	0
05-Water and Stormwater	02-General Service-Commercial	11302800	298666.86	1523.22
05-Water and Stormwater	03-General Service-Industrial	16710400	413568.85	0
05-Water and Stormwater	04-General Service-Public Utilities	800	26.01	0
05-Water and Stormwater	05-P.H.A	0	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	178100	4141.35	24.9
05-Water and Stormwater	07-Public Schools	401600	8093.83	6647.34
05-Water and Stormwater	08-Senior Citizens Discount	54000	1331.5	0
05-Water and Stormwater	09-Hand Bill	28205100	1203465.66	0
05-Water and Stormwater	10-City Leased	2099100	56401.18	1153.49
05-Water and Stormwater	11-Hospital/University	57500	1306.91	146.12
05-Water and Stormwater	13-Fire Service	2238400	55912.2	143.91

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		FY12		
Service Type	Customer Type	fy12 Billed Water Usage	fy12 Water Usage Charges	fy12 Sewer Usage Charges
05-Water and Stormwater	14-City Government	1524000	42579.01	3799.22
06-Sewer Only	01-General Service-Residential	0	0	22.06
06-Sewer Only	02-General Service-Commercial	0	0	0
06-Sewer Only	03-General Service-Industrial	0	0	143.91
06-Sewer Only	04-General Service-Public Utilities	0	0	0
06-Sewer Only	06-Charity/Non-Public Schools	0	0	1086.94
06-Sewer Only	09-Hand Bill	0	0	396.32
06-Sewer Only	13-Fire Service	0	0	0
06-Sewer Only	14-City Government	0	0	0
07-Water and Sewer	01-General Service-Residential	116500	3753.54	2561.87
07-Water and Sewer	02-General Service-Commercial	494500	14139.32	9952.57
07-Water and Sewer	03-General Service-Industrial	500	14.93	10.65
07-Water and Sewer	05-P.H.A	373800	9594.88	7861.42
07-Water and Sewer	06-Charity/Non-Public Schools	170900	3518.19	2837.64
07-Water and Sewer	07-Public Schools	0	0	0
07-Water and Sewer	08-Senior Citizens Discount	2400	69	46.49
07-Water and Sewer	09-Hand Bill	0	0	25768.75
07-Water and Sewer	11-Hospital/University	23700	510.54	393.54
07-Water and Sewer	13-Fire Service	0	0	0
07-Water and Sewer	14-City Government	19500	508.87	419.97
08-RFSS, All Services	01-General Service-Residential	0	0	0
08-RFSS, All Services	02-General Service-Commercial	0	0	0
08-RFSS, All Services	03-General Service-Industrial	0	0	0
08-RFSS, All Services	04-General Service-Public Utilities	0	0	0
08-RFSS, All Services	05-P.H.A	0	0	0
08-RFSS, All Services	08-Senior Citizens Discount	0	0	0
08-RFSS, All Services	13-Fire Service	0	0	0
08-RFSS, All Services	14-City Government	0	0	0
09-RFSS, No Sewer	01-General Service-Residential	0	0	0
09-RFSS, No Sewer	02-General Service-Commercial	0	0	0

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		FY12		
Service Type	Customer Type	fy12 Billed Water Usage	fy12 Water Usage Charges	fy12 Sewer Usage Charges
10-Unknown	01-General Service-Residential	40800	1004.07	738.89
10-Unknown	02-General Service-Commercial	118800	9250.9	2383.11
10-Unknown	03-General Service-Industrial	30300	1176.47	761
10-Unknown	04-General Service-Public Utilities	100	2.99	2.13
10-Unknown	05-P.H.A	5300	2090.64	102.45
10-Unknown	06-Charity/Non-Public Schools	154100	3153.73	2558.85
10-Unknown	07-Public Schools	0	0	0
10-Unknown	08-Senior Citizens Discount	400	9.85	6.65
10-Unknown	09-Hand Bill	91800	2181.75	839.22
10-Unknown	10-City Leased	3400	130.7	51.47
10-Unknown	11-Hospital/University	37400	908.76	645.71
10-Unknown	13-Fire Service	0	0	0
10-Unknown	14-City Government	0	0	0
			184497192.7	133197700.5

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		FY13			
Service Type	Customer Type	fy13 # of Accounts	Months	fy13 # of Accounts	fy13 # of Original Bills Issued
01-Water,Sewer,Stormwater	01-General Service-Residential	4948557		412380	5024140
01-Water,Sewer,Stormwater	02-General Service-Commercial	393215		32768	397214
01-Water,Sewer,Stormwater	03-General Service-Industrial	12063		1005	12160
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	1258		105	1275
01-Water,Sewer,Stormwater	05-P.H.A	70811		5901	71227
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	26446		2204	26988
01-Water,Sewer,Stormwater	07-Public Schools	4617		385	4706
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	230636		19220	234172
01-Water,Sewer,Stormwater	09-Hand Bill	2969		247	2978
01-Water,Sewer,Stormwater	10-City Leased	544		45	560
01-Water,Sewer,Stormwater	11-Hospital/University	4356		363	4477
01-Water,Sewer,Stormwater	12-Scheduled	27		2	27
01-Water,Sewer,Stormwater	13-Fire Service	1015		85	1029
01-Water,Sewer,Stormwater	14-City Government	10466		872	11175
02-Water Only	01-General Service-Residential	6731		561	7961
02-Water Only	02-General Service-Commercial	4587		382	5453
02-Water Only	03-General Service-Industrial	259		22	309
02-Water Only	04-General Service-Public Utilities	19		2	22
02-Water Only	05-P.H.A	1364		114	1635
02-Water Only	06-Charity/Non-Public Schools	284		24	339
02-Water Only	07-Public Schools	781		65	934
02-Water Only	08-Senior Citizens Discount	10		1	12
02-Water Only	09-Hand Bill	150		13	178
02-Water Only	10-City Leased	89		7	106
02-Water Only	11-Hospital/University	502		42	598
02-Water Only	13-Fire Service	37831		3153	45196
02-Water Only	14-City Government	834		70	930
03-Stormwater Only	01-General Service-Residential	295603		24634	301730
03-Stormwater Only	02-General Service-Commercial	418350		34863	432673
03-Stormwater Only	03-General Service-Industrial	165		14	176

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Service Type	Customer Type	FY13		
		fy13 # of Accounts	Months	fy13 # of Original Bills Issued
03-Stormwater Only	04-General Service-Public Utilities	15719	1310	16102
03-Stormwater Only	05-P.H.A	13795	1150	14780
03-Stormwater Only	06-Charity/Non-Public Schools	772	64	798
03-Stormwater Only	07-Public Schools	1005	84	1028
03-Stormwater Only	08-Senior Citizens Discount	2395	200	2446
03-Stormwater Only	09-Hand Bill	168	14	195
03-Stormwater Only	10-City Leased	0	0	0
03-Stormwater Only	11-Hospital/University	1824	152	1859
03-Stormwater Only	12-Scheduled	20	2	20
03-Stormwater Only	13-Fire Service	2780	232	3318
03-Stormwater Only	14-City Government	10712	893	11204
04-Sewer and Stormwater	01-General Service-Residential	294	25	304
04-Sewer and Stormwater	02-General Service-Commercial	0	0	0
04-Sewer and Stormwater	03-General Service-Industrial	5	0	5
04-Sewer and Stormwater	04-General Service-Public Utilities	0	0	0
04-Sewer and Stormwater	06-Charity/Non-Public Schools	11	1	11
04-Sewer and Stormwater	09-Hand Bill	217	18	241
04-Sewer and Stormwater	11-Hospital/University	0	0	0
05-Water and Stormwater	01-General Service-Residential	14275	1190	14525
05-Water and Stormwater	02-General Service-Commercial	1645	137	1713
05-Water and Stormwater	03-General Service-Industrial	191	16	192
05-Water and Stormwater	04-General Service-Public Utilities	12	1	12
05-Water and Stormwater	05-P.H.A	65	5	84
05-Water and Stormwater	06-Charity/Non-Public Schools	194	16	205
05-Water and Stormwater	07-Public Schools	16	1	18
05-Water and Stormwater	08-Senior Citizens Discount	160	13	160
05-Water and Stormwater	09-Hand Bill	39	3	40
05-Water and Stormwater	10-City Leased	196	16	210
05-Water and Stormwater	11-Hospital/University	27	2	29
05-Water and Stormwater	13-Fire Service	832	69	1020

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Service Type	Customer Type	FY13		
		fy13 # of Accounts	Months	fy13 # of Original Bills Issued
05-Water and Stormwater	14-City Government	378	32	420
06-Sewer Only	01-General Service-Residential	1	0	1
06-Sewer Only	02-General Service-Commercial	0	0	0
06-Sewer Only	03-General Service-Industrial	12	1	13
06-Sewer Only	04-General Service-Public Utilities	0	0	0
06-Sewer Only	06-Charity/Non-Public Schools	1	0	1
06-Sewer Only	09-Hand Bill	7	1	8
06-Sewer Only	13-Fire Service	0	0	0
06-Sewer Only	14-City Government	0	0	0
07-Water and Sewer	01-General Service-Residential	998	83	1038
07-Water and Sewer	02-General Service-Commercial	229	19	236
07-Water and Sewer	03-General Service-Industrial	1	0	1
07-Water and Sewer	05-P.H.A	27	2	27
07-Water and Sewer	06-Charity/Non-Public Schools	49	4	49
07-Water and Sewer	07-Public Schools	11	1	13
07-Water and Sewer	08-Senior Citizens Discount	14	1	14
07-Water and Sewer	09-Hand Bill	6	1	11
07-Water and Sewer	11-Hospital/University	1	0	1
07-Water and Sewer	13-Fire Service	12	1	13
07-Water and Sewer	14-City Government	30	3	31
08-RFSS, All Services	01-General Service-Residential	1435	120	1462
08-RFSS, All Services	02-General Service-Commercial	125	10	126
08-RFSS, All Services	03-General Service-Industrial	0	0	0
08-RFSS, All Services	04-General Service-Public Utilities	0	0	0
08-RFSS, All Services	05-P.H.A	2	0	2
08-RFSS, All Services	08-Senior Citizens Discount	0	0	0
08-RFSS, All Services	13-Fire Service	0	0	0
08-RFSS, All Services	14-City Government	9	1	9
09-RFSS, No Sewer	01-General Service-Residential	0	0	0
09-RFSS, No Sewer	02-General Service-Commercial	0	0	0

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		FY13		
Service Type	Customer Type	fy13 # of Accounts Months	fy13 # of Accounts	fy13 # of Original Bills Issued
10-Unknown	01-General Service-Residential	977	81	1232
10-Unknown	02-General Service-Commercial	4217	351	4607
10-Unknown	03-General Service-Industrial	167	14	173
10-Unknown	04-General Service-Public Utilities	72	6	102
10-Unknown	05-P.H.A	22	2	31
10-Unknown	06-Charity/Non-Public Schools	13	1	17
10-Unknown	07-Public Schools	5	0	8
10-Unknown	08-Senior Citizens Discount	0	0	0
10-Unknown	09-Hand Bill	469	39	478
10-Unknown	10-City Leased	0	0	0
10-Unknown	11-Hospital/University	14	1	16
10-Unknown	13-Fire Service	50	4	56
10-Unknown	14-City Government	185	15	243

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		FY13		
Service Type	Customer Type	fy13 Billed Water Usage	fy13 Water Usage Charges	fy13 Sewer Usage Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	3372122100	111509247.7	78262420.39
01-Water,Sewer,Stormwater	02-General Service-Commercial	1223831300	34140444.65	26890425.8
01-Water,Sewer,Stormwater	03-General Service-Industrial	83060300	1925111.5	1515974.3
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	8929000	250187.4	194800.54
01-Water,Sewer,Stormwater	05-P.H.A	166336300	4662831.69	3670487.12
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	161063800	3455396.48	2785417.94
01-Water,Sewer,Stormwater	07-Public Schools	52969000	1121607.49	923496.51
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	109863800	2789288.18	1922050.12
01-Water,Sewer,Stormwater	09-Hand Bill	527441300	11338824.63	6947698.65
01-Water,Sewer,Stormwater	10-City Leased	4381800	123564.49	83819.81
01-Water,Sewer,Stormwater	11-Hospital/University	261871900	5210871.73	4166431.41
01-Water,Sewer,Stormwater	12-Scheduled	15600	530.71	363.57
01-Water,Sewer,Stormwater	13-Fire Service	9847600	274345.82	225883.64
01-Water,Sewer,Stormwater	14-City Government	525898700	12861642.59	12132490.63
02-Water Only	01-General Service-Residential	515700	16591.38	0
02-Water Only	02-General Service-Commercial	2236600	62961.01	25945.95
02-Water Only	03-General Service-Industrial	0	0	0
02-Water Only	04-General Service-Public Utilities	0	0	0
02-Water Only	05-P.H.A	0	0	0
02-Water Only	06-Charity/Non-Public Schools	12900	324.49	220.44
02-Water Only	07-Public Schools	155300	3324.25	2713.88
02-Water Only	08-Senior Citizens Discount	0	0	0
02-Water Only	09-Hand Bill	0	0	0
02-Water Only	10-City Leased	165300	4777.34	3691.17
02-Water Only	11-Hospital/University	22000	562.42	384.34
02-Water Only	13-Fire Service	6114600	158441.04	9256.63
02-Water Only	14-City Government	497600	14359.81	11644.28
03-Stormwater Only	01-General Service-Residential	13643600	447385.64	322207.67
03-Stormwater Only	02-General Service-Commercial	180200	5861.94	4220.22
03-Stormwater Only	03-General Service-Industrial	100	463.37	0

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		FY13		
Service Type	Customer Type	fy13 Billed Water Usage	fy13 Water Usage Charges	fy13 Sewer Usage Charges
03-Stormwater Only	04-General Service-Public Utilities	4300	145.99	99.61
03-Stormwater Only	05-P.H.A	0	9.24	4.54
03-Stormwater Only	06-Charity/Non-Public Schools	130600	3195.63	7.43
03-Stormwater Only	07-Public Schools	0	0	0
03-Stormwater Only	08-Senior Citizens Discount	191200	4970.72	3500.45
03-Stormwater Only	09-Hand Bill	0	0	0
03-Stormwater Only	10-City Leased	0	0	0
03-Stormwater Only	11-Hospital/University	0	0	0
03-Stormwater Only	12-Scheduled	0	0	0
03-Stormwater Only	13-Fire Service	0	0	0
03-Stormwater Only	14-City Government	500	17.82	12.37
04-Sewer and Stormwater	01-General Service-Residential	0	0	2733
04-Sewer and Stormwater	02-General Service-Commercial	0	0	0
04-Sewer and Stormwater	03-General Service-Industrial	0	0	0
04-Sewer and Stormwater	04-General Service-Public Utilities	0	0	7419.87
04-Sewer and Stormwater	06-Charity/Non-Public Schools	0	0	2852.2
04-Sewer and Stormwater	09-Hand Bill	0	0	1266375.07
04-Sewer and Stormwater	11-Hospital/University	0	0	0
05-Water and Stormwater	01-General Service-Residential	11897100	391037.06	163.7
05-Water and Stormwater	02-General Service-Commercial	14858000	409572.22	37.11
05-Water and Stormwater	03-General Service-Industrial	8576200	227486.16	0
05-Water and Stormwater	04-General Service-Public Utilities	1100	36.7	0
05-Water and Stormwater	05-P.H.A	12300	361.22	0
05-Water and Stormwater	06-Charity/Non-Public Schools	409600	9528.36	11.82
05-Water and Stormwater	07-Public Schools	351400	7262.24	6047.75
05-Water and Stormwater	08-Senior Citizens Discount	68000	1745.07	0
05-Water and Stormwater	09-Hand Bill	39032000	953528.69	0
05-Water and Stormwater	10-City Leased	2265400	62559.32	0
05-Water and Stormwater	11-Hospital/University	37900	954.46	0
05-Water and Stormwater	13-Fire Service	8700	294.45	88.03

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		FY13		
Service Type	Customer Type	fy13 Billed Water Usage	fy13 Water Usage Charges	fy13 Sewer Usage Charges
05-Water and Stormwater	14-City Government	1441000	41789.26	0
06-Sewer Only	01-General Service-Residential	0	0	2.21
06-Sewer Only	02-General Service-Commercial	0	0	0
06-Sewer Only	03-General Service-Industrial	0	0	86.59
06-Sewer Only	04-General Service-Public Utilities	0	0	0
06-Sewer Only	06-Charity/Non-Public Schools	0	0	156.09
06-Sewer Only	09-Hand Bill	0	0	45172.65
06-Sewer Only	13-Fire Service	0	0	0
06-Sewer Only	14-City Government	0	0	0
07-Water and Sewer	01-General Service-Residential	864900	26339.63	18921.72
07-Water and Sewer	02-General Service-Commercial	634300	18678.92	14428.06
07-Water and Sewer	03-General Service-Industrial	200	6.57	4.43
07-Water and Sewer	05-P.H.A	613500	16284.88	13607.67
07-Water and Sewer	06-Charity/Non-Public Schools	165100	3562.03	2828.04
07-Water and Sewer	07-Public Schools	937500	18248.55	15346.55
07-Water and Sewer	08-Senior Citizens Discount	6100	155.08	105.79
07-Water and Sewer	09-Hand Bill	0	0	110183.62
07-Water and Sewer	11-Hospital/University	4100	91.2	68.08
07-Water and Sewer	13-Fire Service	13400	404.06	296.68
07-Water and Sewer	14-City Government	189000	5061.58	4184.47
08-RFSS, All Services	01-General Service-Residential	1054000	37974.35	25360.75
08-RFSS, All Services	02-General Service-Commercial	145300	4800.05	3528.19
08-RFSS, All Services	03-General Service-Industrial	0	0	0
08-RFSS, All Services	04-General Service-Public Utilities	0	0	0
08-RFSS, All Services	05-P.H.A	1100	36.69	25.35
08-RFSS, All Services	08-Senior Citizens Discount	0	0	0
08-RFSS, All Services	13-Fire Service	0	0	0
08-RFSS, All Services	14-City Government	4100	144.43	99.86
09-RFSS, No Sewer	01-General Service-Residential	0	0	0
09-RFSS, No Sewer	02-General Service-Commercial	0	0	0

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		FY13		
Service Type	Customer Type	fy13 Billed Water Usage	fy13 Water Usage Charges	fy13 Sewer Usage Charges
10-Unknown	01-General Service-Residential	118900	4035.88	2969.6
10-Unknown	02-General Service-Commercial	107200	3149.53	2377.83
10-Unknown	03-General Service-Industrial	26100	1129.95	458.84
10-Unknown	04-General Service-Public Utilities	0	0	0
10-Unknown	05-P.H.A	7300	56.61	38.35
10-Unknown	06-Charity/Non-Public Schools	72900	1555.71	1084.87
10-Unknown	07-Public Schools	0	0	0
10-Unknown	08-Senior Citizens Discount	0	0	0
10-Unknown	09-Hand Bill	78000	8955.51	276.23
10-Unknown	10-City Leased	0	0	0
10-Unknown	11-Hospital/University	4900	105.31	81.37
10-Unknown	13-Fire Service	1500	53.45	37.11
10-Unknown	14-City Government	194100	74429.21	37326.19
			192718701.5	141690455.2

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Service Type	Customer Type	FY14		
		fy14 # of Accounts	Months	fy14 # of Original Bills Issued
01-Water,Sewer,Stormwater	01-General Service-Residential	4945771	412148	4994124
01-Water,Sewer,Stormwater	02-General Service-Commercial	404336	33695	406971
01-Water,Sewer,Stormwater	03-General Service-Industrial	12563	1047	12637
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	1388	116	1396
01-Water,Sewer,Stormwater	05-P.H.A	70253	5854	70539
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	26544	2212	26904
01-Water,Sewer,Stormwater	07-Public Schools	4670	389	4725
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	234039	19503	236329
01-Water,Sewer,Stormwater	09-Hand Bill	3033	253	3043
01-Water,Sewer,Stormwater	10-City Leased	527	44	534
01-Water,Sewer,Stormwater	11-Hospital/University	4497	375	4559
01-Water,Sewer,Stormwater	12-Scheduled	24	2	24
01-Water,Sewer,Stormwater	13-Fire Service	935	78	941
01-Water,Sewer,Stormwater	14-City Government	10489	874	10778
02-Water Only	01-General Service-Residential	7304	609	8763
02-Water Only	02-General Service-Commercial	5111	426	6074
02-Water Only	03-General Service-Industrial	267	22	319
02-Water Only	04-General Service-Public Utilities	19	2	24
02-Water Only	05-P.H.A	1418	118	1706
02-Water Only	06-Charity/Non-Public Schools	270	23	329
02-Water Only	07-Public Schools	817	68	975
02-Water Only	08-Senior Citizens Discount	10	1	12
02-Water Only	09-Hand Bill	171	14	205
02-Water Only	10-City Leased	77	6	88
02-Water Only	11-Hospital/University	572	48	668
02-Water Only	13-Fire Service	40206	3351	48090
02-Water Only	14-City Government	755	63	793
03-Stormwater Only	01-General Service-Residential	376599	31383	379695
03-Stormwater Only	02-General Service-Commercial	417397	34783	423320
03-Stormwater Only	03-General Service-Industrial	166	14	171

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Service Type	Customer Type	FY14		
		fy14 # of Accounts	Months	fy14 # of Original Bills Issued
03-Stormwater Only	04-General Service-Public Utilities	15389	1282	15471
03-Stormwater Only	05-P.H.A	13917	1160	14484
03-Stormwater Only	06-Charity/Non-Public Schools	1213	101	1217
03-Stormwater Only	07-Public Schools	998	83	1008
03-Stormwater Only	08-Senior Citizens Discount	3574	298	3609
03-Stormwater Only	09-Hand Bill	139	12	150
03-Stormwater Only	10-City Leased	0	0	0
03-Stormwater Only	11-Hospital/University	1888	157	1910
03-Stormwater Only	12-Scheduled	25	2	25
03-Stormwater Only	13-Fire Service	2502	209	2966
03-Stormwater Only	14-City Government	8989	749	9146
04-Sewer and Stormwater	01-General Service-Residential	427	36	432
04-Sewer and Stormwater	02-General Service-Commercial	0	0	0
04-Sewer and Stormwater	03-General Service-Industrial	12	1	12
04-Sewer and Stormwater	04-General Service-Public Utilities	4	0	4
04-Sewer and Stormwater	06-Charity/Non-Public Schools	11	1	11
04-Sewer and Stormwater	09-Hand Bill	220	18	224
04-Sewer and Stormwater	11-Hospital/University	12	1	12
05-Water and Stormwater	01-General Service-Residential	17434	1453	17560
05-Water and Stormwater	02-General Service-Commercial	1861	155	1885
05-Water and Stormwater	03-General Service-Industrial	207	17	207
05-Water and Stormwater	04-General Service-Public Utilities	12	1	12
05-Water and Stormwater	05-P.H.A	54	5	58
05-Water and Stormwater	06-Charity/Non-Public Schools	365	30	370
05-Water and Stormwater	07-Public Schools	8	1	8
05-Water and Stormwater	08-Senior Citizens Discount	204	17	204
05-Water and Stormwater	09-Hand Bill	38	3	38
05-Water and Stormwater	10-City Leased	237	20	246
05-Water and Stormwater	11-Hospital/University	43	4	43
05-Water and Stormwater	13-Fire Service	934	78	1076

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Service Type	Customer Type	FY14		
		fy14 # of Accounts Months	fy14 # of Accounts	fy14 # of Original Bills Issued
05-Water and Stormwater	14-City Government	360	30	372
06-Sewer Only	01-General Service-Residential	3	0	3
06-Sewer Only	02-General Service-Commercial	2	0	2
06-Sewer Only	03-General Service-Industrial	3	0	3
06-Sewer Only	04-General Service-Public Utilities	0	0	0
06-Sewer Only	06-Charity/Non-Public Schools	0	0	0
06-Sewer Only	09-Hand Bill	12	1	12
06-Sewer Only	13-Fire Service	5	0	6
06-Sewer Only	14-City Government	0	0	0
07-Water and Sewer	01-General Service-Residential	203	17	209
07-Water and Sewer	02-General Service-Commercial	202	17	210
07-Water and Sewer	03-General Service-Industrial	0	0	0
07-Water and Sewer	05-P.H.A	25	2	25
07-Water and Sewer	06-Charity/Non-Public Schools	37	3	37
07-Water and Sewer	07-Public Schools	12	1	12
07-Water and Sewer	08-Senior Citizens Discount	12	1	12
07-Water and Sewer	09-Hand Bill	0	0	0
07-Water and Sewer	11-Hospital/University	0	0	0
07-Water and Sewer	13-Fire Service	10	1	12
07-Water and Sewer	14-City Government	12	1	12
08-RFSS, All Services	01-General Service-Residential	7023	585	7057
08-RFSS, All Services	02-General Service-Commercial	476	40	476
08-RFSS, All Services	03-General Service-Industrial	0	0	0
08-RFSS, All Services	04-General Service-Public Utilities	1	0	1
08-RFSS, All Services	05-P.H.A	0	0	0
08-RFSS, All Services	08-Senior Citizens Discount	0	0	0
08-RFSS, All Services	13-Fire Service	24	2	24
08-RFSS, All Services	14-City Government	23	2	23
09-RFSS, No Sewer	01-General Service-Residential	9	1	9
09-RFSS, No Sewer	02-General Service-Commercial	0	0	0

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		FY14		
Service Type	Customer Type	fy14 # of Accounts Months	fy14 # of Accounts	fy14 # of Original Bills Issued
10-Unknown	01-General Service-Residential	1034	86	1285
10-Unknown	02-General Service-Commercial	4919	410	5397
10-Unknown	03-General Service-Industrial	194	16	206
10-Unknown	04-General Service-Public Utilities	92	8	124
10-Unknown	05-P.H.A	10	1	12
10-Unknown	06-Charity/Non-Public Schools	10	1	12
10-Unknown	07-Public Schools	0	0	0
10-Unknown	08-Senior Citizens Discount	1	0	2
10-Unknown	09-Hand Bill	449	37	451
10-Unknown	10-City Leased	0	0	0
10-Unknown	11-Hospital/University	24	2	28
10-Unknown	13-Fire Service	1207	101	1505
10-Unknown	14-City Government	111	9	118

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		FY14		
Service Type	Customer Type	fy14 Billed Water Usage	fy14 Water Usage Charges	fy14 Sewer Usage Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	3238111400	116766206.4	84461332.6
01-Water,Sewer,Stormwater	02-General Service-Commercial	1204698900	36941801.49	29726830.25
01-Water,Sewer,Stormwater	03-General Service-Industrial	84321900	2102455.09	1679502.94
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	8506700	263282.06	208726.28
01-Water,Sewer,Stormwater	05-P.H.A	165337100	5035871.43	4106545.14
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	155916000	3659219.79	3029298.94
01-Water,Sewer,Stormwater	07-Public Schools	54937400	1264788.7	1072108.8
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	109577300	3013892.3	2148891.42
01-Water,Sewer,Stormwater	09-Hand Bill	524773300	12423730.85	8082844.37
01-Water,Sewer,Stormwater	10-City Leased	4442400	136798.85	109732.09
01-Water,Sewer,Stormwater	11-Hospital/University	262321700	5721107.24	4724240.91
01-Water,Sewer,Stormwater	12-Scheduled	22000	815.9	575.47
01-Water,Sewer,Stormwater	13-Fire Service	2960100	94655.32	77163.51
01-Water,Sewer,Stormwater	14-City Government	504989100	13380776.81	13145218.48
02-Water Only	01-General Service-Residential	129200	4658.46	1035.34
02-Water Only	02-General Service-Commercial	621300	20408.02	16209.45
02-Water Only	03-General Service-Industrial	0	0	0
02-Water Only	04-General Service-Public Utilities	0	0	0
02-Water Only	05-P.H.A	0	0	0
02-Water Only	06-Charity/Non-Public Schools	62300	1510.05	237.14
02-Water Only	07-Public Schools	371200	8634.01	7283.03
02-Water Only	08-Senior Citizens Discount	0	0	0
02-Water Only	09-Hand Bill	0	0	0
02-Water Only	10-City Leased	146100	4562.59	3823.32
02-Water Only	11-Hospital/University	19200	534.4	376.9
02-Water Only	13-Fire Service	6276200	176257.34	707.24
02-Water Only	14-City Government	448200	14122.13	11726.32
03-Stormwater Only	01-General Service-Residential	13149200	459124.68	339385.24
03-Stormwater Only	02-General Service-Commercial	144500	4625.02	3598.06
03-Stormwater Only	03-General Service-Industrial	0	0	0

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		FY14		
Service Type	Customer Type	fy14 Billed Water Usage	fy14 Water Usage Charges	fy14 Sewer Usage Charges
03-Stormwater Only	04-General Service-Public Utilities	100	3.71	2.62
03-Stormwater Only	05-P.H.A	100	3.52	2.49
03-Stormwater Only	06-Charity/Non-Public Schools	33900	910.03	11.46
03-Stormwater Only	07-Public Schools	0	0	0
03-Stormwater Only	08-Senior Citizens Discount	289700	7421.91	5652.32
03-Stormwater Only	09-Hand Bill	0	0	0
03-Stormwater Only	10-City Leased	0	0	0
03-Stormwater Only	11-Hospital/University	0	0	0
03-Stormwater Only	12-Scheduled	0	0	0
03-Stormwater Only	13-Fire Service	300	11.14	7.86
03-Stormwater Only	14-City Government	200	7.42	5.24
04-Sewer and Stormwater	01-General Service-Residential	8900	329.62	3352.34
04-Sewer and Stormwater	02-General Service-Commercial	0	0	0
04-Sewer and Stormwater	03-General Service-Industrial	0	0	0
04-Sewer and Stormwater	04-General Service-Public Utilities	0	0	8292.58
04-Sewer and Stormwater	06-Charity/Non-Public Schools	0	0	3052.78
04-Sewer and Stormwater	09-Hand Bill	0	0	1778317.22
04-Sewer and Stormwater	11-Hospital/University	0	0	0
05-Water and Stormwater	01-General Service-Residential	13006800	469072.18	20.96
05-Water and Stormwater	02-General Service-Commercial	18446000	552962.84	-14.84
05-Water and Stormwater	03-General Service-Industrial	11748700	335030.66	0
05-Water and Stormwater	04-General Service-Public Utilities	1200	44.54	0
05-Water and Stormwater	05-P.H.A	23200	718.2	0
05-Water and Stormwater	06-Charity/Non-Public Schools	5533300	113466.95	7.86
05-Water and Stormwater	07-Public Schools	89900	2027.16	1738.56
05-Water and Stormwater	08-Senior Citizens Discount	82900	2781.55	9.17
05-Water and Stormwater	09-Hand Bill	37722500	1012742.94	0
05-Water and Stormwater	10-City Leased	3506200	106149.33	0
05-Water and Stormwater	11-Hospital/University	31700	854.14	0
05-Water and Stormwater	13-Fire Service	9800	359.15	241.7

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		FY14		
Service Type	Customer Type	fy14 Billed Water Usage	fy14 Water Usage Charges	fy14 Sewer Usage Charges
05-Water and Stormwater	14-City Government	1211700	38445.8	0
06-Sewer Only	01-General Service-Residential	600	22.26	15.72
06-Sewer Only	02-General Service-Commercial	1000	37.12	26.19
06-Sewer Only	03-General Service-Industrial	0	0	0
06-Sewer Only	04-General Service-Public Utilities	0	0	0
06-Sewer Only	06-Charity/Non-Public Schools	0	0	0
06-Sewer Only	09-Hand Bill	0	0	202280.56
06-Sewer Only	13-Fire Service	0	0	0
06-Sewer Only	14-City Government	0	0	0
07-Water and Sewer	01-General Service-Residential	40900	1507.39	1060.96
07-Water and Sewer	02-General Service-Commercial	461700	15251.96	12189.43
07-Water and Sewer	03-General Service-Industrial	0	0	0
07-Water and Sewer	05-P.H.A	623500	18074.96	15486.63
07-Water and Sewer	06-Charity/Non-Public Schools	138200	3339.12	2701.66
07-Water and Sewer	07-Public Schools	165700	3875.12	3250.41
07-Water and Sewer	08-Senior Citizens Discount	13000	355.02	253.72
07-Water and Sewer	09-Hand Bill	0	0	0
07-Water and Sewer	11-Hospital/University	0	0	0
07-Water and Sewer	13-Fire Service	0	0	0
07-Water and Sewer	14-City Government	0	0	0
08-RFSS, All Services	01-General Service-Residential	3629200	133668.45	94641.61
08-RFSS, All Services	02-General Service-Commercial	218000	8255.29	5700.73
08-RFSS, All Services	03-General Service-Industrial	0	0	0
08-RFSS, All Services	04-General Service-Public Utilities	200	7.42	5.24
08-RFSS, All Services	05-P.H.A	0	0	0
08-RFSS, All Services	08-Senior Citizens Discount	0	0	0
08-RFSS, All Services	13-Fire Service	16800	623.63	440
08-RFSS, All Services	14-City Government	15200	538.77	381.49
09-RFSS, No Sewer	01-General Service-Residential	2900	107.66	75.98
09-RFSS, No Sewer	02-General Service-Commercial	0	0	0

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		FY14		
Service Type	Customer Type	fy14 Billed Water Usage	fy14 Water Usage Charges	fy14 Sewer Usage Charges
10-Unknown	01-General Service-Residential	148300	4789.42	3749.95
10-Unknown	02-General Service-Commercial	-5800	235.39	-176.6
10-Unknown	03-General Service-Industrial	5400	190.76	141.43
10-Unknown	04-General Service-Public Utilities	0	0	0
10-Unknown	05-P.H.A	0	0	0
10-Unknown	06-Charity/Non-Public Schools	2500	66.47	49.11
10-Unknown	07-Public Schools	0	0	0
10-Unknown	08-Senior Citizens Discount	0	0	0
10-Unknown	09-Hand Bill	0	0	0
10-Unknown	10-City Leased	0	0	0
10-Unknown	11-Hospital/University	0	0	0
10-Unknown	13-Fire Service	14100	523.39	0
10-Unknown	14-City Government	0	0	0
			204334651.3	155100367.8

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		FY15			
Service Type	Customer Type	fy15 # of Accounts	Months	fy15 # of Accounts	fy15 # of Original Bills Issued
01-Water,Sewer,Stormwater	01-General Service-Residential	4868583		405715	4940024
01-Water,Sewer,Stormwater	02-General Service-Commercial	404764		33730	408542
01-Water,Sewer,Stormwater	03-General Service-Industrial	12453		1038	12534
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	1496		125	1506
01-Water,Sewer,Stormwater	05-P.H.A	69003		5750	69348
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	25401		2117	25843
01-Water,Sewer,Stormwater	07-Public Schools	4553		379	4620
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	242069		20172	245754
01-Water,Sewer,Stormwater	09-Hand Bill	2979		248	3003
01-Water,Sewer,Stormwater	10-City Leased	569		47	572
01-Water,Sewer,Stormwater	11-Hospital/University	5154		430	5213
01-Water,Sewer,Stormwater	12-Scheduled	27		2	27
01-Water,Sewer,Stormwater	13-Fire Service	862		72	868
01-Water,Sewer,Stormwater	14-City Government	11116		926	11231
02-Water Only	01-General Service-Residential	8474		706	9257
02-Water Only	02-General Service-Commercial	5868		489	6457
02-Water Only	03-General Service-Industrial	302		25	329
02-Water Only	04-General Service-Public Utilities	21		2	22
02-Water Only	05-P.H.A	1575		131	1739
02-Water Only	06-Charity/Non-Public Schools	105		9	114
02-Water Only	07-Public Schools	877		73	980
02-Water Only	08-Senior Citizens Discount	11		1	12
02-Water Only	09-Hand Bill	210		18	229
02-Water Only	10-City Leased	103		9	109
02-Water Only	11-Hospital/University	805		67	890
02-Water Only	13-Fire Service	47044		3920	51265
02-Water Only	14-City Government	938		78	1031
03-Stormwater Only	01-General Service-Residential	421230		35103	426913
03-Stormwater Only	02-General Service-Commercial	404667		33722	414756
03-Stormwater Only	03-General Service-Industrial	153		13	158

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Service Type	Customer Type	FY15		
		fy15 # of Accounts	Months	fy15 # of Original Bills Issued
03-Stormwater Only	04-General Service-Public Utilities	14860	1238	15119
03-Stormwater Only	05-P.H.A	13962	1164	14626
03-Stormwater Only	06-Charity/Non-Public Schools	1077	90	1108
03-Stormwater Only	07-Public Schools	983	82	1001
03-Stormwater Only	08-Senior Citizens Discount	4503	375	4557
03-Stormwater Only	09-Hand Bill	115	10	120
03-Stormwater Only	10-City Leased	0	0	0
03-Stormwater Only	11-Hospital/University	2132	178	2165
03-Stormwater Only	12-Scheduled	21	2	21
03-Stormwater Only	13-Fire Service	2483	207	2699
03-Stormwater Only	14-City Government	9371	781	9624
04-Sewer and Stormwater	01-General Service-Residential	440	37	445
04-Sewer and Stormwater	02-General Service-Commercial	0	0	0
04-Sewer and Stormwater	03-General Service-Industrial	12	1	12
04-Sewer and Stormwater	04-General Service-Public Utilities	12	1	12
04-Sewer and Stormwater	06-Charity/Non-Public Schools	10	1	11
04-Sewer and Stormwater	09-Hand Bill	229	19	236
04-Sewer and Stormwater	11-Hospital/University	12	1	12
05-Water and Stormwater	01-General Service-Residential	17312	1443	17434
05-Water and Stormwater	02-General Service-Commercial	1881	157	1908
05-Water and Stormwater	03-General Service-Industrial	187	16	190
05-Water and Stormwater	04-General Service-Public Utilities	12	1	12
05-Water and Stormwater	05-P.H.A	34	3	36
05-Water and Stormwater	06-Charity/Non-Public Schools	287	24	291
05-Water and Stormwater	07-Public Schools	4	0	4
05-Water and Stormwater	08-Senior Citizens Discount	198	17	198
05-Water and Stormwater	09-Hand Bill	52	4	52
05-Water and Stormwater	10-City Leased	254	21	262
05-Water and Stormwater	11-Hospital/University	36	3	36
05-Water and Stormwater	13-Fire Service	1292	108	1451

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Service Type	Customer Type	FY15		
		fy15 # of Accounts	Months	fy15 # of Original Bills Issued
05-Water and Stormwater	14-City Government	391	33	398
06-Sewer Only	01-General Service-Residential	18	2	18
06-Sewer Only	02-General Service-Commercial	12	1	12
06-Sewer Only	03-General Service-Industrial	0	0	0
06-Sewer Only	04-General Service-Public Utilities	3	0	3
06-Sewer Only	06-Charity/Non-Public Schools	0	0	0
06-Sewer Only	09-Hand Bill	15	1	15
06-Sewer Only	13-Fire Service	11	1	12
06-Sewer Only	14-City Government	5	0	5
07-Water and Sewer	01-General Service-Residential	222	19	226
07-Water and Sewer	02-General Service-Commercial	246	21	252
07-Water and Sewer	03-General Service-Industrial	0	0	0
07-Water and Sewer	05-P.H.A	26	2	26
07-Water and Sewer	06-Charity/Non-Public Schools	34	3	34
07-Water and Sewer	07-Public Schools	8	1	8
07-Water and Sewer	08-Senior Citizens Discount	11	1	11
07-Water and Sewer	09-Hand Bill	0	0	0
07-Water and Sewer	11-Hospital/University	0	0	0
07-Water and Sewer	13-Fire Service	10	1	12
07-Water and Sewer	14-City Government	12	1	12
08-RFSS, All Services	01-General Service-Residential	11212	934	11244
08-RFSS, All Services	02-General Service-Commercial	512	43	514
08-RFSS, All Services	03-General Service-Industrial	1	0	1
08-RFSS, All Services	04-General Service-Public Utilities	0	0	0
08-RFSS, All Services	05-P.H.A	100	8	100
08-RFSS, All Services	08-Senior Citizens Discount	8	1	8
08-RFSS, All Services	13-Fire Service	0	0	0
08-RFSS, All Services	14-City Government	12	1	12
09-RFSS, No Sewer	01-General Service-Residential	13	1	14
09-RFSS, No Sewer	02-General Service-Commercial	6	1	6

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		FY15		
Service Type	Customer Type	fy15 # of Accounts Months	fy15 # of Accounts	fy15 # of Original Bills Issued
10-Unknown	01-General Service-Residential	1413	118	1738
10-Unknown	02-General Service-Commercial	5629	469	6718
10-Unknown	03-General Service-Industrial	218	18	235
10-Unknown	04-General Service-Public Utilities	167	14	198
10-Unknown	05-P.H.A	163	14	213
10-Unknown	06-Charity/Non-Public Schools	9	1	13
10-Unknown	07-Public Schools	3	0	4
10-Unknown	08-Senior Citizens Discount	1	0	2
10-Unknown	09-Hand Bill	465	39	469
10-Unknown	10-City Leased	0	0	0
10-Unknown	11-Hospital/University	44	4	52
10-Unknown	13-Fire Service	3168	264	3503
10-Unknown	14-City Government	73	6	80

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		FY15		
Service Type	Customer Type	fy15 Billed Water Usage	fy15 Water Usage Charges	fy15 Sewer Usage Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	3153601400	119178110.6	88053492.76
01-Water,Sewer,Stormwater	02-General Service-Commercial	1264149900	40264603.01	33452874.19
01-Water,Sewer,Stormwater	03-General Service-Industrial	84726500	2203426.06	1797758.71
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	10702100	337483.23	274617.06
01-Water,Sewer,Stormwater	05-P.H.A	177531200	5592741.26	4710325.87
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	135908500	3360177.18	2832641.59
01-Water,Sewer,Stormwater	07-Public Schools	54451800	1311657.99	1133976.45
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	114624600	3310312.34	2409329.39
01-Water,Sewer,Stormwater	09-Hand Bill	497645500	12223468.29	8731499.14
01-Water,Sewer,Stormwater	10-City Leased	4467300	137733.91	121442.59
01-Water,Sewer,Stormwater	11-Hospital/University	272715900	6263668.12	5331378.27
01-Water,Sewer,Stormwater	12-Scheduled	20700	805.89	579.36
01-Water,Sewer,Stormwater	13-Fire Service	2636000	87203.81	71826.74
01-Water,Sewer,Stormwater	14-City Government	564482100	15634137.25	15472649.49
02-Water Only	01-General Service-Residential	91700	3560.58	341.71
02-Water Only	02-General Service-Commercial	732200	24635.41	20405.72
02-Water Only	03-General Service-Industrial	100	3.91	2.81
02-Water Only	04-General Service-Public Utilities	0	0	0
02-Water Only	05-P.H.A	0	0	0
02-Water Only	06-Charity/Non-Public Schools	138700	3413.5	0
02-Water Only	07-Public Schools	560200	13473.46	11725.96
02-Water Only	08-Senior Citizens Discount	0	0	0
02-Water Only	09-Hand Bill	0	0	0
02-Water Only	10-City Leased	167400	5501.66	4675.61
02-Water Only	11-Hospital/University	24200	705.31	506.19
02-Water Only	13-Fire Service	8902200	262503.34	26412.94
02-Water Only	14-City Government	672100	22017.38	18742.17
03-Stormwater Only	01-General Service-Residential	47418300	1739745.47	1316947.82
03-Stormwater Only	02-General Service-Commercial	383100	12582.65	9462.23
03-Stormwater Only	03-General Service-Industrial	26100	955.46	719.1

Rpt1a v5 2015.02

		FY15		
Service Type	Customer Type	fy15 Billed Water Usage	fy15 Water Usage Charges	fy15 Sewer Usage Charges
03-Stormwater Only	04-General Service-Public Utilities	900	32.9	25.27
03-Stormwater Only	05-P.H.A	0	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	29800	870.2	157.47
03-Stormwater Only	07-Public Schools	0	0	0
03-Stormwater Only	08-Senior Citizens Discount	1252500	32833.78	26273.38
03-Stormwater Only	09-Hand Bill	0	0	0
03-Stormwater Only	10-City Leased	0	0	0
03-Stormwater Only	11-Hospital/University	0	0	0
03-Stormwater Only	12-Scheduled	0	0	0
03-Stormwater Only	13-Fire Service	0	0	0
03-Stormwater Only	14-City Government	7000	259.9	196.53
04-Sewer and Stormwater	01-General Service-Residential	25900	1006.81	4799.9
04-Sewer and Stormwater	02-General Service-Commercial	0	0	0
04-Sewer and Stormwater	03-General Service-Industrial	0	0	0
04-Sewer and Stormwater	04-General Service-Public Utilities	0	0	8979.75
04-Sewer and Stormwater	06-Charity/Non-Public Schools	0	0	3276.43
04-Sewer and Stormwater	09-Hand Bill	0	0	1703764.2
04-Sewer and Stormwater	11-Hospital/University	0	0	0
05-Water and Stormwater	01-General Service-Residential	13975400	525920.81	2651.29
05-Water and Stormwater	02-General Service-Commercial	28525600	873137.53	0
05-Water and Stormwater	03-General Service-Industrial	5927300	180615.82	0
05-Water and Stormwater	04-General Service-Public Utilities	600	23.45	0
05-Water and Stormwater	05-P.H.A	34300	1104.27	0
05-Water and Stormwater	06-Charity/Non-Public Schools	592400	16054.49	0
05-Water and Stormwater	07-Public Schools	0	0	0
05-Water and Stormwater	08-Senior Citizens Discount	71400	2085.12	0
05-Water and Stormwater	09-Hand Bill	76304400	1995645.05	0
05-Water and Stormwater	10-City Leased	4349600	135839.29	0
05-Water and Stormwater	11-Hospital/University	18000	525.52	0
05-Water and Stormwater	13-Fire Service	1400	53.9	38.54

Rpt1a v5 2015.02

		FY15		
Service Type	Customer Type	fy15 Billed Water Usage	fy15 Water Usage Charges	fy15 Sewer Usage Charges
05-Water and Stormwater	14-City Government	1402000	46252.37	0
06-Sewer Only	01-General Service-Residential	13800	538.72	387.14
06-Sewer Only	02-General Service-Commercial	38800	1389.73	1089.1
06-Sewer Only	03-General Service-Industrial	0	0	0
06-Sewer Only	04-General Service-Public Utilities	8800	319.61	247.01
06-Sewer Only	06-Charity/Non-Public Schools	0	0	0
06-Sewer Only	09-Hand Bill	0	0	239885.47
06-Sewer Only	13-Fire Service	0	0	0
06-Sewer Only	14-City Government	17700	647.63	496.84
07-Water and Sewer	01-General Service-Residential	41200	2119.49	1384.52
07-Water and Sewer	02-General Service-Commercial	545800	18983.77	15185.71
07-Water and Sewer	03-General Service-Industrial	0	0	0
07-Water and Sewer	05-P.H.A	649100	19702.56	17266.93
07-Water and Sewer	06-Charity/Non-Public Schools	271100	6622.73	5669.85
07-Water and Sewer	07-Public Schools	97400	2407.04	2043.32
07-Water and Sewer	08-Senior Citizens Discount	2300	65.78	46.88
07-Water and Sewer	09-Hand Bill	0	0	0
07-Water and Sewer	11-Hospital/University	0	0	0
07-Water and Sewer	13-Fire Service	0	0	0
07-Water and Sewer	14-City Government	0	0	0
08-RFSS, All Services	01-General Service-Residential	5424200	210298.27	151564.53
08-RFSS, All Services	02-General Service-Commercial	301800	11261.11	8433.72
08-RFSS, All Services	03-General Service-Industrial	0	0	0
08-RFSS, All Services	04-General Service-Public Utilities	0	0	0
08-RFSS, All Services	05-P.H.A	70600	2619.26	1882.97
08-RFSS, All Services	08-Senior Citizens Discount	2800	90.82	65.25
08-RFSS, All Services	13-Fire Service	0	0	0
08-RFSS, All Services	14-City Government	7300	283.95	203.8
09-RFSS, No Sewer	01-General Service-Residential	4100	158.59	113.57
09-RFSS, No Sewer	02-General Service-Commercial	600	23.43	16.83

Rpt1a v5 2015.02

		FY15		
Service Type	Customer Type	fy15 Billed Water Usage	fy15 Water Usage Charges	fy15 Sewer Usage Charges
10-Unknown	01-General Service-Residential	116500	4214.02	3124.53
10-Unknown	02-General Service-Commercial	1380100	31928.76	28022.2
10-Unknown	03-General Service-Industrial	3400	121.38	90.4
10-Unknown	04-General Service-Public Utilities	0	0	0
10-Unknown	05-P.H.A	41500	1533.9	1106.66
10-Unknown	06-Charity/Non-Public Schools	7000	190.94	147.38
10-Unknown	07-Public Schools	0	0	0
10-Unknown	08-Senior Citizens Discount	0	0	0
10-Unknown	09-Hand Bill	0	0	67200
10-Unknown	10-City Leased	0	0	0
10-Unknown	11-Hospital/University	6100	163.69	127.58
10-Unknown	13-Fire Service	29100	1000.75	30.88
10-Unknown	14-City Government	510400	16402.18	14237.11
		6538889800	216139976.4	168114566.8

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
01-Water,Sewer,Stormwater	01-General Service-Residential	01-5/8"	5085259	423772
01-Water,Sewer,Stormwater	01-General Service-Residential	02-3/4"	325	27
01-Water,Sewer,Stormwater	01-General Service-Residential	03-1"	20601	1717
01-Water,Sewer,Stormwater	01-General Service-Residential	04-1.5"	6354	530
01-Water,Sewer,Stormwater	01-General Service-Residential	05-2"	4703	392
01-Water,Sewer,Stormwater	01-General Service-Residential	06-3"	1711	143
01-Water,Sewer,Stormwater	01-General Service-Residential	07-4"	571	48
01-Water,Sewer,Stormwater	01-General Service-Residential	08-6"	147	12
01-Water,Sewer,Stormwater	01-General Service-Residential	09-8"	33	3
01-Water,Sewer,Stormwater	01-General Service-Residential	11-12"	4	0
01-Water,Sewer,Stormwater	02-General Service-Commercial	01-5/8"	330731	27561
01-Water,Sewer,Stormwater	02-General Service-Commercial	02-3/4"	249	21
01-Water,Sewer,Stormwater	02-General Service-Commercial	03-1"	28969	2414
01-Water,Sewer,Stormwater	02-General Service-Commercial	04-1.5"	11915	993
01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	15874	1323
01-Water,Sewer,Stormwater	02-General Service-Commercial	06-3"	5389	449
01-Water,Sewer,Stormwater	02-General Service-Commercial	07-4"	2882	240
01-Water,Sewer,Stormwater	02-General Service-Commercial	08-6"	934	78
01-Water,Sewer,Stormwater	02-General Service-Commercial	09-8"	187	16
01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	59	5
01-Water,Sewer,Stormwater	03-General Service-Industrial	01-5/8"	6535	545
01-Water,Sewer,Stormwater	03-General Service-Industrial	03-1"	3051	254
01-Water,Sewer,Stormwater	03-General Service-Industrial	04-1.5"	1004	84
01-Water,Sewer,Stormwater	03-General Service-Industrial	05-2"	1392	116
01-Water,Sewer,Stormwater	03-General Service-Industrial	06-3"	527	44
01-Water,Sewer,Stormwater	03-General Service-Industrial	07-4"	217	18
01-Water,Sewer,Stormwater	03-General Service-Industrial	08-6"	81	7
01-Water,Sewer,Stormwater	03-General Service-Industrial	10-10"	26	2
01-Water,Sewer,Stormwater	03-General Service-Industrial	11-12"	2	0
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	01-5/8"	402	34

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	03-1"	283	24
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	04-1.5"	107	9
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	05-2"	160	13
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	06-3"	113	9
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	07-4"	47	4
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	08-6"	36	3
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	09-8"	0	0
01-Water,Sewer,Stormwater	05-P.H.A	01-5/8"	71318	5943
01-Water,Sewer,Stormwater	05-P.H.A	02-3/4"	5	0
01-Water,Sewer,Stormwater	05-P.H.A	03-1"	226	19
01-Water,Sewer,Stormwater	05-P.H.A	04-1.5"	127	11
01-Water,Sewer,Stormwater	05-P.H.A	05-2"	164	14
01-Water,Sewer,Stormwater	05-P.H.A	06-3"	425	35
01-Water,Sewer,Stormwater	05-P.H.A	07-4"	236	20
01-Water,Sewer,Stormwater	05-P.H.A	08-6"	166	14
01-Water,Sewer,Stormwater	05-P.H.A	09-8"	81	7
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	01-5/8"	15118	1260
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	02-3/4"	5	0
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	03-1"	3976	331
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	04-1.5"	1929	161
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	05-2"	2656	221
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	06-3"	1745	145
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	07-4"	1312	109
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	08-6"	143	12
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	09-8"	23	2
01-Water,Sewer,Stormwater	07-Public Schools	01-5/8"	161	13
01-Water,Sewer,Stormwater	07-Public Schools	03-1"	134	11
01-Water,Sewer,Stormwater	07-Public Schools	04-1.5"	84	7
01-Water,Sewer,Stormwater	07-Public Schools	05-2"	505	42
01-Water,Sewer,Stormwater	07-Public Schools	06-3"	1231	103

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
01-Water,Sewer,Stormwater	07-Public Schools	07-4"	2317	193
01-Water,Sewer,Stormwater	07-Public Schools	08-6"	244	20
01-Water,Sewer,Stormwater	07-Public Schools	09-8"	24	2
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	01-5/8"	229724	19144
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	02-3/4"	1	0
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	03-1"	29	2
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	04-1.5"	12	1
01-Water,Sewer,Stormwater	09-Hand Bill	01-5/8"	170	14
01-Water,Sewer,Stormwater	09-Hand Bill	03-1"	195	16
01-Water,Sewer,Stormwater	09-Hand Bill	04-1.5"	130	11
01-Water,Sewer,Stormwater	09-Hand Bill	05-2"	488	41
01-Water,Sewer,Stormwater	09-Hand Bill	06-3"	850	71
01-Water,Sewer,Stormwater	09-Hand Bill	07-4"	964	80
01-Water,Sewer,Stormwater	09-Hand Bill	08-6"	297	25
01-Water,Sewer,Stormwater	09-Hand Bill	09-8"	83	7
01-Water,Sewer,Stormwater	09-Hand Bill	10-10"	72	6
01-Water,Sewer,Stormwater	10-City Leased	01-5/8"	127	11
01-Water,Sewer,Stormwater	10-City Leased	03-1"	68	6
01-Water,Sewer,Stormwater	10-City Leased	04-1.5"	71	6
01-Water,Sewer,Stormwater	10-City Leased	05-2"	147	12
01-Water,Sewer,Stormwater	10-City Leased	06-3"	61	5
01-Water,Sewer,Stormwater	10-City Leased	07-4"	113	9
01-Water,Sewer,Stormwater	10-City Leased	08-6"	0	0
01-Water,Sewer,Stormwater	10-City Leased	09-8"	2	0
01-Water,Sewer,Stormwater	11-Hospital/University	01-5/8"	534	45
01-Water,Sewer,Stormwater	11-Hospital/University	02-3/4"	5	0
01-Water,Sewer,Stormwater	11-Hospital/University	03-1"	268	22
01-Water,Sewer,Stormwater	11-Hospital/University	04-1.5"	133	11
01-Water,Sewer,Stormwater	11-Hospital/University	05-2"	637	53
01-Water,Sewer,Stormwater	11-Hospital/University	06-3"	998	83

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
01-Water,Sewer,Stormwater	11-Hospital/University	07-4"	1017	85
01-Water,Sewer,Stormwater	11-Hospital/University	08-6"	562	47
01-Water,Sewer,Stormwater	11-Hospital/University	09-8"	47	4
01-Water,Sewer,Stormwater	11-Hospital/University	10-10"	12	1
01-Water,Sewer,Stormwater	12-Scheduled	01-5/8"	24	2
01-Water,Sewer,Stormwater	13-Fire Service	01-5/8"	434	36
01-Water,Sewer,Stormwater	13-Fire Service	03-1"	196	16
01-Water,Sewer,Stormwater	13-Fire Service	04-1.5"	95	8
01-Water,Sewer,Stormwater	13-Fire Service	05-2"	131	11
01-Water,Sewer,Stormwater	13-Fire Service	06-3"	72	6
01-Water,Sewer,Stormwater	13-Fire Service	07-4"	75	6
01-Water,Sewer,Stormwater	13-Fire Service	08-6"	53	4
01-Water,Sewer,Stormwater	13-Fire Service	09-8"	13	1
01-Water,Sewer,Stormwater	13-Fire Service	10-10"	3	0
01-Water,Sewer,Stormwater	14-City Government	01-5/8"	3366	281
01-Water,Sewer,Stormwater	14-City Government	02-3/4"	22	2
01-Water,Sewer,Stormwater	14-City Government	03-1"	1482	124
01-Water,Sewer,Stormwater	14-City Government	04-1.5"	839	70
01-Water,Sewer,Stormwater	14-City Government	05-2"	2905	242
01-Water,Sewer,Stormwater	14-City Government	06-3"	1580	132
01-Water,Sewer,Stormwater	14-City Government	07-4"	760	63
01-Water,Sewer,Stormwater	14-City Government	08-6"	394	33
01-Water,Sewer,Stormwater	14-City Government	09-8"	153	13
01-Water,Sewer,Stormwater	14-City Government	10-10"	169	14
01-Water,Sewer,Stormwater	14-City Government	11-12"	11	1
02-Water Only	01-General Service-Residential	01-5/8"	434	36
02-Water Only	01-General Service-Residential	03-1"	63	5
02-Water Only	01-General Service-Residential	04-1.5"	101	8
02-Water Only	01-General Service-Residential	05-2"	2762	230
02-Water Only	01-General Service-Residential	06-3"	55	5

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
02-Water Only	01-General Service-Residential	07-4"	214	18
02-Water Only	01-General Service-Residential	08-6"	462	39
02-Water Only	01-General Service-Residential	09-8"	193	16
02-Water Only	01-General Service-Residential	10-10"	21	2
02-Water Only	01-General Service-Residential	11-12"	7	1
02-Water Only	01-General Service-Residential	Y-Unknown	0	0
02-Water Only	02-General Service-Commercial	01-5/8"	58	5
02-Water Only	02-General Service-Commercial	03-1"	19	2
02-Water Only	02-General Service-Commercial	04-1.5"	5	0
02-Water Only	02-General Service-Commercial	05-2"	388	32
02-Water Only	02-General Service-Commercial	06-3"	63	5
02-Water Only	02-General Service-Commercial	07-4"	660	55
02-Water Only	02-General Service-Commercial	08-6"	1077	90
02-Water Only	02-General Service-Commercial	09-8"	476	40
02-Water Only	02-General Service-Commercial	10-10"	45	4
02-Water Only	02-General Service-Commercial	11-12"	20	2
02-Water Only	03-General Service-Industrial	05-2"	20	2
02-Water Only	03-General Service-Industrial	07-4"	24	2
02-Water Only	03-General Service-Industrial	08-6"	83	7
02-Water Only	03-General Service-Industrial	09-8"	56	5
02-Water Only	03-General Service-Industrial	10-10"	7	1
02-Water Only	04-General Service-Public Utilities	05-2"	6	1
02-Water Only	04-General Service-Public Utilities	11-12"	5	0
02-Water Only	05-P.H.A	01-5/8"	42	4
02-Water Only	05-P.H.A	03-1"	256	21
02-Water Only	05-P.H.A	05-2"	212	18
02-Water Only	05-P.H.A	07-4"	69	6
02-Water Only	05-P.H.A	08-6"	83	7
02-Water Only	05-P.H.A	09-8"	18	2
02-Water Only	06-Charity/Non-Public Schools	01-5/8"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
02-Water Only	06-Charity/Non-Public Schools	03-1"	7	1
02-Water Only	06-Charity/Non-Public Schools	05-2"	7	1
02-Water Only	06-Charity/Non-Public Schools	06-3"	7	1
02-Water Only	06-Charity/Non-Public Schools	07-4"	63	5
02-Water Only	06-Charity/Non-Public Schools	08-6"	96	8
02-Water Only	06-Charity/Non-Public Schools	09-8"	7	1
02-Water Only	07-Public Schools	06-3"	21	2
02-Water Only	07-Public Schools	07-4"	67	6
02-Water Only	07-Public Schools	08-6"	352	29
02-Water Only	07-Public Schools	09-8"	101	8
02-Water Only	07-Public Schools	10-10"	14	1
02-Water Only	08-Senior Citizens Discount	05-2"	7	1
02-Water Only	09-Hand Bill	06-3"	7	1
02-Water Only	09-Hand Bill	07-4"	0	0
02-Water Only	09-Hand Bill	08-6"	49	4
02-Water Only	09-Hand Bill	09-8"	42	4
02-Water Only	10-City Leased	04-1.5"	2	0
02-Water Only	10-City Leased	05-2"	7	1
02-Water Only	10-City Leased	07-4"	28	2
02-Water Only	10-City Leased	08-6"	9	1
02-Water Only	10-City Leased	09-8"	2	0
02-Water Only	10-City Leased	10-10"	7	1
02-Water Only	11-Hospital/University	01-5/8"	6	1
02-Water Only	11-Hospital/University	03-1"	0	0
02-Water Only	11-Hospital/University	06-3"	7	1
02-Water Only	11-Hospital/University	07-4"	70	6
02-Water Only	11-Hospital/University	08-6"	207	17
02-Water Only	11-Hospital/University	09-8"	33	3
02-Water Only	11-Hospital/University	10-10"	14	1
02-Water Only	13-Fire Service	01-5/8"	88	7

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
02-Water Only	13-Fire Service	03-1"	115	10
02-Water Only	13-Fire Service	04-1.5"	33	3
02-Water Only	13-Fire Service	05-2"	1647	137
02-Water Only	13-Fire Service	06-3"	1420	118
02-Water Only	13-Fire Service	07-4"	7011	584
02-Water Only	13-Fire Service	08-6"	11387	949
02-Water Only	13-Fire Service	09-8"	3496	291
02-Water Only	13-Fire Service	10-10"	519	43
02-Water Only	13-Fire Service	11-12"	77	6
02-Water Only	14-City Government	03-1"	0	0
02-Water Only	14-City Government	05-2"	3	0
02-Water Only	14-City Government	06-3"	21	2
02-Water Only	14-City Government	07-4"	119	10
02-Water Only	14-City Government	08-6"	279	23
02-Water Only	14-City Government	09-8"	99	8
02-Water Only	14-City Government	10-10"	7	1
03-Stormwater Only	01-General Service-Residential	01-5/8"	8256	688
03-Stormwater Only	01-General Service-Residential	02-3/4"	65	5
03-Stormwater Only	01-General Service-Residential	03-1"	443	37
03-Stormwater Only	01-General Service-Residential	04-1.5"	143	12
03-Stormwater Only	01-General Service-Residential	05-2"	94	8
03-Stormwater Only	01-General Service-Residential	06-3"	17	1
03-Stormwater Only	01-General Service-Residential	07-4"	38	3
03-Stormwater Only	01-General Service-Residential	08-6"	33	3
03-Stormwater Only	01-General Service-Residential	09-8"	18	2
03-Stormwater Only	01-General Service-Residential	10-10"	3	0
03-Stormwater Only	01-General Service-Residential	12-Unknown	460	38
03-Stormwater Only	01-General Service-Residential	A-Unknown	153647	12804
03-Stormwater Only	02-General Service-Commercial	01-5/8"	1271	106
03-Stormwater Only	02-General Service-Commercial	02-3/4"	18	2

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
03-Stormwater Only	02-General Service-Commercial	03-1"	241	20
03-Stormwater Only	02-General Service-Commercial	04-1.5"	113	9
03-Stormwater Only	02-General Service-Commercial	05-2"	127	11
03-Stormwater Only	02-General Service-Commercial	06-3"	7	1
03-Stormwater Only	02-General Service-Commercial	07-4"	17	1
03-Stormwater Only	02-General Service-Commercial	08-6"	39	3
03-Stormwater Only	02-General Service-Commercial	09-8"	7	1
03-Stormwater Only	02-General Service-Commercial	12-Unknown	68	6
03-Stormwater Only	02-General Service-Commercial	A-Unknown	366685	30557
03-Stormwater Only	02-General Service-Commercial	Y-Unknown	5	0
03-Stormwater Only	03-General Service-Industrial	01-5/8"	12	1
03-Stormwater Only	03-General Service-Industrial	03-1"	12	1
03-Stormwater Only	03-General Service-Industrial	04-1.5"	12	1
03-Stormwater Only	03-General Service-Industrial	05-2"	12	1
03-Stormwater Only	03-General Service-Industrial	06-3"	13	1
03-Stormwater Only	03-General Service-Industrial	07-4"	23	2
03-Stormwater Only	03-General Service-Industrial	08-6"	10	1
03-Stormwater Only	03-General Service-Industrial	12-Unknown	0	0
03-Stormwater Only	03-General Service-Industrial	A-Unknown	77	6
03-Stormwater Only	03-General Service-Industrial	Y-Unknown	5	0
03-Stormwater Only	04-General Service-Public Utilities	01-5/8"	6	1
03-Stormwater Only	04-General Service-Public Utilities	03-1"	5	0
03-Stormwater Only	04-General Service-Public Utilities	05-2"	0	0
03-Stormwater Only	04-General Service-Public Utilities	A-Unknown	14074	1173
03-Stormwater Only	05-P.H.A	01-5/8"	346	29
03-Stormwater Only	05-P.H.A	03-1"	25	2
03-Stormwater Only	05-P.H.A	05-2"	3	0
03-Stormwater Only	05-P.H.A	A-Unknown	10771	898
03-Stormwater Only	06-Charity/Non-Public Schools	01-5/8"	35	3
03-Stormwater Only	06-Charity/Non-Public Schools	03-1"	10	1

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
03-Stormwater Only	06-Charity/Non-Public Schools	04-1.5"	8	1
03-Stormwater Only	06-Charity/Non-Public Schools	05-2"	23	2
03-Stormwater Only	06-Charity/Non-Public Schools	07-4"	2	0
03-Stormwater Only	06-Charity/Non-Public Schools	09-8"	3	0
03-Stormwater Only	06-Charity/Non-Public Schools	A-Unknown	456	38
03-Stormwater Only	07-Public Schools	01-5/8"	14	1
03-Stormwater Only	07-Public Schools	08-6"	0	0
03-Stormwater Only	07-Public Schools	09-8"	0	0
03-Stormwater Only	07-Public Schools	12-Unknown	15	1
03-Stormwater Only	07-Public Schools	A-Unknown	896	75
03-Stormwater Only	08-Senior Citizens Discount	01-5/8"	86	7
03-Stormwater Only	08-Senior Citizens Discount	A-Unknown	60	5
03-Stormwater Only	09-Hand Bill	01-5/8"	15	1
03-Stormwater Only	09-Hand Bill	05-2"	24	2
03-Stormwater Only	09-Hand Bill	06-3"	0	0
03-Stormwater Only	09-Hand Bill	08-6"	1	0
03-Stormwater Only	09-Hand Bill	09-8"	5	0
03-Stormwater Only	09-Hand Bill	10-10"	5	0
03-Stormwater Only	09-Hand Bill	A-Unknown	74	6
03-Stormwater Only	10-City Leased	01-5/8"	15	1
03-Stormwater Only	10-City Leased	03-1"	5	0
03-Stormwater Only	10-City Leased	05-2"	5	0
03-Stormwater Only	10-City Leased	06-3"	5	0
03-Stormwater Only	10-City Leased	07-4"	5	0
03-Stormwater Only	10-City Leased	08-6"	5	0
03-Stormwater Only	10-City Leased	09-8"	5	0
03-Stormwater Only	11-Hospital/University	01-5/8"	18	2
03-Stormwater Only	11-Hospital/University	03-1"	0	0
03-Stormwater Only	11-Hospital/University	05-2"	4	0
03-Stormwater Only	11-Hospital/University	08-6"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
03-Stormwater Only	11-Hospital/University	A-Unknown	1475	123
03-Stormwater Only	12-Scheduled	01-5/8"	0	0
03-Stormwater Only	12-Scheduled	A-Unknown	8	1
03-Stormwater Only	13-Fire Service	01-5/8"	22	2
03-Stormwater Only	13-Fire Service	03-1"	52	4
03-Stormwater Only	13-Fire Service	04-1.5"	16	1
03-Stormwater Only	13-Fire Service	05-2"	355	30
03-Stormwater Only	13-Fire Service	06-3"	1	0
03-Stormwater Only	13-Fire Service	07-4"	110	9
03-Stormwater Only	13-Fire Service	08-6"	59	5
03-Stormwater Only	13-Fire Service	09-8"	19	2
03-Stormwater Only	13-Fire Service	10-10"	0	0
03-Stormwater Only	13-Fire Service	11-12"	3	0
03-Stormwater Only	13-Fire Service	12-Unknown	20	2
03-Stormwater Only	13-Fire Service	A-Unknown	1075	90
03-Stormwater Only	14-City Government	01-5/8"	1299	108
03-Stormwater Only	14-City Government	02-3/4"	22	2
03-Stormwater Only	14-City Government	03-1"	54	5
03-Stormwater Only	14-City Government	04-1.5"	8	1
03-Stormwater Only	14-City Government	05-2"	24	2
03-Stormwater Only	14-City Government	06-3"	6	1
03-Stormwater Only	14-City Government	07-4"	3	0
03-Stormwater Only	14-City Government	08-6"	0	0
03-Stormwater Only	14-City Government	09-8"	3	0
03-Stormwater Only	14-City Government	12-Unknown	40	3
03-Stormwater Only	14-City Government	A-Unknown	9264	772
04-Sewer and Stormwater	01-General Service-Residential	01-5/8"	162	14
04-Sewer and Stormwater	01-General Service-Residential	02-3/4"	7	1
04-Sewer and Stormwater	01-General Service-Residential	07-4"	0	0
04-Sewer and Stormwater	01-General Service-Residential	08-6"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
04-Sewer and Stormwater	01-General Service-Residential	A-Unknown	0	0
04-Sewer and Stormwater	02-General Service-Commercial	01-5/8"	5	0
04-Sewer and Stormwater	02-General Service-Commercial	05-2"	14	1
04-Sewer and Stormwater	03-General Service-Industrial	04-1.5"	10	1
04-Sewer and Stormwater	03-General Service-Industrial	05-2"	7	1
04-Sewer and Stormwater	03-General Service-Industrial	06-3"	3	0
04-Sewer and Stormwater	03-General Service-Industrial	11-12"	7	1
04-Sewer and Stormwater	04-General Service-Public Utilities	03-1"	2	0
04-Sewer and Stormwater	06-Charity/Non-Public Schools	03-1"	6	1
04-Sewer and Stormwater	09-Hand Bill	01-5/8"	86	7
04-Sewer and Stormwater	09-Hand Bill	04-1.5"	5	0
04-Sewer and Stormwater	09-Hand Bill	05-2"	45	4
04-Sewer and Stormwater	09-Hand Bill	06-3"	7	1
04-Sewer and Stormwater	09-Hand Bill	08-6"	16	1
04-Sewer and Stormwater	09-Hand Bill	09-8"	8	1
04-Sewer and Stormwater	09-Hand Bill	10-10"	0	0
04-Sewer and Stormwater	11-Hospital/University	01-5/8"	0	0
05-Water and Stormwater	01-General Service-Residential	01-5/8"	9226	769
05-Water and Stormwater	01-General Service-Residential	02-3/4"	7	1
05-Water and Stormwater	01-General Service-Residential	03-1"	1172	98
05-Water and Stormwater	01-General Service-Residential	04-1.5"	108	9
05-Water and Stormwater	01-General Service-Residential	05-2"	1355	113
05-Water and Stormwater	01-General Service-Residential	06-3"	28	2
05-Water and Stormwater	01-General Service-Residential	07-4"	127	11
05-Water and Stormwater	01-General Service-Residential	08-6"	263	22
05-Water and Stormwater	01-General Service-Residential	09-8"	108	9
05-Water and Stormwater	01-General Service-Residential	10-10"	12	1
05-Water and Stormwater	01-General Service-Residential	11-12"	4	0
05-Water and Stormwater	01-General Service-Residential	Y-Unknown	0	0
05-Water and Stormwater	02-General Service-Commercial	01-5/8"	612	51

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
05-Water and Stormwater	02-General Service-Commercial	03-1"	178	15
05-Water and Stormwater	02-General Service-Commercial	04-1.5"	129	11
05-Water and Stormwater	02-General Service-Commercial	05-2"	352	29
05-Water and Stormwater	02-General Service-Commercial	06-3"	56	5
05-Water and Stormwater	02-General Service-Commercial	07-4"	394	33
05-Water and Stormwater	02-General Service-Commercial	08-6"	651	54
05-Water and Stormwater	02-General Service-Commercial	09-8"	284	24
05-Water and Stormwater	02-General Service-Commercial	10-10"	20	2
05-Water and Stormwater	02-General Service-Commercial	11-12"	12	1
05-Water and Stormwater	03-General Service-Industrial	01-5/8"	26	2
05-Water and Stormwater	03-General Service-Industrial	03-1"	14	1
05-Water and Stormwater	03-General Service-Industrial	04-1.5"	7	1
05-Water and Stormwater	03-General Service-Industrial	05-2"	23	2
05-Water and Stormwater	03-General Service-Industrial	06-3"	11	1
05-Water and Stormwater	03-General Service-Industrial	07-4"	23	2
05-Water and Stormwater	03-General Service-Industrial	08-6"	48	4
05-Water and Stormwater	03-General Service-Industrial	09-8"	16	1
05-Water and Stormwater	03-General Service-Industrial	10-10"	20	2
05-Water and Stormwater	04-General Service-Public Utilities	03-1"	12	1
05-Water and Stormwater	04-General Service-Public Utilities	11-12"	4	0
05-Water and Stormwater	05-P.H.A	01-5/8"	9	1
05-Water and Stormwater	05-P.H.A	03-1"	88	7
05-Water and Stormwater	05-P.H.A	05-2"	314	26
05-Water and Stormwater	05-P.H.A	07-4"	39	3
05-Water and Stormwater	05-P.H.A	08-6"	44	4
05-Water and Stormwater	05-P.H.A	09-8"	4	0
05-Water and Stormwater	06-Charity/Non-Public Schools	01-5/8"	48	4
05-Water and Stormwater	06-Charity/Non-Public Schools	03-1"	25	2
05-Water and Stormwater	06-Charity/Non-Public Schools	04-1.5"	14	1
05-Water and Stormwater	06-Charity/Non-Public Schools	05-2"	25	2

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
05-Water and Stormwater	06-Charity/Non-Public Schools	06-3"	4	0
05-Water and Stormwater	06-Charity/Non-Public Schools	07-4"	43	4
05-Water and Stormwater	06-Charity/Non-Public Schools	08-6"	62	5
05-Water and Stormwater	06-Charity/Non-Public Schools	09-8"	4	0
05-Water and Stormwater	07-Public Schools	06-3"	13	1
05-Water and Stormwater	07-Public Schools	07-4"	33	3
05-Water and Stormwater	07-Public Schools	08-6"	197	16
05-Water and Stormwater	07-Public Schools	09-8"	68	6
05-Water and Stormwater	07-Public Schools	10-10"	8	1
05-Water and Stormwater	08-Senior Citizens Discount	01-5/8"	103	9
05-Water and Stormwater	08-Senior Citizens Discount	05-2"	4	0
05-Water and Stormwater	09-Hand Bill	01-5/8"	11	1
05-Water and Stormwater	09-Hand Bill	06-3"	4	0
05-Water and Stormwater	09-Hand Bill	08-6"	32	3
05-Water and Stormwater	09-Hand Bill	09-8"	40	3
05-Water and Stormwater	09-Hand Bill	10-10"	0	0
05-Water and Stormwater	10-City Leased	01-5/8"	39	3
05-Water and Stormwater	10-City Leased	03-1"	21	2
05-Water and Stormwater	10-City Leased	04-1.5"	10	1
05-Water and Stormwater	10-City Leased	05-2"	13	1
05-Water and Stormwater	10-City Leased	06-3"	14	1
05-Water and Stormwater	10-City Leased	07-4"	35	3
05-Water and Stormwater	10-City Leased	08-6"	47	4
05-Water and Stormwater	10-City Leased	09-8"	14	1
05-Water and Stormwater	10-City Leased	10-10"	4	0
05-Water and Stormwater	11-Hospital/University	01-5/8"	14	1
05-Water and Stormwater	11-Hospital/University	06-3"	5	0
05-Water and Stormwater	11-Hospital/University	07-4"	40	3
05-Water and Stormwater	11-Hospital/University	08-6"	117	10
05-Water and Stormwater	11-Hospital/University	09-8"	20	2

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
05-Water and Stormwater	11-Hospital/University	10-10"	8	1
05-Water and Stormwater	13-Fire Service	01-5/8"	123	10
05-Water and Stormwater	13-Fire Service	03-1"	80	7
05-Water and Stormwater	13-Fire Service	04-1.5"	18	2
05-Water and Stormwater	13-Fire Service	05-2"	1082	90
05-Water and Stormwater	13-Fire Service	06-3"	816	68
05-Water and Stormwater	13-Fire Service	07-4"	3984	332
05-Water and Stormwater	13-Fire Service	08-6"	6479	540
05-Water and Stormwater	13-Fire Service	09-8"	2039	170
05-Water and Stormwater	13-Fire Service	10-10"	311	26
05-Water and Stormwater	13-Fire Service	11-12"	46	4
05-Water and Stormwater	14-City Government	01-5/8"	163	14
05-Water and Stormwater	14-City Government	02-3/4"	55	5
05-Water and Stormwater	14-City Government	03-1"	51	4
05-Water and Stormwater	14-City Government	04-1.5"	30	3
05-Water and Stormwater	14-City Government	05-2"	55	5
05-Water and Stormwater	14-City Government	06-3"	15	1
05-Water and Stormwater	14-City Government	07-4"	84	7
05-Water and Stormwater	14-City Government	08-6"	197	16
05-Water and Stormwater	14-City Government	09-8"	59	5
05-Water and Stormwater	14-City Government	10-10"	5	0
06-Sewer Only	01-General Service-Residential	01-5/8"	5	0
06-Sewer Only	02-General Service-Commercial	01-5/8"	0	0
06-Sewer Only	02-General Service-Commercial	05-2"	0	0
06-Sewer Only	03-General Service-Industrial	02-3/4"	0	0
06-Sewer Only	03-General Service-Industrial	10-10"	2	0
06-Sewer Only	04-General Service-Public Utilities	07-4"	0	0
06-Sewer Only	06-Charity/Non-Public Schools	03-1"	5	0
06-Sewer Only	09-Hand Bill	01-5/8"	21	2
06-Sewer Only	09-Hand Bill	05-2"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
06-Sewer Only	13-Fire Service	01-5/8"	0	0
06-Sewer Only	14-City Government	07-4"	0	0
07-Water and Sewer	01-General Service-Residential	01-5/8"	265	22
07-Water and Sewer	01-General Service-Residential	02-3/4"	0	0
07-Water and Sewer	01-General Service-Residential	03-1"	1	0
07-Water and Sewer	01-General Service-Residential	05-2"	13	1
07-Water and Sewer	01-General Service-Residential	06-3"	0	0
07-Water and Sewer	02-General Service-Commercial	01-5/8"	34	3
07-Water and Sewer	02-General Service-Commercial	02-3/4"	0	0
07-Water and Sewer	02-General Service-Commercial	03-1"	25	2
07-Water and Sewer	02-General Service-Commercial	04-1.5"	9	1
07-Water and Sewer	02-General Service-Commercial	05-2"	22	2
07-Water and Sewer	02-General Service-Commercial	06-3"	2	0
07-Water and Sewer	02-General Service-Commercial	07-4"	0	0
07-Water and Sewer	02-General Service-Commercial	09-8"	0	0
07-Water and Sewer	03-General Service-Industrial	01-5/8"	1	0
07-Water and Sewer	05-P.H.A	01-5/8"	13	1
07-Water and Sewer	05-P.H.A	03-1"	0	0
07-Water and Sewer	05-P.H.A	06-3"	7	1
07-Water and Sewer	06-Charity/Non-Public Schools	01-5/8"	0	0
07-Water and Sewer	06-Charity/Non-Public Schools	03-1"	8	1
07-Water and Sewer	06-Charity/Non-Public Schools	04-1.5"	20	2
07-Water and Sewer	06-Charity/Non-Public Schools	05-2"	4	0
07-Water and Sewer	07-Public Schools	07-4"	0	0
07-Water and Sewer	07-Public Schools	08-6"	0	0
07-Water and Sewer	08-Senior Citizens Discount	01-5/8"	4	0
07-Water and Sewer	09-Hand Bill	04-1.5"	0	0
07-Water and Sewer	09-Hand Bill	05-2"	1	0
07-Water and Sewer	11-Hospital/University	05-2"	4	0
07-Water and Sewer	13-Fire Service	01-5/8"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
07-Water and Sewer	13-Fire Service	03-1"	0	0
07-Water and Sewer	13-Fire Service	05-2"	11	1
07-Water and Sewer	13-Fire Service	12-Unknown	0	0
07-Water and Sewer	14-City Government	01-5/8"	1	0
07-Water and Sewer	14-City Government	03-1"	13	1
07-Water and Sewer	14-City Government	06-3"	0	0
07-Water and Sewer	14-City Government	08-6"	12	1
08-RFSS, All Services	01-General Service-Residential	01-5/8"	0	0
08-RFSS, All Services	01-General Service-Residential	02-3/4"	0	0
08-RFSS, All Services	01-General Service-Residential	03-1"	0	0
08-RFSS, All Services	01-General Service-Residential	04-1.5"	0	0
08-RFSS, All Services	01-General Service-Residential	05-2"	0	0
08-RFSS, All Services	02-General Service-Commercial	01-5/8"	0	0
08-RFSS, All Services	02-General Service-Commercial	02-3/4"	0	0
08-RFSS, All Services	02-General Service-Commercial	03-1"	0	0
08-RFSS, All Services	02-General Service-Commercial	04-1.5"	0	0
08-RFSS, All Services	02-General Service-Commercial	05-2"	0	0
08-RFSS, All Services	03-General Service-Industrial	03-1"	0	0
08-RFSS, All Services	04-General Service-Public Utilities	03-1"	0	0
08-RFSS, All Services	05-P.H.A	03-1"	0	0
08-RFSS, All Services	05-P.H.A	04-1.5"	0	0
08-RFSS, All Services	05-P.H.A	05-2"	0	0
08-RFSS, All Services	08-Senior Citizens Discount	03-1"	0	0
08-RFSS, All Services	13-Fire Service	03-1"	0	0
08-RFSS, All Services	13-Fire Service	04-1.5"	0	0
08-RFSS, All Services	14-City Government	03-1"	0	0
09-RFSS, No Sewer	01-General Service-Residential	03-1"	0	0
09-RFSS, No Sewer	01-General Service-Residential	05-2"	0	0
09-RFSS, No Sewer	02-General Service-Commercial	03-1"	0	0
10-Unknown	01-General Service-Residential	01-5/8"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
10-Unknown	01-General Service-Residential	03-1"	0	0
10-Unknown	01-General Service-Residential	04-1.5"	0	0
10-Unknown	01-General Service-Residential	05-2"	0	0
10-Unknown	01-General Service-Residential	06-3"	0	0
10-Unknown	01-General Service-Residential	07-4"	0	0
10-Unknown	01-General Service-Residential	08-6"	0	0
10-Unknown	01-General Service-Residential	09-8"	0	0
10-Unknown	01-General Service-Residential	12-Unknown	1757	146
10-Unknown	01-General Service-Residential	A-Unknown	0	0
10-Unknown	02-General Service-Commercial	01-5/8"	0	0
10-Unknown	02-General Service-Commercial	02-3/4"	0	0
10-Unknown	02-General Service-Commercial	03-1"	0	0
10-Unknown	02-General Service-Commercial	04-1.5"	0	0
10-Unknown	02-General Service-Commercial	05-2"	0	0
10-Unknown	02-General Service-Commercial	06-3"	0	0
10-Unknown	02-General Service-Commercial	07-4"	0	0
10-Unknown	02-General Service-Commercial	08-6"	0	0
10-Unknown	02-General Service-Commercial	09-8"	0	0
10-Unknown	02-General Service-Commercial	10-10"	0	0
10-Unknown	02-General Service-Commercial	12-Unknown	4050	338
10-Unknown	02-General Service-Commercial	A-Unknown	3	0
10-Unknown	03-General Service-Industrial	01-5/8"	0	0
10-Unknown	03-General Service-Industrial	12-Unknown	165	14
10-Unknown	04-General Service-Public Utilities	12-Unknown	81	7
10-Unknown	05-P.H.A	07-4"	0	0
10-Unknown	05-P.H.A	12-Unknown	29	2
10-Unknown	06-Charity/Non-Public Schools	01-5/8"	0	0
10-Unknown	06-Charity/Non-Public Schools	09-8"	0	0
10-Unknown	06-Charity/Non-Public Schools	12-Unknown	19	2
10-Unknown	07-Public Schools	12-Unknown	2	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy12 # of Accounts Months	fy12 # of Accounts
10-Unknown	08-Senior Citizens Discount	01-5/8"	0	0
10-Unknown	08-Senior Citizens Discount	12-Unknown	1	0
10-Unknown	09-Hand Bill	08-6"	0	0
10-Unknown	09-Hand Bill	10-10"	0	0
10-Unknown	09-Hand Bill	12-Unknown	459	38
10-Unknown	10-City Leased	12-Unknown	1	0
10-Unknown	11-Hospital/University	06-3"	0	0
10-Unknown	11-Hospital/University	07-4"	0	0
10-Unknown	11-Hospital/University	08-6"	0	0
10-Unknown	11-Hospital/University	09-8"	0	0
10-Unknown	11-Hospital/University	12-Unknown	24	2
10-Unknown	13-Fire Service	03-1"	0	0
10-Unknown	13-Fire Service	04-1.5"	0	0
10-Unknown	13-Fire Service	05-2"	0	0
10-Unknown	13-Fire Service	06-3"	0	0
10-Unknown	13-Fire Service	07-4"	0	0
10-Unknown	13-Fire Service	08-6"	0	0
10-Unknown	13-Fire Service	09-8"	0	0
10-Unknown	13-Fire Service	10-10"	0	0
10-Unknown	13-Fire Service	12-Unknown	2	0
10-Unknown	14-City Government	01-5/8"	0	0
10-Unknown	14-City Government	05-2"	0	0
10-Unknown	14-City Government	08-6"	0	0
10-Unknown	14-City Government	12-Unknown	147	12

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	01-5/8"	5110822	31443331.74
01-Water,Sewer,Stormwater	01-General Service-Residential	02-3/4"	328	2723.19
01-Water,Sewer,Stormwater	01-General Service-Residential	03-1"	20746	207264.99
01-Water,Sewer,Stormwater	01-General Service-Residential	04-1.5"	6399	98239.66
01-Water,Sewer,Stormwater	01-General Service-Residential	05-2"	4749	105125.07
01-Water,Sewer,Stormwater	01-General Service-Residential	06-3"	1726	66237.79
01-Water,Sewer,Stormwater	01-General Service-Residential	07-4"	576	39387.29
01-Water,Sewer,Stormwater	01-General Service-Residential	08-6"	149	18194.29
01-Water,Sewer,Stormwater	01-General Service-Residential	09-8"	33	7141.45
01-Water,Sewer,Stormwater	01-General Service-Residential	11-12"	4	26.4
01-Water,Sewer,Stormwater	02-General Service-Commercial	01-5/8"	331811	2164830.63
01-Water,Sewer,Stormwater	02-General Service-Commercial	02-3/4"	251	1809.28
01-Water,Sewer,Stormwater	02-General Service-Commercial	03-1"	29085	286631.27
01-Water,Sewer,Stormwater	02-General Service-Commercial	04-1.5"	11974	189774.21
01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	15969	372139.53
01-Water,Sewer,Stormwater	02-General Service-Commercial	06-3"	5408	211082.58
01-Water,Sewer,Stormwater	02-General Service-Commercial	07-4"	2904	196969.15
01-Water,Sewer,Stormwater	02-General Service-Commercial	08-6"	944	122313.15
01-Water,Sewer,Stormwater	02-General Service-Commercial	09-8"	193	35602.41
01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	59	16937.33
01-Water,Sewer,Stormwater	03-General Service-Industrial	01-5/8"	6548	42477.3
01-Water,Sewer,Stormwater	03-General Service-Industrial	03-1"	3058	30647.43
01-Water,Sewer,Stormwater	03-General Service-Industrial	04-1.5"	1007	15812.74
01-Water,Sewer,Stormwater	03-General Service-Industrial	05-2"	1397	30805.01
01-Water,Sewer,Stormwater	03-General Service-Industrial	06-3"	530	23053.92
01-Water,Sewer,Stormwater	03-General Service-Industrial	07-4"	217	13356.63
01-Water,Sewer,Stormwater	03-General Service-Industrial	08-6"	82	10687.38
01-Water,Sewer,Stormwater	03-General Service-Industrial	10-10"	28	1465.43
01-Water,Sewer,Stormwater	03-General Service-Industrial	11-12"	2	0
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	01-5/8"	406	2754.88

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	03-1"	283	2707.1
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	04-1.5"	108	1618.02
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	05-2"	160	3644.13
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	06-3"	113	5997.69
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	07-4"	47	3237.1
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	08-6"	36	4950.81
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	09-8"	0	0
01-Water,Sewer,Stormwater	05-P.H.A	01-5/8"	71378	448182.82
01-Water,Sewer,Stormwater	05-P.H.A	02-3/4"	5	31.13
01-Water,Sewer,Stormwater	05-P.H.A	03-1"	228	2156.4
01-Water,Sewer,Stormwater	05-P.H.A	04-1.5"	127	1808.39
01-Water,Sewer,Stormwater	05-P.H.A	05-2"	165	3467.16
01-Water,Sewer,Stormwater	05-P.H.A	06-3"	430	16048.57
01-Water,Sewer,Stormwater	05-P.H.A	07-4"	237	15760.54
01-Water,Sewer,Stormwater	05-P.H.A	08-6"	167	20283.37
01-Water,Sewer,Stormwater	05-P.H.A	09-8"	82	15615.93
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	01-5/8"	15213	74246
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	02-3/4"	5	24.74
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	03-1"	4009	29656.05
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	04-1.5"	1938	21873.26
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	05-2"	2677	44848.62
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	06-3"	1759	51397.71
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	07-4"	1324	63669.65
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	08-6"	152	17071.33
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	09-8"	24	3570.06
01-Water,Sewer,Stormwater	07-Public Schools	01-5/8"	162	790.74
01-Water,Sewer,Stormwater	07-Public Schools	03-1"	136	960.21
01-Water,Sewer,Stormwater	07-Public Schools	04-1.5"	84	938.78
01-Water,Sewer,Stormwater	07-Public Schools	05-2"	510	8495.46
01-Water,Sewer,Stormwater	07-Public Schools	06-3"	1237	35494.23

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
01-Water,Sewer,Stormwater	07-Public Schools	07-4"	2332	116688.4
01-Water,Sewer,Stormwater	07-Public Schools	08-6"	245	24032.88
01-Water,Sewer,Stormwater	07-Public Schools	09-8"	24	3566.58
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	01-5/8"	230835	1113939.78
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	02-3/4"	1	4.78
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	03-1"	30	472.06
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	04-1.5"	12	135.06
01-Water,Sewer,Stormwater	09-Hand Bill	01-5/8"	170	852.63
01-Water,Sewer,Stormwater	09-Hand Bill	03-1"	196	1943.51
01-Water,Sewer,Stormwater	09-Hand Bill	04-1.5"	130	1978.68
01-Water,Sewer,Stormwater	09-Hand Bill	05-2"	489	9921.85
01-Water,Sewer,Stormwater	09-Hand Bill	06-3"	854	32631.08
01-Water,Sewer,Stormwater	09-Hand Bill	07-4"	964	62808.05
01-Water,Sewer,Stormwater	09-Hand Bill	08-6"	297	38647.84
01-Water,Sewer,Stormwater	09-Hand Bill	09-8"	86	15086.72
01-Water,Sewer,Stormwater	09-Hand Bill	10-10"	72	13602.61
01-Water,Sewer,Stormwater	10-City Leased	01-5/8"	129	845.43
01-Water,Sewer,Stormwater	10-City Leased	03-1"	70	692.71
01-Water,Sewer,Stormwater	10-City Leased	04-1.5"	73	1259.09
01-Water,Sewer,Stormwater	10-City Leased	05-2"	147	3312.64
01-Water,Sewer,Stormwater	10-City Leased	06-3"	61	2790.84
01-Water,Sewer,Stormwater	10-City Leased	07-4"	114	8031.88
01-Water,Sewer,Stormwater	10-City Leased	08-6"	0	0
01-Water,Sewer,Stormwater	10-City Leased	09-8"	2	391.56
01-Water,Sewer,Stormwater	11-Hospital/University	01-5/8"	546	2691.98
01-Water,Sewer,Stormwater	11-Hospital/University	02-3/4"	5	24.87
01-Water,Sewer,Stormwater	11-Hospital/University	03-1"	268	1986.11
01-Water,Sewer,Stormwater	11-Hospital/University	04-1.5"	136	1549.75
01-Water,Sewer,Stormwater	11-Hospital/University	05-2"	639	10707.79
01-Water,Sewer,Stormwater	11-Hospital/University	06-3"	1008	30395.77

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
01-Water,Sewer,Stormwater	11-Hospital/University	07-4"	1029	55330.05
01-Water,Sewer,Stormwater	11-Hospital/University	08-6"	571	60974.39
01-Water,Sewer,Stormwater	11-Hospital/University	09-8"	49	12526.57
01-Water,Sewer,Stormwater	11-Hospital/University	10-10"	12	5381.23
01-Water,Sewer,Stormwater	12-Scheduled	01-5/8"	24	86.55
01-Water,Sewer,Stormwater	13-Fire Service	01-5/8"	436	2866.84
01-Water,Sewer,Stormwater	13-Fire Service	03-1"	197	2032.49
01-Water,Sewer,Stormwater	13-Fire Service	04-1.5"	96	1593.89
01-Water,Sewer,Stormwater	13-Fire Service	05-2"	131	2868.76
01-Water,Sewer,Stormwater	13-Fire Service	06-3"	72	2716.4
01-Water,Sewer,Stormwater	13-Fire Service	07-4"	75	4743.3
01-Water,Sewer,Stormwater	13-Fire Service	08-6"	53	-2989.66
01-Water,Sewer,Stormwater	13-Fire Service	09-8"	13	0
01-Water,Sewer,Stormwater	13-Fire Service	10-10"	3	852.69
01-Water,Sewer,Stormwater	14-City Government	01-5/8"	3467	19213.24
01-Water,Sewer,Stormwater	14-City Government	02-3/4"	22	121.97
01-Water,Sewer,Stormwater	14-City Government	03-1"	1522	14850.76
01-Water,Sewer,Stormwater	14-City Government	04-1.5"	860	12976.07
01-Water,Sewer,Stormwater	14-City Government	05-2"	2946	65465.94
01-Water,Sewer,Stormwater	14-City Government	06-3"	1608	62972.43
01-Water,Sewer,Stormwater	14-City Government	07-4"	775	51349.33
01-Water,Sewer,Stormwater	14-City Government	08-6"	404	54012.19
01-Water,Sewer,Stormwater	14-City Government	09-8"	156	31138.42
01-Water,Sewer,Stormwater	14-City Government	10-10"	170	53239.47
01-Water,Sewer,Stormwater	14-City Government	11-12"	12	5943.6
02-Water Only	01-General Service-Residential	01-5/8"	436	2347.73
02-Water Only	01-General Service-Residential	03-1"	68	221.95
02-Water Only	01-General Service-Residential	04-1.5"	115	29.62
02-Water Only	01-General Service-Residential	05-2"	2925	152.74
02-Water Only	01-General Service-Residential	06-3"	55	0

Rpt1b v5 2015.02		FY12		
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
02-Water Only	01-General Service-Residential	07-4"	219	0
02-Water Only	01-General Service-Residential	08-6"	467	0
02-Water Only	01-General Service-Residential	09-8"	193	0
02-Water Only	01-General Service-Residential	10-10"	21	0
02-Water Only	01-General Service-Residential	11-12"	7	0
02-Water Only	01-General Service-Residential	Y-Unknown	0	0
02-Water Only	02-General Service-Commercial	01-5/8"	59	244.17
02-Water Only	02-General Service-Commercial	03-1"	20	106.15
02-Water Only	02-General Service-Commercial	04-1.5"	5	59.24
02-Water Only	02-General Service-Commercial	05-2"	402	43.64
02-Water Only	02-General Service-Commercial	06-3"	65	149.08
02-Water Only	02-General Service-Commercial	07-4"	675	130.2
02-Water Only	02-General Service-Commercial	08-6"	1103	0
02-Water Only	02-General Service-Commercial	09-8"	495	0
02-Water Only	02-General Service-Commercial	10-10"	46	0
02-Water Only	02-General Service-Commercial	11-12"	21	0
02-Water Only	03-General Service-Industrial	05-2"	21	204.88
02-Water Only	03-General Service-Industrial	07-4"	24	0
02-Water Only	03-General Service-Industrial	08-6"	85	0
02-Water Only	03-General Service-Industrial	09-8"	59	0
02-Water Only	03-General Service-Industrial	10-10"	7	0
02-Water Only	04-General Service-Public Utilities	05-2"	7	0
02-Water Only	04-General Service-Public Utilities	11-12"	7	0
02-Water Only	05-P.H.A	01-5/8"	46	0
02-Water Only	05-P.H.A	03-1"	293	0
02-Water Only	05-P.H.A	05-2"	220	0
02-Water Only	05-P.H.A	07-4"	70	0
02-Water Only	05-P.H.A	08-6"	84	0
02-Water Only	05-P.H.A	09-8"	19	0
02-Water Only	06-Charity/Non-Public Schools	01-5/8"	0	0

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
02-Water Only	06-Charity/Non-Public Schools	03-1"	7	0
02-Water Only	06-Charity/Non-Public Schools	05-2"	7	0
02-Water Only	06-Charity/Non-Public Schools	06-3"	7	0
02-Water Only	06-Charity/Non-Public Schools	07-4"	63	97.64
02-Water Only	06-Charity/Non-Public Schools	08-6"	97	0
02-Water Only	06-Charity/Non-Public Schools	09-8"	7	0
02-Water Only	07-Public Schools	06-3"	22	0
02-Water Only	07-Public Schools	07-4"	68	0
02-Water Only	07-Public Schools	08-6"	353	0
02-Water Only	07-Public Schools	09-8"	101	0
02-Water Only	07-Public Schools	10-10"	14	0
02-Water Only	08-Senior Citizens Discount	05-2"	7	0
02-Water Only	09-Hand Bill	06-3"	7	0
02-Water Only	09-Hand Bill	07-4"	0	0
02-Water Only	09-Hand Bill	08-6"	51	625.58
02-Water Only	09-Hand Bill	09-8"	42	0
02-Water Only	10-City Leased	04-1.5"	2	29.62
02-Water Only	10-City Leased	05-2"	8	0
02-Water Only	10-City Leased	07-4"	29	0
02-Water Only	10-City Leased	08-6"	9	0
02-Water Only	10-City Leased	09-8"	2	0
02-Water Only	10-City Leased	10-10"	8	0
02-Water Only	11-Hospital/University	01-5/8"	7	0
02-Water Only	11-Hospital/University	03-1"	0	0
02-Water Only	11-Hospital/University	06-3"	7	0
02-Water Only	11-Hospital/University	07-4"	70	0
02-Water Only	11-Hospital/University	08-6"	212	0
02-Water Only	11-Hospital/University	09-8"	33	0
02-Water Only	11-Hospital/University	10-10"	14	0
02-Water Only	13-Fire Service	01-5/8"	90	0

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
02-Water Only	13-Fire Service	03-1"	117	0
02-Water Only	13-Fire Service	04-1.5"	36	0
02-Water Only	13-Fire Service	05-2"	1682	71.31
02-Water Only	13-Fire Service	06-3"	1420	0
02-Water Only	13-Fire Service	07-4"	7028	130.6
02-Water Only	13-Fire Service	08-6"	11396	0
02-Water Only	13-Fire Service	09-8"	3517	0
02-Water Only	13-Fire Service	10-10"	522	0
02-Water Only	13-Fire Service	11-12"	77	0
02-Water Only	14-City Government	03-1"	0	0
02-Water Only	14-City Government	05-2"	3	0
02-Water Only	14-City Government	06-3"	21	0
02-Water Only	14-City Government	07-4"	119	0
02-Water Only	14-City Government	08-6"	282	0
02-Water Only	14-City Government	09-8"	100	0
02-Water Only	14-City Government	10-10"	7	0
03-Stormwater Only	01-General Service-Residential	01-5/8"	8270	32790.12
03-Stormwater Only	01-General Service-Residential	02-3/4"	65	37.62
03-Stormwater Only	01-General Service-Residential	03-1"	444	2467.66
03-Stormwater Only	01-General Service-Residential	04-1.5"	143	683.88
03-Stormwater Only	01-General Service-Residential	05-2"	94	223.54
03-Stormwater Only	01-General Service-Residential	06-3"	17	191.57
03-Stormwater Only	01-General Service-Residential	07-4"	38	0
03-Stormwater Only	01-General Service-Residential	08-6"	33	0
03-Stormwater Only	01-General Service-Residential	09-8"	18	0
03-Stormwater Only	01-General Service-Residential	10-10"	3	0
03-Stormwater Only	01-General Service-Residential	12-Unknown	460	0
03-Stormwater Only	01-General Service-Residential	A-Unknown	154241	590.62
03-Stormwater Only	02-General Service-Commercial	01-5/8"	1285	1805.55
03-Stormwater Only	02-General Service-Commercial	02-3/4"	18	0

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
03-Stormwater Only	02-General Service-Commercial	03-1"	242	351.32
03-Stormwater Only	02-General Service-Commercial	04-1.5"	114	775.06
03-Stormwater Only	02-General Service-Commercial	05-2"	127	677.81
03-Stormwater Only	02-General Service-Commercial	06-3"	7	6.18
03-Stormwater Only	02-General Service-Commercial	07-4"	17	333.17
03-Stormwater Only	02-General Service-Commercial	08-6"	39	2570.54
03-Stormwater Only	02-General Service-Commercial	09-8"	7	0
03-Stormwater Only	02-General Service-Commercial	12-Unknown	68	0
03-Stormwater Only	02-General Service-Commercial	A-Unknown	369673	2.88
03-Stormwater Only	02-General Service-Commercial	Y-Unknown	5	0
03-Stormwater Only	03-General Service-Industrial	01-5/8"	12	33.07
03-Stormwater Only	03-General Service-Industrial	03-1"	14	0
03-Stormwater Only	03-General Service-Industrial	04-1.5"	12	76.49
03-Stormwater Only	03-General Service-Industrial	05-2"	12	271.43
03-Stormwater Only	03-General Service-Industrial	06-3"	13	536
03-Stormwater Only	03-General Service-Industrial	07-4"	24	666.34
03-Stormwater Only	03-General Service-Industrial	08-6"	10	1291.07
03-Stormwater Only	03-General Service-Industrial	12-Unknown	0	0
03-Stormwater Only	03-General Service-Industrial	A-Unknown	79	0
03-Stormwater Only	03-General Service-Industrial	Y-Unknown	5	0
03-Stormwater Only	04-General Service-Public Utilities	01-5/8"	6	0
03-Stormwater Only	04-General Service-Public Utilities	03-1"	6	0
03-Stormwater Only	04-General Service-Public Utilities	05-2"	0	0
03-Stormwater Only	04-General Service-Public Utilities	A-Unknown	14126	0
03-Stormwater Only	05-P.H.A	01-5/8"	346	0
03-Stormwater Only	05-P.H.A	03-1"	25	0
03-Stormwater Only	05-P.H.A	05-2"	3	0
03-Stormwater Only	05-P.H.A	A-Unknown	11095	0
03-Stormwater Only	06-Charity/Non-Public Schools	01-5/8"	35	172.72
03-Stormwater Only	06-Charity/Non-Public Schools	03-1"	10	74.41

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
03-Stormwater Only	06-Charity/Non-Public Schools	04-1.5"	8	92.08
03-Stormwater Only	06-Charity/Non-Public Schools	05-2"	23	251.83
03-Stormwater Only	06-Charity/Non-Public Schools	07-4"	2	0
03-Stormwater Only	06-Charity/Non-Public Schools	09-8"	3	0
03-Stormwater Only	06-Charity/Non-Public Schools	A-Unknown	456	0
03-Stormwater Only	07-Public Schools	01-5/8"	14	0
03-Stormwater Only	07-Public Schools	08-6"	0	0
03-Stormwater Only	07-Public Schools	09-8"	0	0
03-Stormwater Only	07-Public Schools	12-Unknown	15	0
03-Stormwater Only	07-Public Schools	A-Unknown	901	0
03-Stormwater Only	08-Senior Citizens Discount	01-5/8"	86	336.83
03-Stormwater Only	08-Senior Citizens Discount	A-Unknown	60	0
03-Stormwater Only	09-Hand Bill	01-5/8"	15	65.77
03-Stormwater Only	09-Hand Bill	05-2"	25	0
03-Stormwater Only	09-Hand Bill	06-3"	0	0
03-Stormwater Only	09-Hand Bill	08-6"	1	769.17
03-Stormwater Only	09-Hand Bill	09-8"	7	0
03-Stormwater Only	09-Hand Bill	10-10"	5	0
03-Stormwater Only	09-Hand Bill	A-Unknown	78	0
03-Stormwater Only	10-City Leased	01-5/8"	15	97.7
03-Stormwater Only	10-City Leased	03-1"	5	49.83
03-Stormwater Only	10-City Leased	05-2"	5	112.02
03-Stormwater Only	10-City Leased	06-3"	5	190.88
03-Stormwater Only	10-City Leased	07-4"	5	334.5
03-Stormwater Only	10-City Leased	08-6"	5	643.91
03-Stormwater Only	10-City Leased	09-8"	5	1006.44
03-Stormwater Only	11-Hospital/University	01-5/8"	18	34.9
03-Stormwater Only	11-Hospital/University	03-1"	0	0
03-Stormwater Only	11-Hospital/University	05-2"	5	0
03-Stormwater Only	11-Hospital/University	08-6"	0	0

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
03-Stormwater Only	11-Hospital/University	A-Unknown	1483	0
03-Stormwater Only	12-Scheduled	01-5/8"	0	0
03-Stormwater Only	12-Scheduled	A-Unknown	8	0
03-Stormwater Only	13-Fire Service	01-5/8"	22	66.08
03-Stormwater Only	13-Fire Service	03-1"	52	0
03-Stormwater Only	13-Fire Service	04-1.5"	16	0
03-Stormwater Only	13-Fire Service	05-2"	356	0
03-Stormwater Only	13-Fire Service	06-3"	1	0
03-Stormwater Only	13-Fire Service	07-4"	111	0
03-Stormwater Only	13-Fire Service	08-6"	61	0
03-Stormwater Only	13-Fire Service	09-8"	19	0
03-Stormwater Only	13-Fire Service	10-10"	0	0
03-Stormwater Only	13-Fire Service	11-12"	3	0
03-Stormwater Only	13-Fire Service	12-Unknown	20	0
03-Stormwater Only	13-Fire Service	A-Unknown	1251	0
03-Stormwater Only	14-City Government	01-5/8"	1315	33.18
03-Stormwater Only	14-City Government	02-3/4"	22	36.55
03-Stormwater Only	14-City Government	03-1"	55	148.78
03-Stormwater Only	14-City Government	04-1.5"	8	75.88
03-Stormwater Only	14-City Government	05-2"	25	223.62
03-Stormwater Only	14-City Government	06-3"	6	0
03-Stormwater Only	14-City Government	07-4"	3	0
03-Stormwater Only	14-City Government	08-6"	0	0
03-Stormwater Only	14-City Government	09-8"	3	0
03-Stormwater Only	14-City Government	12-Unknown	40	0
03-Stormwater Only	14-City Government	A-Unknown	9366	0
04-Sewer and Stormwater	01-General Service-Residential	01-5/8"	166	42.4
04-Sewer and Stormwater	01-General Service-Residential	02-3/4"	7	0
04-Sewer and Stormwater	01-General Service-Residential	07-4"	0	0
04-Sewer and Stormwater	01-General Service-Residential	08-6"	0	0

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
04-Sewer and Stormwater	01-General Service-Residential	A-Unknown	0	0
04-Sewer and Stormwater	02-General Service-Commercial	01-5/8"	5	0
04-Sewer and Stormwater	02-General Service-Commercial	05-2"	14	0
04-Sewer and Stormwater	03-General Service-Industrial	04-1.5"	10	0
04-Sewer and Stormwater	03-General Service-Industrial	05-2"	7	0
04-Sewer and Stormwater	03-General Service-Industrial	06-3"	3	0
04-Sewer and Stormwater	03-General Service-Industrial	11-12"	7	0
04-Sewer and Stormwater	04-General Service-Public Utilities	03-1"	2	0
04-Sewer and Stormwater	06-Charity/Non-Public Schools	03-1"	6	0
04-Sewer and Stormwater	09-Hand Bill	01-5/8"	87	0
04-Sewer and Stormwater	09-Hand Bill	04-1.5"	5	0
04-Sewer and Stormwater	09-Hand Bill	05-2"	45	0
04-Sewer and Stormwater	09-Hand Bill	06-3"	7	0
04-Sewer and Stormwater	09-Hand Bill	08-6"	18	0
04-Sewer and Stormwater	09-Hand Bill	09-8"	8	0
04-Sewer and Stormwater	09-Hand Bill	10-10"	0	0
04-Sewer and Stormwater	11-Hospital/University	01-5/8"	0	0
05-Water and Stormwater	01-General Service-Residential	01-5/8"	9277	58862.39
05-Water and Stormwater	01-General Service-Residential	02-3/4"	7	51.17
05-Water and Stormwater	01-General Service-Residential	03-1"	1178	11314.66
05-Water and Stormwater	01-General Service-Residential	04-1.5"	113	1083.98
05-Water and Stormwater	01-General Service-Residential	05-2"	1608	901.04
05-Water and Stormwater	01-General Service-Residential	06-3"	35	0
05-Water and Stormwater	01-General Service-Residential	07-4"	156	0
05-Water and Stormwater	01-General Service-Residential	08-6"	328	0
05-Water and Stormwater	01-General Service-Residential	09-8"	134	0
05-Water and Stormwater	01-General Service-Residential	10-10"	15	0
05-Water and Stormwater	01-General Service-Residential	11-12"	5	0
05-Water and Stormwater	01-General Service-Residential	Y-Unknown	0	0
05-Water and Stormwater	02-General Service-Commercial	01-5/8"	617	3853.42

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
05-Water and Stormwater	02-General Service-Commercial	03-1"	179	1678.28
05-Water and Stormwater	02-General Service-Commercial	04-1.5"	129	1941.38
05-Water and Stormwater	02-General Service-Commercial	05-2"	395	3331.53
05-Water and Stormwater	02-General Service-Commercial	06-3"	64	755.28
05-Water and Stormwater	02-General Service-Commercial	07-4"	475	2166.43
05-Water and Stormwater	02-General Service-Commercial	08-6"	788	5045.04
05-Water and Stormwater	02-General Service-Commercial	09-8"	343	0
05-Water and Stormwater	02-General Service-Commercial	10-10"	25	0
05-Water and Stormwater	02-General Service-Commercial	11-12"	15	0
05-Water and Stormwater	03-General Service-Industrial	01-5/8"	26	166.94
05-Water and Stormwater	03-General Service-Industrial	03-1"	14	135.1
05-Water and Stormwater	03-General Service-Industrial	04-1.5"	7	103.67
05-Water and Stormwater	03-General Service-Industrial	05-2"	25	327.3
05-Water and Stormwater	03-General Service-Industrial	06-3"	11	409.97
05-Water and Stormwater	03-General Service-Industrial	07-4"	26	716.1
05-Water and Stormwater	03-General Service-Industrial	08-6"	56	1760.08
05-Water and Stormwater	03-General Service-Industrial	09-8"	20	0
05-Water and Stormwater	03-General Service-Industrial	10-10"	21	4585.19
05-Water and Stormwater	04-General Service-Public Utilities	03-1"	12	117.14
05-Water and Stormwater	04-General Service-Public Utilities	11-12"	5	0
05-Water and Stormwater	05-P.H.A	01-5/8"	10	0
05-Water and Stormwater	05-P.H.A	03-1"	106	0
05-Water and Stormwater	05-P.H.A	05-2"	357	0
05-Water and Stormwater	05-P.H.A	07-4"	48	0
05-Water and Stormwater	05-P.H.A	08-6"	55	0
05-Water and Stormwater	05-P.H.A	09-8"	5	0
05-Water and Stormwater	06-Charity/Non-Public Schools	01-5/8"	50	264.26
05-Water and Stormwater	06-Charity/Non-Public Schools	03-1"	26	152.04
05-Water and Stormwater	06-Charity/Non-Public Schools	04-1.5"	14	155.54
05-Water and Stormwater	06-Charity/Non-Public Schools	05-2"	26	343.56

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
05-Water and Stormwater	06-Charity/Non-Public Schools	06-3"	5	0
05-Water and Stormwater	06-Charity/Non-Public Schools	07-4"	54	556.66
05-Water and Stormwater	06-Charity/Non-Public Schools	08-6"	73	0
05-Water and Stormwater	06-Charity/Non-Public Schools	09-8"	5	0
05-Water and Stormwater	07-Public Schools	06-3"	15	0
05-Water and Stormwater	07-Public Schools	07-4"	40	0
05-Water and Stormwater	07-Public Schools	08-6"	245	0
05-Water and Stormwater	07-Public Schools	09-8"	83	0
05-Water and Stormwater	07-Public Schools	10-10"	10	0
05-Water and Stormwater	08-Senior Citizens Discount	01-5/8"	103	493.21
05-Water and Stormwater	08-Senior Citizens Discount	05-2"	5	0
05-Water and Stormwater	09-Hand Bill	01-5/8"	11	70.07
05-Water and Stormwater	09-Hand Bill	06-3"	5	0
05-Water and Stormwater	09-Hand Bill	08-6"	39	1131.48
05-Water and Stormwater	09-Hand Bill	09-8"	46	2371.18
05-Water and Stormwater	09-Hand Bill	10-10"	0	0
05-Water and Stormwater	10-City Leased	01-5/8"	40	255.75
05-Water and Stormwater	10-City Leased	03-1"	22	213.94
05-Water and Stormwater	10-City Leased	04-1.5"	10	150.45
05-Water and Stormwater	10-City Leased	05-2"	13	196.38
05-Water and Stormwater	10-City Leased	06-3"	14	521.78
05-Water and Stormwater	10-City Leased	07-4"	38	1236.9
05-Water and Stormwater	10-City Leased	08-6"	48	5463.26
05-Water and Stormwater	10-City Leased	09-8"	15	978.9
05-Water and Stormwater	10-City Leased	10-10"	4	0
05-Water and Stormwater	11-Hospital/University	01-5/8"	14	66.92
05-Water and Stormwater	11-Hospital/University	06-3"	5	0
05-Water and Stormwater	11-Hospital/University	07-4"	50	0
05-Water and Stormwater	11-Hospital/University	08-6"	145	0
05-Water and Stormwater	11-Hospital/University	09-8"	25	0

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
05-Water and Stormwater	11-Hospital/University	10-10"	10	0
05-Water and Stormwater	13-Fire Service	01-5/8"	150	89.18
05-Water and Stormwater	13-Fire Service	03-1"	90	0
05-Water and Stormwater	13-Fire Service	04-1.5"	24	0
05-Water and Stormwater	13-Fire Service	05-2"	1345	0
05-Water and Stormwater	13-Fire Service	06-3"	1016	0
05-Water and Stormwater	13-Fire Service	07-4"	4965	111.3
05-Water and Stormwater	13-Fire Service	08-6"	8051	0
05-Water and Stormwater	13-Fire Service	09-8"	2500	0
05-Water and Stormwater	13-Fire Service	10-10"	376	0
05-Water and Stormwater	13-Fire Service	11-12"	55	0
05-Water and Stormwater	14-City Government	01-5/8"	171	1097.63
05-Water and Stormwater	14-City Government	02-3/4"	55	402.05
05-Water and Stormwater	14-City Government	03-1"	53	512.89
05-Water and Stormwater	14-City Government	04-1.5"	30	448.74
05-Water and Stormwater	14-City Government	05-2"	58	1050.32
05-Water and Stormwater	14-City Government	06-3"	15	0
05-Water and Stormwater	14-City Government	07-4"	85	0
05-Water and Stormwater	14-City Government	08-6"	205	1508.64
05-Water and Stormwater	14-City Government	09-8"	63	0
05-Water and Stormwater	14-City Government	10-10"	5	0
06-Sewer Only	01-General Service-Residential	01-5/8"	5	0
06-Sewer Only	02-General Service-Commercial	01-5/8"	0	0
06-Sewer Only	02-General Service-Commercial	05-2"	0	0
06-Sewer Only	03-General Service-Industrial	02-3/4"	0	0
06-Sewer Only	03-General Service-Industrial	10-10"	6	0
06-Sewer Only	04-General Service-Public Utilities	07-4"	0	0
06-Sewer Only	06-Charity/Non-Public Schools	03-1"	5	0
06-Sewer Only	09-Hand Bill	01-5/8"	21	0
06-Sewer Only	09-Hand Bill	05-2"	0	0

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
06-Sewer Only	13-Fire Service	01-5/8"	0	0
06-Sewer Only	14-City Government	07-4"	0	0
07-Water and Sewer	01-General Service-Residential	01-5/8"	273	2072.81
07-Water and Sewer	01-General Service-Residential	02-3/4"	0	0
07-Water and Sewer	01-General Service-Residential	03-1"	1	8.22
07-Water and Sewer	01-General Service-Residential	05-2"	15	83.06
07-Water and Sewer	01-General Service-Residential	06-3"	0	0
07-Water and Sewer	02-General Service-Commercial	01-5/8"	34	496.42
07-Water and Sewer	02-General Service-Commercial	02-3/4"	0	0
07-Water and Sewer	02-General Service-Commercial	03-1"	26	341.31
07-Water and Sewer	02-General Service-Commercial	04-1.5"	9	921.15
07-Water and Sewer	02-General Service-Commercial	05-2"	24	605.19
07-Water and Sewer	02-General Service-Commercial	06-3"	2	37.27
07-Water and Sewer	02-General Service-Commercial	07-4"	0	0
07-Water and Sewer	02-General Service-Commercial	09-8"	0	0
07-Water and Sewer	03-General Service-Industrial	01-5/8"	1	7.23
07-Water and Sewer	05-P.H.A	01-5/8"	13	80.61
07-Water and Sewer	05-P.H.A	03-1"	0	0
07-Water and Sewer	05-P.H.A	06-3"	8	283.28
07-Water and Sewer	06-Charity/Non-Public Schools	01-5/8"	0	0
07-Water and Sewer	06-Charity/Non-Public Schools	03-1"	8	72.39
07-Water and Sewer	06-Charity/Non-Public Schools	04-1.5"	20	246.09
07-Water and Sewer	06-Charity/Non-Public Schools	05-2"	4	163.63
07-Water and Sewer	07-Public Schools	07-4"	0	0
07-Water and Sewer	07-Public Schools	08-6"	0	0
07-Water and Sewer	08-Senior Citizens Discount	01-5/8"	4	21.07
07-Water and Sewer	09-Hand Bill	04-1.5"	0	0
07-Water and Sewer	09-Hand Bill	05-2"	3	0
07-Water and Sewer	11-Hospital/University	05-2"	4	81.81
07-Water and Sewer	13-Fire Service	01-5/8"	0	0

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
07-Water and Sewer	13-Fire Service	03-1"	0	0
07-Water and Sewer	13-Fire Service	05-2"	11	199.01
07-Water and Sewer	13-Fire Service	12-Unknown	0	0
07-Water and Sewer	14-City Government	01-5/8"	1	0
07-Water and Sewer	14-City Government	03-1"	13	128.35
07-Water and Sewer	14-City Government	06-3"	0	0
07-Water and Sewer	14-City Government	08-6"	12	1527.2
08-RFSS, All Services	01-General Service-Residential	01-5/8"	0	0
08-RFSS, All Services	01-General Service-Residential	02-3/4"	0	0
08-RFSS, All Services	01-General Service-Residential	03-1"	0	0
08-RFSS, All Services	01-General Service-Residential	04-1.5"	0	0
08-RFSS, All Services	01-General Service-Residential	05-2"	0	0
08-RFSS, All Services	02-General Service-Commercial	01-5/8"	0	0
08-RFSS, All Services	02-General Service-Commercial	02-3/4"	0	0
08-RFSS, All Services	02-General Service-Commercial	03-1"	0	0
08-RFSS, All Services	02-General Service-Commercial	04-1.5"	0	0
08-RFSS, All Services	02-General Service-Commercial	05-2"	0	0
08-RFSS, All Services	03-General Service-Industrial	03-1"	0	0
08-RFSS, All Services	04-General Service-Public Utilities	03-1"	0	0
08-RFSS, All Services	05-P.H.A	03-1"	0	0
08-RFSS, All Services	05-P.H.A	04-1.5"	0	0
08-RFSS, All Services	05-P.H.A	05-2"	0	0
08-RFSS, All Services	08-Senior Citizens Discount	03-1"	0	0
08-RFSS, All Services	13-Fire Service	03-1"	0	0
08-RFSS, All Services	13-Fire Service	04-1.5"	0	0
08-RFSS, All Services	14-City Government	03-1"	0	0
09-RFSS, No Sewer	01-General Service-Residential	03-1"	0	0
09-RFSS, No Sewer	01-General Service-Residential	05-2"	0	0
09-RFSS, No Sewer	02-General Service-Commercial	03-1"	0	0
10-Unknown	01-General Service-Residential	01-5/8"	0	0

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
10-Unknown	01-General Service-Residential	03-1"	0	0
10-Unknown	01-General Service-Residential	04-1.5"	0	0
10-Unknown	01-General Service-Residential	05-2"	0	0
10-Unknown	01-General Service-Residential	06-3"	0	0
10-Unknown	01-General Service-Residential	07-4"	0	0
10-Unknown	01-General Service-Residential	08-6"	0	0
10-Unknown	01-General Service-Residential	09-8"	0	0
10-Unknown	01-General Service-Residential	12-Unknown	2205	-2219.8
10-Unknown	01-General Service-Residential	A-Unknown	0	0
10-Unknown	02-General Service-Commercial	01-5/8"	0	0
10-Unknown	02-General Service-Commercial	02-3/4"	0	0
10-Unknown	02-General Service-Commercial	03-1"	0	0
10-Unknown	02-General Service-Commercial	04-1.5"	0	0
10-Unknown	02-General Service-Commercial	05-2"	0	0
10-Unknown	02-General Service-Commercial	06-3"	0	0
10-Unknown	02-General Service-Commercial	07-4"	0	0
10-Unknown	02-General Service-Commercial	08-6"	0	0
10-Unknown	02-General Service-Commercial	09-8"	0	0
10-Unknown	02-General Service-Commercial	10-10"	0	0
10-Unknown	02-General Service-Commercial	12-Unknown	4460	-11733.85
10-Unknown	02-General Service-Commercial	A-Unknown	3	0
10-Unknown	03-General Service-Industrial	01-5/8"	0	0
10-Unknown	03-General Service-Industrial	12-Unknown	174	-1359
10-Unknown	04-General Service-Public Utilities	12-Unknown	99	-14.05
10-Unknown	05-P.H.A	07-4"	0	0
10-Unknown	05-P.H.A	12-Unknown	40	-146.86
10-Unknown	06-Charity/Non-Public Schools	01-5/8"	0	0
10-Unknown	06-Charity/Non-Public Schools	09-8"	0	0
10-Unknown	06-Charity/Non-Public Schools	12-Unknown	25	-5103.88
10-Unknown	07-Public Schools	12-Unknown	2	-289.5

Rpt1b v5 2015.02			FY12	
Service Type	Customer Type	Meter Size	fy12 # of Original Bills Issued	fy12 Water Usage Charges
10-Unknown	08-Senior Citizens Discount	01-5/8"	0	0
10-Unknown	08-Senior Citizens Discount	12-Unknown	1	-43.25
10-Unknown	09-Hand Bill	08-6"	0	0
10-Unknown	09-Hand Bill	10-10"	0	0
10-Unknown	09-Hand Bill	12-Unknown	466	-268.17
10-Unknown	10-City Leased	12-Unknown	2	-17.74
10-Unknown	11-Hospital/University	06-3"	0	0
10-Unknown	11-Hospital/University	07-4"	0	0
10-Unknown	11-Hospital/University	08-6"	0	0
10-Unknown	11-Hospital/University	09-8"	0	0
10-Unknown	11-Hospital/University	12-Unknown	27	-1786.32
10-Unknown	13-Fire Service	03-1"	0	0
10-Unknown	13-Fire Service	04-1.5"	0	0
10-Unknown	13-Fire Service	05-2"	0	0
10-Unknown	13-Fire Service	06-3"	0	0
10-Unknown	13-Fire Service	07-4"	0	0
10-Unknown	13-Fire Service	08-6"	0	0
10-Unknown	13-Fire Service	09-8"	0	0
10-Unknown	13-Fire Service	10-10"	0	0
10-Unknown	13-Fire Service	12-Unknown	3	-52.22
10-Unknown	14-City Government	01-5/8"	0	0
10-Unknown	14-City Government	05-2"	0	0
10-Unknown	14-City Government	08-6"	0	0
10-Unknown	14-City Government	12-Unknown	162	0
				38836004.11

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	01-5/8"	21727168.48
01-Water,Sewer,Stormwater	01-General Service-Residential	02-3/4"	5759.34
01-Water,Sewer,Stormwater	01-General Service-Residential	03-1"	489013.31
01-Water,Sewer,Stormwater	01-General Service-Residential	04-1.5"	296091.55
01-Water,Sewer,Stormwater	01-General Service-Residential	05-2"	325396.3
01-Water,Sewer,Stormwater	01-General Service-Residential	06-3"	223260.08
01-Water,Sewer,Stormwater	01-General Service-Residential	07-4"	133155.87
01-Water,Sewer,Stormwater	01-General Service-Residential	08-6"	60731.37
01-Water,Sewer,Stormwater	01-General Service-Residential	09-8"	24347.24
01-Water,Sewer,Stormwater	01-General Service-Residential	11-12"	18.07
01-Water,Sewer,Stormwater	02-General Service-Commercial	01-5/8"	1529347.08
01-Water,Sewer,Stormwater	02-General Service-Commercial	02-3/4"	2906.17
01-Water,Sewer,Stormwater	02-General Service-Commercial	03-1"	738246.73
01-Water,Sewer,Stormwater	02-General Service-Commercial	04-1.5"	582359.26
01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	1212571.24
01-Water,Sewer,Stormwater	02-General Service-Commercial	06-3"	738947.83
01-Water,Sewer,Stormwater	02-General Service-Commercial	07-4"	675413.88
01-Water,Sewer,Stormwater	02-General Service-Commercial	08-6"	403986.16
01-Water,Sewer,Stormwater	02-General Service-Commercial	09-8"	121751.49
01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	57391.44
01-Water,Sewer,Stormwater	03-General Service-Industrial	01-5/8"	30043.82
01-Water,Sewer,Stormwater	03-General Service-Industrial	03-1"	73095.58
01-Water,Sewer,Stormwater	03-General Service-Industrial	04-1.5"	53572.94
01-Water,Sewer,Stormwater	03-General Service-Industrial	05-2"	95108.31
01-Water,Sewer,Stormwater	03-General Service-Industrial	06-3"	70664.33
01-Water,Sewer,Stormwater	03-General Service-Industrial	07-4"	43349.8
01-Water,Sewer,Stormwater	03-General Service-Industrial	08-6"	35675.34
01-Water,Sewer,Stormwater	03-General Service-Industrial	10-10"	0
01-Water,Sewer,Stormwater	03-General Service-Industrial	11-12"	3642.3
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	01-5/8"	2021.98

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	03-1"	6670.14
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	04-1.5"	4759.97
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	05-2"	11431.96
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	06-3"	41201.63
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	07-4"	10491.97
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	08-6"	16542.78
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	09-8"	0
01-Water,Sewer,Stormwater	05-P.H.A	01-5/8"	310318.68
01-Water,Sewer,Stormwater	05-P.H.A	02-3/4"	21.36
01-Water,Sewer,Stormwater	05-P.H.A	03-1"	5212.66
01-Water,Sewer,Stormwater	05-P.H.A	04-1.5"	5317.68
01-Water,Sewer,Stormwater	05-P.H.A	05-2"	10860.64
01-Water,Sewer,Stormwater	05-P.H.A	06-3"	54083.9
01-Water,Sewer,Stormwater	05-P.H.A	07-4"	51208.51
01-Water,Sewer,Stormwater	05-P.H.A	08-6"	67759.18
01-Water,Sewer,Stormwater	05-P.H.A	09-8"	53271.33
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	01-5/8"	51898.52
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	02-3/4"	16.94
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	03-1"	72327.43
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	04-1.5"	64246.72
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	05-2"	138346.74
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	06-3"	192333.29
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	07-4"	214108.54
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	08-6"	57081.99
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	09-8"	12166.27
01-Water,Sewer,Stormwater	07-Public Schools	01-5/8"	671.19
01-Water,Sewer,Stormwater	07-Public Schools	03-1"	890.88
01-Water,Sewer,Stormwater	07-Public Schools	04-1.5"	2759.28
01-Water,Sewer,Stormwater	07-Public Schools	05-2"	26613.88
01-Water,Sewer,Stormwater	07-Public Schools	06-3"	119700.96

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
01-Water,Sewer,Stormwater	07-Public Schools	07-4"	379902.87
01-Water,Sewer,Stormwater	07-Public Schools	08-6"	80255.89
01-Water,Sewer,Stormwater	07-Public Schools	09-8"	12162.72
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	01-5/8"	768141.56
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	02-3/4"	3.31
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	03-1"	565.03
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	04-1.5"	396.84
01-Water,Sewer,Stormwater	09-Hand Bill	01-5/8"	781.27
01-Water,Sewer,Stormwater	09-Hand Bill	03-1"	4822.57
01-Water,Sewer,Stormwater	09-Hand Bill	04-1.5"	5818.69
01-Water,Sewer,Stormwater	09-Hand Bill	05-2"	32078.03
01-Water,Sewer,Stormwater	09-Hand Bill	06-3"	110634.47
01-Water,Sewer,Stormwater	09-Hand Bill	07-4"	204052.85
01-Water,Sewer,Stormwater	09-Hand Bill	08-6"	131229.38
01-Water,Sewer,Stormwater	09-Hand Bill	09-8"	58157.25
01-Water,Sewer,Stormwater	09-Hand Bill	10-10"	46050.08
01-Water,Sewer,Stormwater	10-City Leased	01-5/8"	489.11
01-Water,Sewer,Stormwater	10-City Leased	03-1"	1464.73
01-Water,Sewer,Stormwater	10-City Leased	04-1.5"	3706.85
01-Water,Sewer,Stormwater	10-City Leased	05-2"	10374.47
01-Water,Sewer,Stormwater	10-City Leased	06-3"	8766.21
01-Water,Sewer,Stormwater	10-City Leased	07-4"	23517.4
01-Water,Sewer,Stormwater	10-City Leased	08-6"	0
01-Water,Sewer,Stormwater	10-City Leased	09-8"	0
01-Water,Sewer,Stormwater	11-Hospital/University	01-5/8"	1855.92
01-Water,Sewer,Stormwater	11-Hospital/University	02-3/4"	17
01-Water,Sewer,Stormwater	11-Hospital/University	03-1"	4803.98
01-Water,Sewer,Stormwater	11-Hospital/University	04-1.5"	4562.7
01-Water,Sewer,Stormwater	11-Hospital/University	05-2"	33552.79
01-Water,Sewer,Stormwater	11-Hospital/University	06-3"	102477.39

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
01-Water,Sewer,Stormwater	11-Hospital/University	07-4"	179799.68
01-Water,Sewer,Stormwater	11-Hospital/University	08-6"	203871.3
01-Water,Sewer,Stormwater	11-Hospital/University	09-8"	42751.41
01-Water,Sewer,Stormwater	11-Hospital/University	10-10"	18237.33
01-Water,Sewer,Stormwater	12-Scheduled	01-5/8"	59.9
01-Water,Sewer,Stormwater	13-Fire Service	01-5/8"	1975.95
01-Water,Sewer,Stormwater	13-Fire Service	03-1"	4920.06
01-Water,Sewer,Stormwater	13-Fire Service	04-1.5"	4696.44
01-Water,Sewer,Stormwater	13-Fire Service	05-2"	8990.82
01-Water,Sewer,Stormwater	13-Fire Service	06-3"	9151.04
01-Water,Sewer,Stormwater	13-Fire Service	07-4"	15403.94
01-Water,Sewer,Stormwater	13-Fire Service	08-6"	21572.03
01-Water,Sewer,Stormwater	13-Fire Service	09-8"	0
01-Water,Sewer,Stormwater	13-Fire Service	10-10"	2909.58
01-Water,Sewer,Stormwater	14-City Government	01-5/8"	13106.41
01-Water,Sewer,Stormwater	14-City Government	02-3/4"	205.94
01-Water,Sewer,Stormwater	14-City Government	03-1"	35895.24
01-Water,Sewer,Stormwater	14-City Government	04-1.5"	38154.32
01-Water,Sewer,Stormwater	14-City Government	05-2"	205205.39
01-Water,Sewer,Stormwater	14-City Government	06-3"	212466.41
01-Water,Sewer,Stormwater	14-City Government	07-4"	167050.95
01-Water,Sewer,Stormwater	14-City Government	08-6"	180574.02
01-Water,Sewer,Stormwater	14-City Government	09-8"	106114.94
01-Water,Sewer,Stormwater	14-City Government	10-10"	180522.77
01-Water,Sewer,Stormwater	14-City Government	11-12"	21450.36
02-Water Only	01-General Service-Residential	01-5/8"	0
02-Water Only	01-General Service-Residential	03-1"	0
02-Water Only	01-General Service-Residential	04-1.5"	0
02-Water Only	01-General Service-Residential	05-2"	0
02-Water Only	01-General Service-Residential	06-3"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
02-Water Only	01-General Service-Residential	07-4"	0
02-Water Only	01-General Service-Residential	08-6"	0
02-Water Only	01-General Service-Residential	09-8"	0
02-Water Only	01-General Service-Residential	10-10"	0
02-Water Only	01-General Service-Residential	11-12"	0
02-Water Only	01-General Service-Residential	Y-Unknown	0
02-Water Only	02-General Service-Commercial	01-5/8"	0
02-Water Only	02-General Service-Commercial	03-1"	0
02-Water Only	02-General Service-Commercial	04-1.5"	0
02-Water Only	02-General Service-Commercial	05-2"	0
02-Water Only	02-General Service-Commercial	06-3"	0
02-Water Only	02-General Service-Commercial	07-4"	0
02-Water Only	02-General Service-Commercial	08-6"	0
02-Water Only	02-General Service-Commercial	09-8"	0
02-Water Only	02-General Service-Commercial	10-10"	0
02-Water Only	02-General Service-Commercial	11-12"	0
02-Water Only	03-General Service-Industrial	05-2"	0
02-Water Only	03-General Service-Industrial	07-4"	0
02-Water Only	03-General Service-Industrial	08-6"	0
02-Water Only	03-General Service-Industrial	09-8"	0
02-Water Only	03-General Service-Industrial	10-10"	0
02-Water Only	04-General Service-Public Utilities	05-2"	0
02-Water Only	04-General Service-Public Utilities	11-12"	0
02-Water Only	05-P.H.A	01-5/8"	0
02-Water Only	05-P.H.A	03-1"	0
02-Water Only	05-P.H.A	05-2"	0
02-Water Only	05-P.H.A	07-4"	0
02-Water Only	05-P.H.A	08-6"	0
02-Water Only	05-P.H.A	09-8"	0
02-Water Only	06-Charity/Non-Public Schools	01-5/8"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
02-Water Only	06-Charity/Non-Public Schools	03-1"	0
02-Water Only	06-Charity/Non-Public Schools	05-2"	0
02-Water Only	06-Charity/Non-Public Schools	06-3"	0
02-Water Only	06-Charity/Non-Public Schools	07-4"	0
02-Water Only	06-Charity/Non-Public Schools	08-6"	0
02-Water Only	06-Charity/Non-Public Schools	09-8"	0
02-Water Only	07-Public Schools	06-3"	0
02-Water Only	07-Public Schools	07-4"	0
02-Water Only	07-Public Schools	08-6"	0
02-Water Only	07-Public Schools	09-8"	0
02-Water Only	07-Public Schools	10-10"	0
02-Water Only	08-Senior Citizens Discount	05-2"	0
02-Water Only	09-Hand Bill	06-3"	0
02-Water Only	09-Hand Bill	07-4"	0
02-Water Only	09-Hand Bill	08-6"	0
02-Water Only	09-Hand Bill	09-8"	0
02-Water Only	10-City Leased	04-1.5"	0
02-Water Only	10-City Leased	05-2"	0
02-Water Only	10-City Leased	07-4"	0
02-Water Only	10-City Leased	08-6"	0
02-Water Only	10-City Leased	09-8"	0
02-Water Only	10-City Leased	10-10"	0
02-Water Only	11-Hospital/University	01-5/8"	0
02-Water Only	11-Hospital/University	03-1"	0
02-Water Only	11-Hospital/University	06-3"	0
02-Water Only	11-Hospital/University	07-4"	0
02-Water Only	11-Hospital/University	08-6"	0
02-Water Only	11-Hospital/University	09-8"	0
02-Water Only	11-Hospital/University	10-10"	0
02-Water Only	13-Fire Service	01-5/8"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
02-Water Only	13-Fire Service	03-1"	0
02-Water Only	13-Fire Service	04-1.5"	0
02-Water Only	13-Fire Service	05-2"	0
02-Water Only	13-Fire Service	06-3"	0
02-Water Only	13-Fire Service	07-4"	8.83
02-Water Only	13-Fire Service	08-6"	0
02-Water Only	13-Fire Service	09-8"	0
02-Water Only	13-Fire Service	10-10"	0
02-Water Only	13-Fire Service	11-12"	0
02-Water Only	14-City Government	03-1"	0
02-Water Only	14-City Government	05-2"	0
02-Water Only	14-City Government	06-3"	0
02-Water Only	14-City Government	07-4"	0
02-Water Only	14-City Government	08-6"	0
02-Water Only	14-City Government	09-8"	0
02-Water Only	14-City Government	10-10"	0
03-Stormwater Only	01-General Service-Residential	01-5/8"	913.04
03-Stormwater Only	01-General Service-Residential	02-3/4"	0
03-Stormwater Only	01-General Service-Residential	03-1"	0.69
03-Stormwater Only	01-General Service-Residential	04-1.5"	0
03-Stormwater Only	01-General Service-Residential	05-2"	0
03-Stormwater Only	01-General Service-Residential	06-3"	638.42
03-Stormwater Only	01-General Service-Residential	07-4"	0
03-Stormwater Only	01-General Service-Residential	08-6"	0
03-Stormwater Only	01-General Service-Residential	09-8"	0
03-Stormwater Only	01-General Service-Residential	10-10"	0
03-Stormwater Only	01-General Service-Residential	12-Unknown	0
03-Stormwater Only	01-General Service-Residential	A-Unknown	11121.36
03-Stormwater Only	02-General Service-Commercial	01-5/8"	414.67
03-Stormwater Only	02-General Service-Commercial	02-3/4"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
03-Stormwater Only	02-General Service-Commercial	03-1"	-69.88
03-Stormwater Only	02-General Service-Commercial	04-1.5"	0
03-Stormwater Only	02-General Service-Commercial	05-2"	20.02
03-Stormwater Only	02-General Service-Commercial	06-3"	6.18
03-Stormwater Only	02-General Service-Commercial	07-4"	0
03-Stormwater Only	02-General Service-Commercial	08-6"	0
03-Stormwater Only	02-General Service-Commercial	09-8"	0
03-Stormwater Only	02-General Service-Commercial	12-Unknown	0
03-Stormwater Only	02-General Service-Commercial	A-Unknown	1.99
03-Stormwater Only	02-General Service-Commercial	Y-Unknown	0
03-Stormwater Only	03-General Service-Industrial	01-5/8"	0
03-Stormwater Only	03-General Service-Industrial	03-1"	0
03-Stormwater Only	03-General Service-Industrial	04-1.5"	0
03-Stormwater Only	03-General Service-Industrial	05-2"	0
03-Stormwater Only	03-General Service-Industrial	06-3"	0
03-Stormwater Only	03-General Service-Industrial	07-4"	0
03-Stormwater Only	03-General Service-Industrial	08-6"	0
03-Stormwater Only	03-General Service-Industrial	12-Unknown	0
03-Stormwater Only	03-General Service-Industrial	A-Unknown	0
03-Stormwater Only	03-General Service-Industrial	Y-Unknown	0
03-Stormwater Only	04-General Service-Public Utilities	01-5/8"	0
03-Stormwater Only	04-General Service-Public Utilities	03-1"	0
03-Stormwater Only	04-General Service-Public Utilities	05-2"	0
03-Stormwater Only	04-General Service-Public Utilities	A-Unknown	0
03-Stormwater Only	05-P.H.A	01-5/8"	0.51
03-Stormwater Only	05-P.H.A	03-1"	0
03-Stormwater Only	05-P.H.A	05-2"	0
03-Stormwater Only	05-P.H.A	A-Unknown	0
03-Stormwater Only	06-Charity/Non-Public Schools	01-5/8"	0
03-Stormwater Only	06-Charity/Non-Public Schools	03-1"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
03-Stormwater Only	06-Charity/Non-Public Schools	04-1.5"	0
03-Stormwater Only	06-Charity/Non-Public Schools	05-2"	0
03-Stormwater Only	06-Charity/Non-Public Schools	07-4"	0
03-Stormwater Only	06-Charity/Non-Public Schools	09-8"	0
03-Stormwater Only	06-Charity/Non-Public Schools	A-Unknown	0
03-Stormwater Only	07-Public Schools	01-5/8"	0
03-Stormwater Only	07-Public Schools	08-6"	0
03-Stormwater Only	07-Public Schools	09-8"	0
03-Stormwater Only	07-Public Schools	12-Unknown	0
03-Stormwater Only	07-Public Schools	A-Unknown	0
03-Stormwater Only	08-Senior Citizens Discount	01-5/8"	0.61
03-Stormwater Only	08-Senior Citizens Discount	A-Unknown	0
03-Stormwater Only	09-Hand Bill	01-5/8"	0
03-Stormwater Only	09-Hand Bill	05-2"	0
03-Stormwater Only	09-Hand Bill	06-3"	0
03-Stormwater Only	09-Hand Bill	08-6"	0
03-Stormwater Only	09-Hand Bill	09-8"	0
03-Stormwater Only	09-Hand Bill	10-10"	0
03-Stormwater Only	09-Hand Bill	A-Unknown	0
03-Stormwater Only	10-City Leased	01-5/8"	0
03-Stormwater Only	10-City Leased	03-1"	0
03-Stormwater Only	10-City Leased	05-2"	0
03-Stormwater Only	10-City Leased	06-3"	0
03-Stormwater Only	10-City Leased	07-4"	0
03-Stormwater Only	10-City Leased	08-6"	0
03-Stormwater Only	10-City Leased	09-8"	0
03-Stormwater Only	11-Hospital/University	01-5/8"	-46.46
03-Stormwater Only	11-Hospital/University	03-1"	0
03-Stormwater Only	11-Hospital/University	05-2"	0
03-Stormwater Only	11-Hospital/University	08-6"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
03-Stormwater Only	11-Hospital/University	A-Unknown	0
03-Stormwater Only	12-Scheduled	01-5/8"	0
03-Stormwater Only	12-Scheduled	A-Unknown	0
03-Stormwater Only	13-Fire Service	01-5/8"	0
03-Stormwater Only	13-Fire Service	03-1"	0
03-Stormwater Only	13-Fire Service	04-1.5"	0
03-Stormwater Only	13-Fire Service	05-2"	0
03-Stormwater Only	13-Fire Service	06-3"	0
03-Stormwater Only	13-Fire Service	07-4"	0
03-Stormwater Only	13-Fire Service	08-6"	0
03-Stormwater Only	13-Fire Service	09-8"	0
03-Stormwater Only	13-Fire Service	10-10"	0
03-Stormwater Only	13-Fire Service	11-12"	0
03-Stormwater Only	13-Fire Service	12-Unknown	0
03-Stormwater Only	13-Fire Service	A-Unknown	0
03-Stormwater Only	14-City Government	01-5/8"	0.13
03-Stormwater Only	14-City Government	02-3/4"	0
03-Stormwater Only	14-City Government	03-1"	0.28
03-Stormwater Only	14-City Government	04-1.5"	0
03-Stormwater Only	14-City Government	05-2"	0
03-Stormwater Only	14-City Government	06-3"	0
03-Stormwater Only	14-City Government	07-4"	0
03-Stormwater Only	14-City Government	08-6"	0
03-Stormwater Only	14-City Government	09-8"	0
03-Stormwater Only	14-City Government	12-Unknown	0
03-Stormwater Only	14-City Government	A-Unknown	0
04-Sewer and Stormwater	01-General Service-Residential	01-5/8"	753.11
04-Sewer and Stormwater	01-General Service-Residential	02-3/4"	106.47
04-Sewer and Stormwater	01-General Service-Residential	07-4"	0
04-Sewer and Stormwater	01-General Service-Residential	08-6"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
04-Sewer and Stormwater	01-General Service-Residential	A-Unknown	0
04-Sewer and Stormwater	02-General Service-Commercial	01-5/8"	0
04-Sewer and Stormwater	02-General Service-Commercial	05-2"	0
04-Sewer and Stormwater	03-General Service-Industrial	04-1.5"	0
04-Sewer and Stormwater	03-General Service-Industrial	05-2"	482.44
04-Sewer and Stormwater	03-General Service-Industrial	06-3"	0
04-Sewer and Stormwater	03-General Service-Industrial	11-12"	12512.71
04-Sewer and Stormwater	04-General Service-Public Utilities	03-1"	164.85
04-Sewer and Stormwater	06-Charity/Non-Public Schools	03-1"	105.96
04-Sewer and Stormwater	09-Hand Bill	01-5/8"	33.6
04-Sewer and Stormwater	09-Hand Bill	04-1.5"	0
04-Sewer and Stormwater	09-Hand Bill	05-2"	1416.5
04-Sewer and Stormwater	09-Hand Bill	06-3"	886.48
04-Sewer and Stormwater	09-Hand Bill	08-6"	5501.6
04-Sewer and Stormwater	09-Hand Bill	09-8"	5386.32
04-Sewer and Stormwater	09-Hand Bill	10-10"	0
04-Sewer and Stormwater	11-Hospital/University	01-5/8"	0
05-Water and Stormwater	01-General Service-Residential	01-5/8"	0
05-Water and Stormwater	01-General Service-Residential	02-3/4"	0
05-Water and Stormwater	01-General Service-Residential	03-1"	0
05-Water and Stormwater	01-General Service-Residential	04-1.5"	0
05-Water and Stormwater	01-General Service-Residential	05-2"	0
05-Water and Stormwater	01-General Service-Residential	06-3"	0
05-Water and Stormwater	01-General Service-Residential	07-4"	0
05-Water and Stormwater	01-General Service-Residential	08-6"	0
05-Water and Stormwater	01-General Service-Residential	09-8"	0
05-Water and Stormwater	01-General Service-Residential	10-10"	0
05-Water and Stormwater	01-General Service-Residential	11-12"	0
05-Water and Stormwater	01-General Service-Residential	Y-Unknown	0
05-Water and Stormwater	02-General Service-Commercial	01-5/8"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
05-Water and Stormwater	02-General Service-Commercial	03-1"	0
05-Water and Stormwater	02-General Service-Commercial	04-1.5"	0
05-Water and Stormwater	02-General Service-Commercial	05-2"	0
05-Water and Stormwater	02-General Service-Commercial	06-3"	0
05-Water and Stormwater	02-General Service-Commercial	07-4"	0
05-Water and Stormwater	02-General Service-Commercial	08-6"	0
05-Water and Stormwater	02-General Service-Commercial	09-8"	0
05-Water and Stormwater	02-General Service-Commercial	10-10"	0
05-Water and Stormwater	02-General Service-Commercial	11-12"	0
05-Water and Stormwater	03-General Service-Industrial	01-5/8"	0
05-Water and Stormwater	03-General Service-Industrial	03-1"	0
05-Water and Stormwater	03-General Service-Industrial	04-1.5"	0
05-Water and Stormwater	03-General Service-Industrial	05-2"	0
05-Water and Stormwater	03-General Service-Industrial	06-3"	0
05-Water and Stormwater	03-General Service-Industrial	07-4"	0
05-Water and Stormwater	03-General Service-Industrial	08-6"	0
05-Water and Stormwater	03-General Service-Industrial	09-8"	0
05-Water and Stormwater	03-General Service-Industrial	10-10"	0
05-Water and Stormwater	04-General Service-Public Utilities	03-1"	0
05-Water and Stormwater	04-General Service-Public Utilities	11-12"	0
05-Water and Stormwater	05-P.H.A	01-5/8"	0
05-Water and Stormwater	05-P.H.A	03-1"	0
05-Water and Stormwater	05-P.H.A	05-2"	0
05-Water and Stormwater	05-P.H.A	07-4"	0
05-Water and Stormwater	05-P.H.A	08-6"	0
05-Water and Stormwater	05-P.H.A	09-8"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	01-5/8"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	03-1"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	04-1.5"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	05-2"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
05-Water and Stormwater	06-Charity/Non-Public Schools	06-3"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	07-4"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	08-6"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	09-8"	0
05-Water and Stormwater	07-Public Schools	06-3"	0
05-Water and Stormwater	07-Public Schools	07-4"	0
05-Water and Stormwater	07-Public Schools	08-6"	0
05-Water and Stormwater	07-Public Schools	09-8"	0
05-Water and Stormwater	07-Public Schools	10-10"	0
05-Water and Stormwater	08-Senior Citizens Discount	01-5/8"	0
05-Water and Stormwater	08-Senior Citizens Discount	05-2"	0
05-Water and Stormwater	09-Hand Bill	01-5/8"	0
05-Water and Stormwater	09-Hand Bill	06-3"	0
05-Water and Stormwater	09-Hand Bill	08-6"	0
05-Water and Stormwater	09-Hand Bill	09-8"	0
05-Water and Stormwater	09-Hand Bill	10-10"	0
05-Water and Stormwater	10-City Leased	01-5/8"	0
05-Water and Stormwater	10-City Leased	03-1"	0
05-Water and Stormwater	10-City Leased	04-1.5"	0
05-Water and Stormwater	10-City Leased	05-2"	0
05-Water and Stormwater	10-City Leased	06-3"	0
05-Water and Stormwater	10-City Leased	07-4"	0
05-Water and Stormwater	10-City Leased	08-6"	0
05-Water and Stormwater	10-City Leased	09-8"	0
05-Water and Stormwater	10-City Leased	10-10"	0
05-Water and Stormwater	11-Hospital/University	01-5/8"	0
05-Water and Stormwater	11-Hospital/University	06-3"	0
05-Water and Stormwater	11-Hospital/University	07-4"	0
05-Water and Stormwater	11-Hospital/University	08-6"	0
05-Water and Stormwater	11-Hospital/University	09-8"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
05-Water and Stormwater	11-Hospital/University	10-10"	0
05-Water and Stormwater	13-Fire Service	01-5/8"	0
05-Water and Stormwater	13-Fire Service	03-1"	0
05-Water and Stormwater	13-Fire Service	04-1.5"	0
05-Water and Stormwater	13-Fire Service	05-2"	0
05-Water and Stormwater	13-Fire Service	06-3"	0
05-Water and Stormwater	13-Fire Service	07-4"	0
05-Water and Stormwater	13-Fire Service	08-6"	0
05-Water and Stormwater	13-Fire Service	09-8"	0
05-Water and Stormwater	13-Fire Service	10-10"	0
05-Water and Stormwater	13-Fire Service	11-12"	0
05-Water and Stormwater	14-City Government	01-5/8"	0
05-Water and Stormwater	14-City Government	02-3/4"	0
05-Water and Stormwater	14-City Government	03-1"	0
05-Water and Stormwater	14-City Government	04-1.5"	0
05-Water and Stormwater	14-City Government	05-2"	0
05-Water and Stormwater	14-City Government	06-3"	0
05-Water and Stormwater	14-City Government	07-4"	0
05-Water and Stormwater	14-City Government	08-6"	0
05-Water and Stormwater	14-City Government	09-8"	0
05-Water and Stormwater	14-City Government	10-10"	0
06-Sewer Only	01-General Service-Residential	01-5/8"	22.58
06-Sewer Only	02-General Service-Commercial	01-5/8"	0
06-Sewer Only	02-General Service-Commercial	05-2"	0
06-Sewer Only	03-General Service-Industrial	02-3/4"	0
06-Sewer Only	03-General Service-Industrial	10-10"	4849.3
06-Sewer Only	04-General Service-Public Utilities	07-4"	0
06-Sewer Only	06-Charity/Non-Public Schools	03-1"	89.17
06-Sewer Only	09-Hand Bill	01-5/8"	107.69
06-Sewer Only	09-Hand Bill	05-2"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
06-Sewer Only	13-Fire Service	01-5/8"	0
06-Sewer Only	14-City Government	07-4"	0
07-Water and Sewer	01-General Service-Residential	01-5/8"	2141.96
07-Water and Sewer	01-General Service-Residential	02-3/4"	0
07-Water and Sewer	01-General Service-Residential	03-1"	133.42
07-Water and Sewer	01-General Service-Residential	05-2"	262.34
07-Water and Sewer	01-General Service-Residential	06-3"	0
07-Water and Sewer	02-General Service-Commercial	01-5/8"	747.56
07-Water and Sewer	02-General Service-Commercial	02-3/4"	0
07-Water and Sewer	02-General Service-Commercial	03-1"	830.08
07-Water and Sewer	02-General Service-Commercial	04-1.5"	11259.15
07-Water and Sewer	02-General Service-Commercial	05-2"	1903.96
07-Water and Sewer	02-General Service-Commercial	06-3"	126.64
07-Water and Sewer	02-General Service-Commercial	07-4"	0
07-Water and Sewer	02-General Service-Commercial	09-8"	0
07-Water and Sewer	03-General Service-Industrial	01-5/8"	4.81
07-Water and Sewer	05-P.H.A	01-5/8"	55.37
07-Water and Sewer	05-P.H.A	03-1"	0
07-Water and Sewer	05-P.H.A	06-3"	962.48
07-Water and Sewer	06-Charity/Non-Public Schools	01-5/8"	0
07-Water and Sewer	06-Charity/Non-Public Schools	03-1"	176.61
07-Water and Sewer	06-Charity/Non-Public Schools	04-1.5"	726.18
07-Water and Sewer	06-Charity/Non-Public Schools	05-2"	516.9
07-Water and Sewer	07-Public Schools	07-4"	0
07-Water and Sewer	07-Public Schools	08-6"	0
07-Water and Sewer	08-Senior Citizens Discount	01-5/8"	14.59
07-Water and Sewer	09-Hand Bill	04-1.5"	0
07-Water and Sewer	09-Hand Bill	05-2"	206.76
07-Water and Sewer	11-Hospital/University	05-2"	258.45
07-Water and Sewer	13-Fire Service	01-5/8"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
07-Water and Sewer	13-Fire Service	03-1"	0
07-Water and Sewer	13-Fire Service	05-2"	622.7
07-Water and Sewer	13-Fire Service	12-Unknown	0
07-Water and Sewer	14-City Government	01-5/8"	0
07-Water and Sewer	14-City Government	03-1"	308.33
07-Water and Sewer	14-City Government	06-3"	0
07-Water and Sewer	14-City Government	08-6"	5096.91
08-RFSS, All Services	01-General Service-Residential	01-5/8"	0
08-RFSS, All Services	01-General Service-Residential	02-3/4"	0
08-RFSS, All Services	01-General Service-Residential	03-1"	0
08-RFSS, All Services	01-General Service-Residential	04-1.5"	0
08-RFSS, All Services	01-General Service-Residential	05-2"	0
08-RFSS, All Services	02-General Service-Commercial	01-5/8"	0
08-RFSS, All Services	02-General Service-Commercial	02-3/4"	0
08-RFSS, All Services	02-General Service-Commercial	03-1"	0
08-RFSS, All Services	02-General Service-Commercial	04-1.5"	0
08-RFSS, All Services	02-General Service-Commercial	05-2"	0
08-RFSS, All Services	03-General Service-Industrial	03-1"	0
08-RFSS, All Services	04-General Service-Public Utilities	03-1"	0
08-RFSS, All Services	05-P.H.A	03-1"	0
08-RFSS, All Services	05-P.H.A	04-1.5"	0
08-RFSS, All Services	05-P.H.A	05-2"	0
08-RFSS, All Services	08-Senior Citizens Discount	03-1"	0
08-RFSS, All Services	13-Fire Service	03-1"	0
08-RFSS, All Services	13-Fire Service	04-1.5"	0
08-RFSS, All Services	14-City Government	03-1"	0
09-RFSS, No Sewer	01-General Service-Residential	03-1"	0
09-RFSS, No Sewer	01-General Service-Residential	05-2"	0
09-RFSS, No Sewer	02-General Service-Commercial	03-1"	0
10-Unknown	01-General Service-Residential	01-5/8"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
10-Unknown	01-General Service-Residential	03-1"	0
10-Unknown	01-General Service-Residential	04-1.5"	0
10-Unknown	01-General Service-Residential	05-2"	0
10-Unknown	01-General Service-Residential	06-3"	0
10-Unknown	01-General Service-Residential	07-4"	0
10-Unknown	01-General Service-Residential	08-6"	0
10-Unknown	01-General Service-Residential	09-8"	0
10-Unknown	01-General Service-Residential	12-Unknown	-3115.14
10-Unknown	01-General Service-Residential	A-Unknown	0
10-Unknown	02-General Service-Commercial	01-5/8"	0
10-Unknown	02-General Service-Commercial	02-3/4"	0
10-Unknown	02-General Service-Commercial	03-1"	0
10-Unknown	02-General Service-Commercial	04-1.5"	0
10-Unknown	02-General Service-Commercial	05-2"	0
10-Unknown	02-General Service-Commercial	06-3"	0
10-Unknown	02-General Service-Commercial	07-4"	0
10-Unknown	02-General Service-Commercial	08-6"	0
10-Unknown	02-General Service-Commercial	09-8"	0
10-Unknown	02-General Service-Commercial	10-10"	0
10-Unknown	02-General Service-Commercial	12-Unknown	-33334.78
10-Unknown	02-General Service-Commercial	A-Unknown	0
10-Unknown	03-General Service-Industrial	01-5/8"	0
10-Unknown	03-General Service-Industrial	12-Unknown	-1418.11
10-Unknown	04-General Service-Public Utilities	12-Unknown	-50.65
10-Unknown	05-P.H.A	07-4"	0
10-Unknown	05-P.H.A	12-Unknown	-165
10-Unknown	06-Charity/Non-Public Schools	01-5/8"	0
10-Unknown	06-Charity/Non-Public Schools	09-8"	0
10-Unknown	06-Charity/Non-Public Schools	12-Unknown	-508.14
10-Unknown	07-Public Schools	12-Unknown	-50.3

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy12 Sewer Usage Charges
10-Unknown	08-Senior Citizens Discount	01-5/8"	0
10-Unknown	08-Senior Citizens Discount	12-Unknown	-8.67
10-Unknown	09-Hand Bill	08-6"	0
10-Unknown	09-Hand Bill	10-10"	0
10-Unknown	09-Hand Bill	12-Unknown	-8022.42
10-Unknown	10-City Leased	12-Unknown	-412.48
10-Unknown	11-Hospital/University	06-3"	0
10-Unknown	11-Hospital/University	07-4"	0
10-Unknown	11-Hospital/University	08-6"	0
10-Unknown	11-Hospital/University	09-8"	0
10-Unknown	11-Hospital/University	12-Unknown	-1676.14
10-Unknown	13-Fire Service	03-1"	0
10-Unknown	13-Fire Service	04-1.5"	0
10-Unknown	13-Fire Service	05-2"	0
10-Unknown	13-Fire Service	06-3"	0
10-Unknown	13-Fire Service	07-4"	0
10-Unknown	13-Fire Service	08-6"	0
10-Unknown	13-Fire Service	09-8"	0
10-Unknown	13-Fire Service	10-10"	0
10-Unknown	13-Fire Service	12-Unknown	-8.08
10-Unknown	14-City Government	01-5/8"	0
10-Unknown	14-City Government	05-2"	0
10-Unknown	14-City Government	08-6"	0
10-Unknown	14-City Government	12-Unknown	0
			35086094.36

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
01-Water,Sewer,Stormwater	01-General Service-Residential	01-5/8"	4915518	409627
01-Water,Sewer,Stormwater	01-General Service-Residential	02-3/4"	163	14
01-Water,Sewer,Stormwater	01-General Service-Residential	03-1"	20120	1677
01-Water,Sewer,Stormwater	01-General Service-Residential	04-1.5"	6162	514
01-Water,Sewer,Stormwater	01-General Service-Residential	05-2"	4298	358
01-Water,Sewer,Stormwater	01-General Service-Residential	06-3"	1634	136
01-Water,Sewer,Stormwater	01-General Service-Residential	07-4"	493	41
01-Water,Sewer,Stormwater	01-General Service-Residential	08-6"	133	11
01-Water,Sewer,Stormwater	01-General Service-Residential	09-8"	36	3
01-Water,Sewer,Stormwater	01-General Service-Residential	11-12"	0	0
01-Water,Sewer,Stormwater	02-General Service-Commercial	01-5/8"	327569	27297
01-Water,Sewer,Stormwater	02-General Service-Commercial	02-3/4"	125	10
01-Water,Sewer,Stormwater	02-General Service-Commercial	03-1"	28559	2380
01-Water,Sewer,Stormwater	02-General Service-Commercial	04-1.5"	11715	976
01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	15664	1305
01-Water,Sewer,Stormwater	02-General Service-Commercial	06-3"	5531	461
01-Water,Sewer,Stormwater	02-General Service-Commercial	07-4"	2834	236
01-Water,Sewer,Stormwater	02-General Service-Commercial	08-6"	960	80
01-Water,Sewer,Stormwater	02-General Service-Commercial	09-8"	206	17
01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	52	4
01-Water,Sewer,Stormwater	03-General Service-Industrial	01-5/8"	6207	517
01-Water,Sewer,Stormwater	03-General Service-Industrial	03-1"	2898	242
01-Water,Sewer,Stormwater	03-General Service-Industrial	04-1.5"	937	78
01-Water,Sewer,Stormwater	03-General Service-Industrial	05-2"	1242	104
01-Water,Sewer,Stormwater	03-General Service-Industrial	06-3"	534	45
01-Water,Sewer,Stormwater	03-General Service-Industrial	07-4"	162	14
01-Water,Sewer,Stormwater	03-General Service-Industrial	08-6"	83	7
01-Water,Sewer,Stormwater	03-General Service-Industrial	10-10"	0	0
01-Water,Sewer,Stormwater	03-General Service-Industrial	11-12"	0	0
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	01-5/8"	410	34

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	03-1"	290	24
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	04-1.5"	112	9
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	05-2"	205	17
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	06-3"	142	12
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	07-4"	43	4
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	08-6"	56	5
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	09-8"	0	0
01-Water,Sewer,Stormwater	05-P.H.A	01-5/8"	69440	5787
01-Water,Sewer,Stormwater	05-P.H.A	02-3/4"	0	0
01-Water,Sewer,Stormwater	05-P.H.A	03-1"	180	15
01-Water,Sewer,Stormwater	05-P.H.A	04-1.5"	109	9
01-Water,Sewer,Stormwater	05-P.H.A	05-2"	169	14
01-Water,Sewer,Stormwater	05-P.H.A	06-3"	428	36
01-Water,Sewer,Stormwater	05-P.H.A	07-4"	235	20
01-Water,Sewer,Stormwater	05-P.H.A	08-6"	167	14
01-Water,Sewer,Stormwater	05-P.H.A	09-8"	83	7
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	01-5/8"	14753	1229
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	02-3/4"	0	0
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	03-1"	3950	329
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	04-1.5"	1900	158
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	05-2"	2624	219
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	06-3"	1745	145
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	07-4"	1299	108
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	08-6"	155	13
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	09-8"	20	2
01-Water,Sewer,Stormwater	07-Public Schools	01-5/8"	130	11
01-Water,Sewer,Stormwater	07-Public Schools	03-1"	122	10
01-Water,Sewer,Stormwater	07-Public Schools	04-1.5"	82	7
01-Water,Sewer,Stormwater	07-Public Schools	05-2"	493	41
01-Water,Sewer,Stormwater	07-Public Schools	06-3"	1211	101

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
01-Water,Sewer,Stormwater	07-Public Schools	07-4"	2303	192
01-Water,Sewer,Stormwater	07-Public Schools	08-6"	244	20
01-Water,Sewer,Stormwater	07-Public Schools	09-8"	32	3
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	01-5/8"	230591	19216
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	02-3/4"	0	0
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	03-1"	33	3
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	04-1.5"	12	1
01-Water,Sewer,Stormwater	09-Hand Bill	01-5/8"	132	11
01-Water,Sewer,Stormwater	09-Hand Bill	03-1"	188	16
01-Water,Sewer,Stormwater	09-Hand Bill	04-1.5"	123	10
01-Water,Sewer,Stormwater	09-Hand Bill	05-2"	412	34
01-Water,Sewer,Stormwater	09-Hand Bill	06-3"	813	68
01-Water,Sewer,Stormwater	09-Hand Bill	07-4"	900	75
01-Water,Sewer,Stormwater	09-Hand Bill	08-6"	284	24
01-Water,Sewer,Stormwater	09-Hand Bill	09-8"	70	6
01-Water,Sewer,Stormwater	09-Hand Bill	10-10"	47	4
01-Water,Sewer,Stormwater	10-City Leased	01-5/8"	139	12
01-Water,Sewer,Stormwater	10-City Leased	03-1"	54	5
01-Water,Sewer,Stormwater	10-City Leased	04-1.5"	64	5
01-Water,Sewer,Stormwater	10-City Leased	05-2"	134	11
01-Water,Sewer,Stormwater	10-City Leased	06-3"	52	4
01-Water,Sewer,Stormwater	10-City Leased	07-4"	91	8
01-Water,Sewer,Stormwater	10-City Leased	08-6"	5	0
01-Water,Sewer,Stormwater	10-City Leased	09-8"	5	0
01-Water,Sewer,Stormwater	11-Hospital/University	01-5/8"	568	47
01-Water,Sewer,Stormwater	11-Hospital/University	02-3/4"	0	0
01-Water,Sewer,Stormwater	11-Hospital/University	03-1"	283	24
01-Water,Sewer,Stormwater	11-Hospital/University	04-1.5"	141	12
01-Water,Sewer,Stormwater	11-Hospital/University	05-2"	631	53
01-Water,Sewer,Stormwater	11-Hospital/University	06-3"	1027	86

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
01-Water,Sewer,Stormwater	11-Hospital/University	07-4"	1029	86
01-Water,Sewer,Stormwater	11-Hospital/University	08-6"	595	50
01-Water,Sewer,Stormwater	11-Hospital/University	09-8"	64	5
01-Water,Sewer,Stormwater	11-Hospital/University	10-10"	18	2
01-Water,Sewer,Stormwater	12-Scheduled	01-5/8"	27	2
01-Water,Sewer,Stormwater	13-Fire Service	01-5/8"	467	39
01-Water,Sewer,Stormwater	13-Fire Service	03-1"	158	13
01-Water,Sewer,Stormwater	13-Fire Service	04-1.5"	84	7
01-Water,Sewer,Stormwater	13-Fire Service	05-2"	136	11
01-Water,Sewer,Stormwater	13-Fire Service	06-3"	47	4
01-Water,Sewer,Stormwater	13-Fire Service	07-4"	58	5
01-Water,Sewer,Stormwater	13-Fire Service	08-6"	45	4
01-Water,Sewer,Stormwater	13-Fire Service	09-8"	20	2
01-Water,Sewer,Stormwater	13-Fire Service	10-10"	0	0
01-Water,Sewer,Stormwater	14-City Government	01-5/8"	2762	230
01-Water,Sewer,Stormwater	14-City Government	02-3/4"	10	1
01-Water,Sewer,Stormwater	14-City Government	03-1"	1342	112
01-Water,Sewer,Stormwater	14-City Government	04-1.5"	809	67
01-Water,Sewer,Stormwater	14-City Government	05-2"	2694	225
01-Water,Sewer,Stormwater	14-City Government	06-3"	1479	123
01-Water,Sewer,Stormwater	14-City Government	07-4"	701	58
01-Water,Sewer,Stormwater	14-City Government	08-6"	362	30
01-Water,Sewer,Stormwater	14-City Government	09-8"	143	12
01-Water,Sewer,Stormwater	14-City Government	10-10"	155	13
01-Water,Sewer,Stormwater	14-City Government	11-12"	9	1
02-Water Only	01-General Service-Residential	01-5/8"	646	54
02-Water Only	01-General Service-Residential	03-1"	149	12
02-Water Only	01-General Service-Residential	04-1.5"	164	14
02-Water Only	01-General Service-Residential	05-2"	4236	353
02-Water Only	01-General Service-Residential	06-3"	103	9

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
02-Water Only	01-General Service-Residential	07-4"	385	32
02-Water Only	01-General Service-Residential	08-6"	719	60
02-Water Only	01-General Service-Residential	09-8"	289	24
02-Water Only	01-General Service-Residential	10-10"	30	3
02-Water Only	01-General Service-Residential	11-12"	10	1
02-Water Only	01-General Service-Residential	Y-Unknown	0	0
02-Water Only	02-General Service-Commercial	01-5/8"	69	6
02-Water Only	02-General Service-Commercial	03-1"	58	5
02-Water Only	02-General Service-Commercial	04-1.5"	14	1
02-Water Only	02-General Service-Commercial	05-2"	686	57
02-Water Only	02-General Service-Commercial	06-3"	102	9
02-Water Only	02-General Service-Commercial	07-4"	1103	92
02-Water Only	02-General Service-Commercial	08-6"	1711	143
02-Water Only	02-General Service-Commercial	09-8"	749	62
02-Water Only	02-General Service-Commercial	10-10"	65	5
02-Water Only	02-General Service-Commercial	11-12"	30	3
02-Water Only	03-General Service-Industrial	05-2"	30	3
02-Water Only	03-General Service-Industrial	07-4"	44	4
02-Water Only	03-General Service-Industrial	08-6"	101	8
02-Water Only	03-General Service-Industrial	09-8"	74	6
02-Water Only	03-General Service-Industrial	10-10"	10	1
02-Water Only	04-General Service-Public Utilities	05-2"	10	1
02-Water Only	04-General Service-Public Utilities	11-12"	9	1
02-Water Only	05-P.H.A	01-5/8"	50	4
02-Water Only	05-P.H.A	03-1"	542	45
02-Water Only	05-P.H.A	05-2"	545	45
02-Water Only	05-P.H.A	07-4"	91	8
02-Water Only	05-P.H.A	08-6"	116	10
02-Water Only	05-P.H.A	09-8"	20	2
02-Water Only	06-Charity/Non-Public Schools	01-5/8"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
02-Water Only	06-Charity/Non-Public Schools	03-1"	10	1
02-Water Only	06-Charity/Non-Public Schools	05-2"	10	1
02-Water Only	06-Charity/Non-Public Schools	06-3"	10	1
02-Water Only	06-Charity/Non-Public Schools	07-4"	106	9
02-Water Only	06-Charity/Non-Public Schools	08-6"	138	12
02-Water Only	06-Charity/Non-Public Schools	09-8"	10	1
02-Water Only	07-Public Schools	06-3"	32	3
02-Water Only	07-Public Schools	07-4"	96	8
02-Water Only	07-Public Schools	08-6"	483	40
02-Water Only	07-Public Schools	09-8"	150	13
02-Water Only	07-Public Schools	10-10"	20	2
02-Water Only	08-Senior Citizens Discount	05-2"	10	1
02-Water Only	09-Hand Bill	06-3"	10	1
02-Water Only	09-Hand Bill	07-4"	0	0
02-Water Only	09-Hand Bill	08-6"	80	7
02-Water Only	09-Hand Bill	09-8"	60	5
02-Water Only	10-City Leased	04-1.5"	7	1
02-Water Only	10-City Leased	05-2"	10	1
02-Water Only	10-City Leased	07-4"	41	3
02-Water Only	10-City Leased	08-6"	11	1
02-Water Only	10-City Leased	09-8"	10	1
02-Water Only	10-City Leased	10-10"	10	1
02-Water Only	11-Hospital/University	01-5/8"	10	1
02-Water Only	11-Hospital/University	03-1"	0	0
02-Water Only	11-Hospital/University	06-3"	12	1
02-Water Only	11-Hospital/University	07-4"	100	8
02-Water Only	11-Hospital/University	08-6"	310	26
02-Water Only	11-Hospital/University	09-8"	50	4
02-Water Only	11-Hospital/University	10-10"	20	2
02-Water Only	13-Fire Service	01-5/8"	282	24

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
02-Water Only	13-Fire Service	03-1"	227	19
02-Water Only	13-Fire Service	04-1.5"	76	6
02-Water Only	13-Fire Service	05-2"	3176	265
02-Water Only	13-Fire Service	06-3"	2008	167
02-Water Only	13-Fire Service	07-4"	9990	833
02-Water Only	13-Fire Service	08-6"	16190	1349
02-Water Only	13-Fire Service	09-8"	5008	417
02-Water Only	13-Fire Service	10-10"	761	63
02-Water Only	13-Fire Service	11-12"	113	9
02-Water Only	14-City Government	03-1"	0	0
02-Water Only	14-City Government	05-2"	5	0
02-Water Only	14-City Government	06-3"	32	3
02-Water Only	14-City Government	07-4"	189	16
02-Water Only	14-City Government	08-6"	439	37
02-Water Only	14-City Government	09-8"	156	13
02-Water Only	14-City Government	10-10"	13	1
03-Stormwater Only	01-General Service-Residential	01-5/8"	140688	11724
03-Stormwater Only	01-General Service-Residential	02-3/4"	93	8
03-Stormwater Only	01-General Service-Residential	03-1"	496	41
03-Stormwater Only	01-General Service-Residential	04-1.5"	93	8
03-Stormwater Only	01-General Service-Residential	05-2"	215	18
03-Stormwater Only	01-General Service-Residential	06-3"	4	0
03-Stormwater Only	01-General Service-Residential	07-4"	80	7
03-Stormwater Only	01-General Service-Residential	08-6"	105	9
03-Stormwater Only	01-General Service-Residential	09-8"	50	4
03-Stormwater Only	01-General Service-Residential	10-10"	0	0
03-Stormwater Only	01-General Service-Residential	12-Unknown	1	0
03-Stormwater Only	01-General Service-Residential	A-Unknown	153778	12815
03-Stormwater Only	02-General Service-Commercial	01-5/8"	2203	184
03-Stormwater Only	02-General Service-Commercial	02-3/4"	28	2

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
03-Stormwater Only	02-General Service-Commercial	03-1"	337	28
03-Stormwater Only	02-General Service-Commercial	04-1.5"	77	6
03-Stormwater Only	02-General Service-Commercial	05-2"	133	11
03-Stormwater Only	02-General Service-Commercial	06-3"	12	1
03-Stormwater Only	02-General Service-Commercial	07-4"	19	2
03-Stormwater Only	02-General Service-Commercial	08-6"	23	2
03-Stormwater Only	02-General Service-Commercial	09-8"	32	3
03-Stormwater Only	02-General Service-Commercial	12-Unknown	0	0
03-Stormwater Only	02-General Service-Commercial	A-Unknown	415484	34624
03-Stormwater Only	02-General Service-Commercial	Y-Unknown	2	0
03-Stormwater Only	03-General Service-Industrial	01-5/8"	14	1
03-Stormwater Only	03-General Service-Industrial	03-1"	21	2
03-Stormwater Only	03-General Service-Industrial	04-1.5"	1	0
03-Stormwater Only	03-General Service-Industrial	05-2"	0	0
03-Stormwater Only	03-General Service-Industrial	06-3"	0	0
03-Stormwater Only	03-General Service-Industrial	07-4"	14	1
03-Stormwater Only	03-General Service-Industrial	08-6"	0	0
03-Stormwater Only	03-General Service-Industrial	12-Unknown	0	0
03-Stormwater Only	03-General Service-Industrial	A-Unknown	115	10
03-Stormwater Only	03-General Service-Industrial	Y-Unknown	0	0
03-Stormwater Only	04-General Service-Public Utilities	01-5/8"	5	0
03-Stormwater Only	04-General Service-Public Utilities	03-1"	17	1
03-Stormwater Only	04-General Service-Public Utilities	05-2"	1	0
03-Stormwater Only	04-General Service-Public Utilities	A-Unknown	15696	1308
03-Stormwater Only	05-P.H.A	01-5/8"	585	49
03-Stormwater Only	05-P.H.A	03-1"	44	4
03-Stormwater Only	05-P.H.A	05-2"	0	0
03-Stormwater Only	05-P.H.A	A-Unknown	13166	1097
03-Stormwater Only	06-Charity/Non-Public Schools	01-5/8"	119	10
03-Stormwater Only	06-Charity/Non-Public Schools	03-1"	5	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
03-Stormwater Only	06-Charity/Non-Public Schools	04-1.5"	8	1
03-Stormwater Only	06-Charity/Non-Public Schools	05-2"	10	1
03-Stormwater Only	06-Charity/Non-Public Schools	07-4"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	09-8"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	A-Unknown	630	53
03-Stormwater Only	07-Public Schools	01-5/8"	16	1
03-Stormwater Only	07-Public Schools	08-6"	1	0
03-Stormwater Only	07-Public Schools	09-8"	1	0
03-Stormwater Only	07-Public Schools	12-Unknown	0	0
03-Stormwater Only	07-Public Schools	A-Unknown	987	82
03-Stormwater Only	08-Senior Citizens Discount	01-5/8"	2369	197
03-Stormwater Only	08-Senior Citizens Discount	A-Unknown	26	2
03-Stormwater Only	09-Hand Bill	01-5/8"	12	1
03-Stormwater Only	09-Hand Bill	05-2"	47	4
03-Stormwater Only	09-Hand Bill	06-3"	2	0
03-Stormwater Only	09-Hand Bill	08-6"	0	0
03-Stormwater Only	09-Hand Bill	09-8"	7	1
03-Stormwater Only	09-Hand Bill	10-10"	17	1
03-Stormwater Only	09-Hand Bill	A-Unknown	83	7
03-Stormwater Only	10-City Leased	01-5/8"	0	0
03-Stormwater Only	10-City Leased	03-1"	0	0
03-Stormwater Only	10-City Leased	05-2"	0	0
03-Stormwater Only	10-City Leased	06-3"	0	0
03-Stormwater Only	10-City Leased	07-4"	0	0
03-Stormwater Only	10-City Leased	08-6"	0	0
03-Stormwater Only	10-City Leased	09-8"	0	0
03-Stormwater Only	11-Hospital/University	01-5/8"	12	1
03-Stormwater Only	11-Hospital/University	03-1"	0	0
03-Stormwater Only	11-Hospital/University	05-2"	1	0
03-Stormwater Only	11-Hospital/University	08-6"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
03-Stormwater Only	11-Hospital/University	A-Unknown	1811	151
03-Stormwater Only	12-Scheduled	01-5/8"	7	1
03-Stormwater Only	12-Scheduled	A-Unknown	13	1
03-Stormwater Only	13-Fire Service	01-5/8"	1	0
03-Stormwater Only	13-Fire Service	03-1"	111	9
03-Stormwater Only	13-Fire Service	04-1.5"	40	3
03-Stormwater Only	13-Fire Service	05-2"	841	70
03-Stormwater Only	13-Fire Service	06-3"	0	0
03-Stormwater Only	13-Fire Service	07-4"	268	22
03-Stormwater Only	13-Fire Service	08-6"	178	15
03-Stormwater Only	13-Fire Service	09-8"	58	5
03-Stormwater Only	13-Fire Service	10-10"	1	0
03-Stormwater Only	13-Fire Service	11-12"	10	1
03-Stormwater Only	13-Fire Service	12-Unknown	0	0
03-Stormwater Only	13-Fire Service	A-Unknown	1272	106
03-Stormwater Only	14-City Government	01-5/8"	933	78
03-Stormwater Only	14-City Government	02-3/4"	12	1
03-Stormwater Only	14-City Government	03-1"	24	2
03-Stormwater Only	14-City Government	04-1.5"	0	0
03-Stormwater Only	14-City Government	05-2"	15	1
03-Stormwater Only	14-City Government	06-3"	0	0
03-Stormwater Only	14-City Government	07-4"	12	1
03-Stormwater Only	14-City Government	08-6"	0	0
03-Stormwater Only	14-City Government	09-8"	10	1
03-Stormwater Only	14-City Government	12-Unknown	0	0
03-Stormwater Only	14-City Government	A-Unknown	9706	809
04-Sewer and Stormwater	01-General Service-Residential	01-5/8"	261	22
04-Sewer and Stormwater	01-General Service-Residential	02-3/4"	10	1
04-Sewer and Stormwater	01-General Service-Residential	07-4"	0	0
04-Sewer and Stormwater	01-General Service-Residential	08-6"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
04-Sewer and Stormwater	01-General Service-Residential	A-Unknown	23	2
04-Sewer and Stormwater	02-General Service-Commercial	01-5/8"	0	0
04-Sewer and Stormwater	02-General Service-Commercial	05-2"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	04-1.5"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	05-2"	5	0
04-Sewer and Stormwater	03-General Service-Industrial	06-3"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	11-12"	0	0
04-Sewer and Stormwater	04-General Service-Public Utilities	03-1"	0	0
04-Sewer and Stormwater	06-Charity/Non-Public Schools	03-1"	11	1
04-Sewer and Stormwater	09-Hand Bill	01-5/8"	144	12
04-Sewer and Stormwater	09-Hand Bill	04-1.5"	0	0
04-Sewer and Stormwater	09-Hand Bill	05-2"	25	2
04-Sewer and Stormwater	09-Hand Bill	06-3"	12	1
04-Sewer and Stormwater	09-Hand Bill	08-6"	18	2
04-Sewer and Stormwater	09-Hand Bill	09-8"	18	2
04-Sewer and Stormwater	09-Hand Bill	10-10"	0	0
04-Sewer and Stormwater	11-Hospital/University	01-5/8"	0	0
05-Water and Stormwater	01-General Service-Residential	01-5/8"	11819	985
05-Water and Stormwater	01-General Service-Residential	02-3/4"	12	1
05-Water and Stormwater	01-General Service-Residential	03-1"	1841	153
05-Water and Stormwater	01-General Service-Residential	04-1.5"	128	11
05-Water and Stormwater	01-General Service-Residential	05-2"	439	37
05-Water and Stormwater	01-General Service-Residential	06-3"	0	0
05-Water and Stormwater	01-General Service-Residential	07-4"	36	3
05-Water and Stormwater	01-General Service-Residential	08-6"	0	0
05-Water and Stormwater	01-General Service-Residential	09-8"	0	0
05-Water and Stormwater	01-General Service-Residential	10-10"	0	0
05-Water and Stormwater	01-General Service-Residential	11-12"	0	0
05-Water and Stormwater	01-General Service-Residential	Y-Unknown	0	0
05-Water and Stormwater	02-General Service-Commercial	01-5/8"	798	67

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
05-Water and Stormwater	02-General Service-Commercial	03-1"	226	19
05-Water and Stormwater	02-General Service-Commercial	04-1.5"	184	15
05-Water and Stormwater	02-General Service-Commercial	05-2"	225	19
05-Water and Stormwater	02-General Service-Commercial	06-3"	10	1
05-Water and Stormwater	02-General Service-Commercial	07-4"	93	8
05-Water and Stormwater	02-General Service-Commercial	08-6"	100	8
05-Water and Stormwater	02-General Service-Commercial	09-8"	9	1
05-Water and Stormwater	02-General Service-Commercial	10-10"	0	0
05-Water and Stormwater	02-General Service-Commercial	11-12"	0	0
05-Water and Stormwater	03-General Service-Industrial	01-5/8"	31	3
05-Water and Stormwater	03-General Service-Industrial	03-1"	24	2
05-Water and Stormwater	03-General Service-Industrial	04-1.5"	8	1
05-Water and Stormwater	03-General Service-Industrial	05-2"	37	3
05-Water and Stormwater	03-General Service-Industrial	06-3"	31	3
05-Water and Stormwater	03-General Service-Industrial	07-4"	24	2
05-Water and Stormwater	03-General Service-Industrial	08-6"	24	2
05-Water and Stormwater	03-General Service-Industrial	09-8"	0	0
05-Water and Stormwater	03-General Service-Industrial	10-10"	12	1
05-Water and Stormwater	04-General Service-Public Utilities	03-1"	12	1
05-Water and Stormwater	04-General Service-Public Utilities	11-12"	0	0
05-Water and Stormwater	05-P.H.A	01-5/8"	0	0
05-Water and Stormwater	05-P.H.A	03-1"	55	5
05-Water and Stormwater	05-P.H.A	05-2"	5	0
05-Water and Stormwater	05-P.H.A	07-4"	5	0
05-Water and Stormwater	05-P.H.A	08-6"	0	0
05-Water and Stormwater	05-P.H.A	09-8"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	01-5/8"	92	8
05-Water and Stormwater	06-Charity/Non-Public Schools	03-1"	31	3
05-Water and Stormwater	06-Charity/Non-Public Schools	04-1.5"	21	2
05-Water and Stormwater	06-Charity/Non-Public Schools	05-2"	40	3

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
05-Water and Stormwater	06-Charity/Non-Public Schools	06-3"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	07-4"	5	0
05-Water and Stormwater	06-Charity/Non-Public Schools	08-6"	4	0
05-Water and Stormwater	06-Charity/Non-Public Schools	09-8"	1	0
05-Water and Stormwater	07-Public Schools	06-3"	0	0
05-Water and Stormwater	07-Public Schools	07-4"	11	1
05-Water and Stormwater	07-Public Schools	08-6"	5	0
05-Water and Stormwater	07-Public Schools	09-8"	0	0
05-Water and Stormwater	07-Public Schools	10-10"	0	0
05-Water and Stormwater	08-Senior Citizens Discount	01-5/8"	160	13
05-Water and Stormwater	08-Senior Citizens Discount	05-2"	0	0
05-Water and Stormwater	09-Hand Bill	01-5/8"	16	1
05-Water and Stormwater	09-Hand Bill	06-3"	0	0
05-Water and Stormwater	09-Hand Bill	08-6"	12	1
05-Water and Stormwater	09-Hand Bill	09-8"	11	1
05-Water and Stormwater	09-Hand Bill	10-10"	0	0
05-Water and Stormwater	10-City Leased	01-5/8"	56	5
05-Water and Stormwater	10-City Leased	03-1"	32	3
05-Water and Stormwater	10-City Leased	04-1.5"	5	0
05-Water and Stormwater	10-City Leased	05-2"	12	1
05-Water and Stormwater	10-City Leased	06-3"	24	2
05-Water and Stormwater	10-City Leased	07-4"	26	2
05-Water and Stormwater	10-City Leased	08-6"	36	3
05-Water and Stormwater	10-City Leased	09-8"	5	0
05-Water and Stormwater	10-City Leased	10-10"	0	0
05-Water and Stormwater	11-Hospital/University	01-5/8"	24	2
05-Water and Stormwater	11-Hospital/University	06-3"	0	0
05-Water and Stormwater	11-Hospital/University	07-4"	0	0
05-Water and Stormwater	11-Hospital/University	08-6"	3	0
05-Water and Stormwater	11-Hospital/University	09-8"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
05-Water and Stormwater	11-Hospital/University	10-10"	0	0
05-Water and Stormwater	13-Fire Service	01-5/8"	40	3
05-Water and Stormwater	13-Fire Service	03-1"	31	3
05-Water and Stormwater	13-Fire Service	04-1.5"	20	2
05-Water and Stormwater	13-Fire Service	05-2"	563	47
05-Water and Stormwater	13-Fire Service	06-3"	0	0
05-Water and Stormwater	13-Fire Service	07-4"	76	6
05-Water and Stormwater	13-Fire Service	08-6"	51	4
05-Water and Stormwater	13-Fire Service	09-8"	38	3
05-Water and Stormwater	13-Fire Service	10-10"	13	1
05-Water and Stormwater	13-Fire Service	11-12"	0	0
05-Water and Stormwater	14-City Government	01-5/8"	165	14
05-Water and Stormwater	14-City Government	02-3/4"	55	5
05-Water and Stormwater	14-City Government	03-1"	61	5
05-Water and Stormwater	14-City Government	04-1.5"	30	3
05-Water and Stormwater	14-City Government	05-2"	58	5
05-Water and Stormwater	14-City Government	06-3"	0	0
05-Water and Stormwater	14-City Government	07-4"	0	0
05-Water and Stormwater	14-City Government	08-6"	9	1
05-Water and Stormwater	14-City Government	09-8"	0	0
05-Water and Stormwater	14-City Government	10-10"	0	0
06-Sewer Only	01-General Service-Residential	01-5/8"	1	0
06-Sewer Only	02-General Service-Commercial	01-5/8"	0	0
06-Sewer Only	02-General Service-Commercial	05-2"	0	0
06-Sewer Only	03-General Service-Industrial	02-3/4"	10	1
06-Sewer Only	03-General Service-Industrial	10-10"	2	0
06-Sewer Only	04-General Service-Public Utilities	07-4"	0	0
06-Sewer Only	06-Charity/Non-Public Schools	03-1"	1	0
06-Sewer Only	09-Hand Bill	01-5/8"	4	0
06-Sewer Only	09-Hand Bill	05-2"	3	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
06-Sewer Only	13-Fire Service	01-5/8"	0	0
06-Sewer Only	14-City Government	07-4"	0	0
07-Water and Sewer	01-General Service-Residential	01-5/8"	993	83
07-Water and Sewer	01-General Service-Residential	02-3/4"	1	0
07-Water and Sewer	01-General Service-Residential	03-1"	3	0
07-Water and Sewer	01-General Service-Residential	05-2"	0	0
07-Water and Sewer	01-General Service-Residential	06-3"	1	0
07-Water and Sewer	02-General Service-Commercial	01-5/8"	132	11
07-Water and Sewer	02-General Service-Commercial	02-3/4"	3	0
07-Water and Sewer	02-General Service-Commercial	03-1"	45	4
07-Water and Sewer	02-General Service-Commercial	04-1.5"	12	1
07-Water and Sewer	02-General Service-Commercial	05-2"	35	3
07-Water and Sewer	02-General Service-Commercial	06-3"	0	0
07-Water and Sewer	02-General Service-Commercial	07-4"	1	0
07-Water and Sewer	02-General Service-Commercial	09-8"	1	0
07-Water and Sewer	03-General Service-Industrial	01-5/8"	1	0
07-Water and Sewer	05-P.H.A	01-5/8"	14	1
07-Water and Sewer	05-P.H.A	03-1"	1	0
07-Water and Sewer	05-P.H.A	06-3"	12	1
07-Water and Sewer	06-Charity/Non-Public Schools	01-5/8"	1	0
07-Water and Sewer	06-Charity/Non-Public Schools	03-1"	12	1
07-Water and Sewer	06-Charity/Non-Public Schools	04-1.5"	24	2
07-Water and Sewer	06-Charity/Non-Public Schools	05-2"	12	1
07-Water and Sewer	07-Public Schools	07-4"	10	1
07-Water and Sewer	07-Public Schools	08-6"	1	0
07-Water and Sewer	08-Senior Citizens Discount	01-5/8"	14	1
07-Water and Sewer	09-Hand Bill	04-1.5"	1	0
07-Water and Sewer	09-Hand Bill	05-2"	5	0
07-Water and Sewer	11-Hospital/University	05-2"	1	0
07-Water and Sewer	13-Fire Service	01-5/8"	2	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
07-Water and Sewer	13-Fire Service	03-1"	1	0
07-Water and Sewer	13-Fire Service	05-2"	5	0
07-Water and Sewer	13-Fire Service	12-Unknown	4	0
07-Water and Sewer	14-City Government	01-5/8"	2	0
07-Water and Sewer	14-City Government	03-1"	14	1
07-Water and Sewer	14-City Government	06-3"	2	0
07-Water and Sewer	14-City Government	08-6"	12	1
08-RFSS, All Services	01-General Service-Residential	01-5/8"	10	1
08-RFSS, All Services	01-General Service-Residential	02-3/4"	30	3
08-RFSS, All Services	01-General Service-Residential	03-1"	1019	85
08-RFSS, All Services	01-General Service-Residential	04-1.5"	226	19
08-RFSS, All Services	01-General Service-Residential	05-2"	150	13
08-RFSS, All Services	02-General Service-Commercial	01-5/8"	0	0
08-RFSS, All Services	02-General Service-Commercial	02-3/4"	4	0
08-RFSS, All Services	02-General Service-Commercial	03-1"	90	8
08-RFSS, All Services	02-General Service-Commercial	04-1.5"	23	2
08-RFSS, All Services	02-General Service-Commercial	05-2"	8	1
08-RFSS, All Services	03-General Service-Industrial	03-1"	0	0
08-RFSS, All Services	04-General Service-Public Utilities	03-1"	0	0
08-RFSS, All Services	05-P.H.A	03-1"	2	0
08-RFSS, All Services	05-P.H.A	04-1.5"	0	0
08-RFSS, All Services	05-P.H.A	05-2"	0	0
08-RFSS, All Services	08-Senior Citizens Discount	03-1"	0	0
08-RFSS, All Services	13-Fire Service	03-1"	0	0
08-RFSS, All Services	13-Fire Service	04-1.5"	0	0
08-RFSS, All Services	14-City Government	03-1"	9	1
09-RFSS, No Sewer	01-General Service-Residential	03-1"	0	0
09-RFSS, No Sewer	01-General Service-Residential	05-2"	0	0
09-RFSS, No Sewer	02-General Service-Commercial	03-1"	0	0
10-Unknown	01-General Service-Residential	01-5/8"	11	1

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
10-Unknown	01-General Service-Residential	03-1"	11	1
10-Unknown	01-General Service-Residential	04-1.5"	35	3
10-Unknown	01-General Service-Residential	05-2"	89	7
10-Unknown	01-General Service-Residential	06-3"	0	0
10-Unknown	01-General Service-Residential	07-4"	1	0
10-Unknown	01-General Service-Residential	08-6"	0	0
10-Unknown	01-General Service-Residential	09-8"	0	0
10-Unknown	01-General Service-Residential	12-Unknown	827	69
10-Unknown	01-General Service-Residential	A-Unknown	3	0
10-Unknown	02-General Service-Commercial	01-5/8"	6	1
10-Unknown	02-General Service-Commercial	02-3/4"	1	0
10-Unknown	02-General Service-Commercial	03-1"	6	1
10-Unknown	02-General Service-Commercial	04-1.5"	0	0
10-Unknown	02-General Service-Commercial	05-2"	4	0
10-Unknown	02-General Service-Commercial	06-3"	0	0
10-Unknown	02-General Service-Commercial	07-4"	7	1
10-Unknown	02-General Service-Commercial	08-6"	0	0
10-Unknown	02-General Service-Commercial	09-8"	5	0
10-Unknown	02-General Service-Commercial	10-10"	0	0
10-Unknown	02-General Service-Commercial	12-Unknown	4183	349
10-Unknown	02-General Service-Commercial	A-Unknown	5	0
10-Unknown	03-General Service-Industrial	01-5/8"	0	0
10-Unknown	03-General Service-Industrial	12-Unknown	167	14
10-Unknown	04-General Service-Public Utilities	12-Unknown	72	6
10-Unknown	05-P.H.A	07-4"	0	0
10-Unknown	05-P.H.A	12-Unknown	22	2
10-Unknown	06-Charity/Non-Public Schools	01-5/8"	1	0
10-Unknown	06-Charity/Non-Public Schools	09-8"	1	0
10-Unknown	06-Charity/Non-Public Schools	12-Unknown	11	1
10-Unknown	07-Public Schools	12-Unknown	5	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy13 # of Accounts Months	fy13 # of Accounts
10-Unknown	08-Senior Citizens Discount	01-5/8"	0	0
10-Unknown	08-Senior Citizens Discount	12-Unknown	0	0
10-Unknown	09-Hand Bill	08-6"	3	0
10-Unknown	09-Hand Bill	10-10"	0	0
10-Unknown	09-Hand Bill	12-Unknown	466	39
10-Unknown	10-City Leased	12-Unknown	0	0
10-Unknown	11-Hospital/University	06-3"	0	0
10-Unknown	11-Hospital/University	07-4"	0	0
10-Unknown	11-Hospital/University	08-6"	0	0
10-Unknown	11-Hospital/University	09-8"	0	0
10-Unknown	11-Hospital/University	12-Unknown	14	1
10-Unknown	13-Fire Service	03-1"	0	0
10-Unknown	13-Fire Service	04-1.5"	3	0
10-Unknown	13-Fire Service	05-2"	22	2
10-Unknown	13-Fire Service	06-3"	0	0
10-Unknown	13-Fire Service	07-4"	10	1
10-Unknown	13-Fire Service	08-6"	10	1
10-Unknown	13-Fire Service	09-8"	1	0
10-Unknown	13-Fire Service	10-10"	0	0
10-Unknown	13-Fire Service	12-Unknown	4	0
10-Unknown	14-City Government	01-5/8"	1	0
10-Unknown	14-City Government	05-2"	0	0
10-Unknown	14-City Government	08-6"	0	0
10-Unknown	14-City Government	12-Unknown	184	15

Rpt1b v5 2015.02			FY13	
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	01-5/8"	4990363	30668683.26
01-Water,Sewer,Stormwater	01-General Service-Residential	02-3/4"	168	1468.72
01-Water,Sewer,Stormwater	01-General Service-Residential	03-1"	20530	207902.16
01-Water,Sewer,Stormwater	01-General Service-Residential	04-1.5"	6298	100786.82
01-Water,Sewer,Stormwater	01-General Service-Residential	05-2"	4421	104809.86
01-Water,Sewer,Stormwater	01-General Service-Residential	06-3"	1681	66651.53
01-Water,Sewer,Stormwater	01-General Service-Residential	07-4"	507	36106.49
01-Water,Sewer,Stormwater	01-General Service-Residential	08-6"	136	17845.36
01-Water,Sewer,Stormwater	01-General Service-Residential	09-8"	36	7123.09
01-Water,Sewer,Stormwater	01-General Service-Residential	11-12"	0	0
01-Water,Sewer,Stormwater	02-General Service-Commercial	01-5/8"	330712	2133221.21
01-Water,Sewer,Stormwater	02-General Service-Commercial	02-3/4"	130	954.42
01-Water,Sewer,Stormwater	02-General Service-Commercial	03-1"	28840	292944.64
01-Water,Sewer,Stormwater	02-General Service-Commercial	04-1.5"	11875	190303.78
01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	15948	384091.34
01-Water,Sewer,Stormwater	02-General Service-Commercial	06-3"	5580	226608.51
01-Water,Sewer,Stormwater	02-General Service-Commercial	07-4"	2890	208512.98
01-Water,Sewer,Stormwater	02-General Service-Commercial	08-6"	980	133876.54
01-Water,Sewer,Stormwater	02-General Service-Commercial	09-8"	207	37810.39
01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	52	23366.88
01-Water,Sewer,Stormwater	03-General Service-Industrial	01-5/8"	6253	41562.29
01-Water,Sewer,Stormwater	03-General Service-Industrial	03-1"	2921	30259.16
01-Water,Sewer,Stormwater	03-General Service-Industrial	04-1.5"	941	14982.28
01-Water,Sewer,Stormwater	03-General Service-Industrial	05-2"	1255	29737.62
01-Water,Sewer,Stormwater	03-General Service-Industrial	06-3"	542	21906.09
01-Water,Sewer,Stormwater	03-General Service-Industrial	07-4"	162	11364.67
01-Water,Sewer,Stormwater	03-General Service-Industrial	08-6"	86	11378.9
01-Water,Sewer,Stormwater	03-General Service-Industrial	10-10"	0	0
01-Water,Sewer,Stormwater	03-General Service-Industrial	11-12"	0	0
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	01-5/8"	421	2818.27

Rpt1b v5 2015.02		FY13		
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	03-1"	291	3016.55
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	04-1.5"	115	1831.38
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	05-2"	206	4806.42
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	06-3"	142	5768.7
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	07-4"	44	3149.49
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	08-6"	56	8019.27
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	09-8"	0	0
01-Water,Sewer,Stormwater	05-P.H.A	01-5/8"	69829	421314.32
01-Water,Sewer,Stormwater	05-P.H.A	02-3/4"	0	0
01-Water,Sewer,Stormwater	05-P.H.A	03-1"	183	1693.69
01-Water,Sewer,Stormwater	05-P.H.A	04-1.5"	118	1692.39
01-Water,Sewer,Stormwater	05-P.H.A	05-2"	178	4242.17
01-Water,Sewer,Stormwater	05-P.H.A	06-3"	434	15875.88
01-Water,Sewer,Stormwater	05-P.H.A	07-4"	235	15479.06
01-Water,Sewer,Stormwater	05-P.H.A	08-6"	167	20245.78
01-Water,Sewer,Stormwater	05-P.H.A	09-8"	83	15975.21
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	01-5/8"	15039	72307.09
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	02-3/4"	0	0
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	03-1"	4038	29305.91
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	04-1.5"	1930	21349.76
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	05-2"	2663	44316.02
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	06-3"	1791	51454.98
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	07-4"	1333	66425.72
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	08-6"	170	17128.54
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	09-8"	24	3563.85
01-Water,Sewer,Stormwater	07-Public Schools	01-5/8"	136	638.61
01-Water,Sewer,Stormwater	07-Public Schools	03-1"	129	1098.02
01-Water,Sewer,Stormwater	07-Public Schools	04-1.5"	84	939.11
01-Water,Sewer,Stormwater	07-Public Schools	05-2"	510	8507.65
01-Water,Sewer,Stormwater	07-Public Schools	06-3"	1234	35349.32

Rpt1b v5 2015.02			FY13	
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
01-Water,Sewer,Stormwater	07-Public Schools	07-4"	2331	115664.75
01-Water,Sewer,Stormwater	07-Public Schools	08-6"	250	23792.53
01-Water,Sewer,Stormwater	07-Public Schools	09-8"	32	4854.67
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	01-5/8"	234124	1102309.62
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	02-3/4"	0	0
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	03-1"	36	258.83
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	04-1.5"	12	133.65
01-Water,Sewer,Stormwater	09-Hand Bill	01-5/8"	132	857.63
01-Water,Sewer,Stormwater	09-Hand Bill	03-1"	191	1908.13
01-Water,Sewer,Stormwater	09-Hand Bill	04-1.5"	123	1959.28
01-Water,Sewer,Stormwater	09-Hand Bill	05-2"	412	10713.86
01-Water,Sewer,Stormwater	09-Hand Bill	06-3"	819	32101.37
01-Water,Sewer,Stormwater	09-Hand Bill	07-4"	900	62223.49
01-Water,Sewer,Stormwater	09-Hand Bill	08-6"	284	38083.27
01-Water,Sewer,Stormwater	09-Hand Bill	09-8"	70	14282.02
01-Water,Sewer,Stormwater	09-Hand Bill	10-10"	47	13775.56
01-Water,Sewer,Stormwater	10-City Leased	01-5/8"	142	895.19
01-Water,Sewer,Stormwater	10-City Leased	03-1"	60	594.45
01-Water,Sewer,Stormwater	10-City Leased	04-1.5"	69	1247.44
01-Water,Sewer,Stormwater	10-City Leased	05-2"	134	3050.24
01-Water,Sewer,Stormwater	10-City Leased	06-3"	52	2858.55
01-Water,Sewer,Stormwater	10-City Leased	07-4"	93	7346.64
01-Water,Sewer,Stormwater	10-City Leased	08-6"	5	628.6
01-Water,Sewer,Stormwater	10-City Leased	09-8"	5	1377.53
01-Water,Sewer,Stormwater	11-Hospital/University	01-5/8"	598	2853.63
01-Water,Sewer,Stormwater	11-Hospital/University	02-3/4"	0	0
01-Water,Sewer,Stormwater	11-Hospital/University	03-1"	286	2070.9
01-Water,Sewer,Stormwater	11-Hospital/University	04-1.5"	143	2718.25
01-Water,Sewer,Stormwater	11-Hospital/University	05-2"	637	10628.72
01-Water,Sewer,Stormwater	11-Hospital/University	06-3"	1051	31606.67

Rpt1b v5 2015.02			FY13	
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
01-Water,Sewer,Stormwater	11-Hospital/University	07-4"	1060	58106.08
01-Water,Sewer,Stormwater	11-Hospital/University	08-6"	611	56282.76
01-Water,Sewer,Stormwater	11-Hospital/University	09-8"	71	11738.46
01-Water,Sewer,Stormwater	11-Hospital/University	10-10"	20	5170.32
01-Water,Sewer,Stormwater	12-Scheduled	01-5/8"	27	213.19
01-Water,Sewer,Stormwater	13-Fire Service	01-5/8"	473	2994.83
01-Water,Sewer,Stormwater	13-Fire Service	03-1"	161	1584.35
01-Water,Sewer,Stormwater	13-Fire Service	04-1.5"	85	1321.81
01-Water,Sewer,Stormwater	13-Fire Service	05-2"	137	2948.9
01-Water,Sewer,Stormwater	13-Fire Service	06-3"	48	1989.08
01-Water,Sewer,Stormwater	13-Fire Service	07-4"	58	3931.62
01-Water,Sewer,Stormwater	13-Fire Service	08-6"	46	4554.96
01-Water,Sewer,Stormwater	13-Fire Service	09-8"	21	0
01-Water,Sewer,Stormwater	13-Fire Service	10-10"	0	0
01-Water,Sewer,Stormwater	14-City Government	01-5/8"	3030	19762.1
01-Water,Sewer,Stormwater	14-City Government	02-3/4"	10	86.58
01-Water,Sewer,Stormwater	14-City Government	03-1"	1456	15842.01
01-Water,Sewer,Stormwater	14-City Government	04-1.5"	859	13193.45
01-Water,Sewer,Stormwater	14-City Government	05-2"	2813	65320.21
01-Water,Sewer,Stormwater	14-City Government	06-3"	1553	62689.99
01-Water,Sewer,Stormwater	14-City Government	07-4"	748	51299.82
01-Water,Sewer,Stormwater	14-City Government	08-6"	385	53892.95
01-Water,Sewer,Stormwater	14-City Government	09-8"	151	31964.45
01-Water,Sewer,Stormwater	14-City Government	10-10"	158	60689.24
01-Water,Sewer,Stormwater	14-City Government	11-12"	12	6035.46
02-Water Only	01-General Service-Residential	01-5/8"	677	3402.41
02-Water Only	01-General Service-Residential	03-1"	163	636.28
02-Water Only	01-General Service-Residential	04-1.5"	197	148.19
02-Water Only	01-General Service-Residential	05-2"	5073	606.2
02-Water Only	01-General Service-Residential	06-3"	123	0

Rpt1b v5 2015.02			FY13	
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
02-Water Only	01-General Service-Residential	07-4"	468	0
02-Water Only	01-General Service-Residential	08-6"	864	0
02-Water Only	01-General Service-Residential	09-8"	348	0
02-Water Only	01-General Service-Residential	10-10"	36	0
02-Water Only	01-General Service-Residential	11-12"	12	0
02-Water Only	01-General Service-Residential	Y-Unknown	0	0
02-Water Only	02-General Service-Commercial	01-5/8"	73	265.17
02-Water Only	02-General Service-Commercial	03-1"	61	404.88
02-Water Only	02-General Service-Commercial	04-1.5"	14	207.54
02-Water Only	02-General Service-Commercial	05-2"	810	174.99
02-Water Only	02-General Service-Commercial	06-3"	117	524
02-Water Only	02-General Service-Commercial	07-4"	1320	456.95
02-Water Only	02-General Service-Commercial	08-6"	2052	0
02-Water Only	02-General Service-Commercial	09-8"	893	0
02-Water Only	02-General Service-Commercial	10-10"	76	0
02-Water Only	02-General Service-Commercial	11-12"	37	0
02-Water Only	03-General Service-Industrial	05-2"	36	263.52
02-Water Only	03-General Service-Industrial	07-4"	52	0
02-Water Only	03-General Service-Industrial	08-6"	120	0
02-Water Only	03-General Service-Industrial	09-8"	89	0
02-Water Only	03-General Service-Industrial	10-10"	12	0
02-Water Only	04-General Service-Public Utilities	05-2"	12	0
02-Water Only	04-General Service-Public Utilities	11-12"	10	0
02-Water Only	05-P.H.A	01-5/8"	60	0
02-Water Only	05-P.H.A	03-1"	649	0
02-Water Only	05-P.H.A	05-2"	654	0
02-Water Only	05-P.H.A	07-4"	109	0
02-Water Only	05-P.H.A	08-6"	139	0
02-Water Only	05-P.H.A	09-8"	24	0
02-Water Only	06-Charity/Non-Public Schools	01-5/8"	0	0

Rpt1b v5 2015.02			FY13	
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
02-Water Only	06-Charity/Non-Public Schools	03-1"	12	0
02-Water Only	06-Charity/Non-Public Schools	05-2"	12	0
02-Water Only	06-Charity/Non-Public Schools	06-3"	12	0
02-Water Only	06-Charity/Non-Public Schools	07-4"	126	590.88
02-Water Only	06-Charity/Non-Public Schools	08-6"	165	0
02-Water Only	06-Charity/Non-Public Schools	09-8"	12	0
02-Water Only	07-Public Schools	06-3"	39	0
02-Water Only	07-Public Schools	07-4"	112	0
02-Water Only	07-Public Schools	08-6"	579	0
02-Water Only	07-Public Schools	09-8"	180	0
02-Water Only	07-Public Schools	10-10"	24	0
02-Water Only	08-Senior Citizens Discount	05-2"	12	0
02-Water Only	09-Hand Bill	06-3"	12	0
02-Water Only	09-Hand Bill	07-4"	0	0
02-Water Only	09-Hand Bill	08-6"	94	125.72
02-Water Only	09-Hand Bill	09-8"	72	0
02-Water Only	10-City Leased	04-1.5"	7	103.81
02-Water Only	10-City Leased	05-2"	13	0
02-Water Only	10-City Leased	07-4"	49	0
02-Water Only	10-City Leased	08-6"	13	0
02-Water Only	10-City Leased	09-8"	12	0
02-Water Only	10-City Leased	10-10"	12	0
02-Water Only	11-Hospital/University	01-5/8"	12	0
02-Water Only	11-Hospital/University	03-1"	0	0
02-Water Only	11-Hospital/University	06-3"	13	0
02-Water Only	11-Hospital/University	07-4"	120	0
02-Water Only	11-Hospital/University	08-6"	369	0
02-Water Only	11-Hospital/University	09-8"	60	0
02-Water Only	11-Hospital/University	10-10"	24	0
02-Water Only	13-Fire Service	01-5/8"	339	0

Rpt1b v5 2015.02			FY13	
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
02-Water Only	13-Fire Service	03-1"	264	0
02-Water Only	13-Fire Service	04-1.5"	93	0
02-Water Only	13-Fire Service	05-2"	3782	0
02-Water Only	13-Fire Service	06-3"	2396	0
02-Water Only	13-Fire Service	07-4"	11960	787.75
02-Water Only	13-Fire Service	08-6"	19349	0
02-Water Only	13-Fire Service	09-8"	5981	0
02-Water Only	13-Fire Service	10-10"	900	0
02-Water Only	13-Fire Service	11-12"	132	0
02-Water Only	14-City Government	03-1"	0	0
02-Water Only	14-City Government	05-2"	6	0
02-Water Only	14-City Government	06-3"	36	0
02-Water Only	14-City Government	07-4"	207	0
02-Water Only	14-City Government	08-6"	491	0
02-Water Only	14-City Government	09-8"	176	0
02-Water Only	14-City Government	10-10"	14	0
03-Stormwater Only	01-General Service-Residential	01-5/8"	143656	34182.48
03-Stormwater Only	01-General Service-Residential	02-3/4"	97	0
03-Stormwater Only	01-General Service-Residential	03-1"	518	12.06
03-Stormwater Only	01-General Service-Residential	04-1.5"	93	37.16
03-Stormwater Only	01-General Service-Residential	05-2"	239	9.19
03-Stormwater Only	01-General Service-Residential	06-3"	5	0
03-Stormwater Only	01-General Service-Residential	07-4"	95	0
03-Stormwater Only	01-General Service-Residential	08-6"	125	0
03-Stormwater Only	01-General Service-Residential	09-8"	60	0
03-Stormwater Only	01-General Service-Residential	10-10"	0	0
03-Stormwater Only	01-General Service-Residential	12-Unknown	1	0
03-Stormwater Only	01-General Service-Residential	A-Unknown	156841	8
03-Stormwater Only	02-General Service-Commercial	01-5/8"	2234	400.49
03-Stormwater Only	02-General Service-Commercial	02-3/4"	28	0

Rpt1b v5 2015.02			FY13	
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
03-Stormwater Only	02-General Service-Commercial	03-1"	365	490.13
03-Stormwater Only	02-General Service-Commercial	04-1.5"	82	4.3
03-Stormwater Only	02-General Service-Commercial	05-2"	139	0.59
03-Stormwater Only	02-General Service-Commercial	06-3"	15	154.38
03-Stormwater Only	02-General Service-Commercial	07-4"	19	0
03-Stormwater Only	02-General Service-Commercial	08-6"	27	0
03-Stormwater Only	02-General Service-Commercial	09-8"	32	0
03-Stormwater Only	02-General Service-Commercial	12-Unknown	0	0
03-Stormwater Only	02-General Service-Commercial	A-Unknown	429730	220.84
03-Stormwater Only	02-General Service-Commercial	Y-Unknown	2	0
03-Stormwater Only	03-General Service-Industrial	01-5/8"	15	0
03-Stormwater Only	03-General Service-Industrial	03-1"	24	0.25
03-Stormwater Only	03-General Service-Industrial	04-1.5"	1	0
03-Stormwater Only	03-General Service-Industrial	05-2"	0	0
03-Stormwater Only	03-General Service-Industrial	06-3"	0	0
03-Stormwater Only	03-General Service-Industrial	07-4"	14	0
03-Stormwater Only	03-General Service-Industrial	08-6"	0	0
03-Stormwater Only	03-General Service-Industrial	12-Unknown	0	0
03-Stormwater Only	03-General Service-Industrial	A-Unknown	122	0
03-Stormwater Only	03-General Service-Industrial	Y-Unknown	0	0
03-Stormwater Only	04-General Service-Public Utilities	01-5/8"	5	0
03-Stormwater Only	04-General Service-Public Utilities	03-1"	17	0
03-Stormwater Only	04-General Service-Public Utilities	05-2"	1	0
03-Stormwater Only	04-General Service-Public Utilities	A-Unknown	16079	0
03-Stormwater Only	05-P.H.A	01-5/8"	595	1.37
03-Stormwater Only	05-P.H.A	03-1"	46	0
03-Stormwater Only	05-P.H.A	05-2"	0	0
03-Stormwater Only	05-P.H.A	A-Unknown	14139	0
03-Stormwater Only	06-Charity/Non-Public Schools	01-5/8"	129	526.48
03-Stormwater Only	06-Charity/Non-Public Schools	03-1"	6	45.29

Rpt1b v5 2015.02		FY13		
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
03-Stormwater Only	06-Charity/Non-Public Schools	04-1.5"	9	0.36
03-Stormwater Only	06-Charity/Non-Public Schools	05-2"	11	102.94
03-Stormwater Only	06-Charity/Non-Public Schools	07-4"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	09-8"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	A-Unknown	643	26.44
03-Stormwater Only	07-Public Schools	01-5/8"	16	0
03-Stormwater Only	07-Public Schools	08-6"	1	0
03-Stormwater Only	07-Public Schools	09-8"	1	0
03-Stormwater Only	07-Public Schools	12-Unknown	0	0
03-Stormwater Only	07-Public Schools	A-Unknown	1010	0
03-Stormwater Only	08-Senior Citizens Discount	01-5/8"	2420	587.7
03-Stormwater Only	08-Senior Citizens Discount	A-Unknown	26	0
03-Stormwater Only	09-Hand Bill	01-5/8"	12	0
03-Stormwater Only	09-Hand Bill	05-2"	61	0
03-Stormwater Only	09-Hand Bill	06-3"	5	0
03-Stormwater Only	09-Hand Bill	08-6"	0	0
03-Stormwater Only	09-Hand Bill	09-8"	10	0
03-Stormwater Only	09-Hand Bill	10-10"	17	0
03-Stormwater Only	09-Hand Bill	A-Unknown	90	0
03-Stormwater Only	10-City Leased	01-5/8"	0	0
03-Stormwater Only	10-City Leased	03-1"	0	0
03-Stormwater Only	10-City Leased	05-2"	0	0
03-Stormwater Only	10-City Leased	06-3"	0	0
03-Stormwater Only	10-City Leased	07-4"	0	0
03-Stormwater Only	10-City Leased	08-6"	0	0
03-Stormwater Only	10-City Leased	09-8"	0	0
03-Stormwater Only	11-Hospital/University	01-5/8"	12	0
03-Stormwater Only	11-Hospital/University	03-1"	0	0
03-Stormwater Only	11-Hospital/University	05-2"	1	0
03-Stormwater Only	11-Hospital/University	08-6"	0	0

Rpt1b v5 2015.02			FY13	
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
03-Stormwater Only	11-Hospital/University	A-Unknown	1846	0
03-Stormwater Only	12-Scheduled	01-5/8"	7	0
03-Stormwater Only	12-Scheduled	A-Unknown	13	0
03-Stormwater Only	13-Fire Service	01-5/8"	1	0
03-Stormwater Only	13-Fire Service	03-1"	131	0
03-Stormwater Only	13-Fire Service	04-1.5"	48	0
03-Stormwater Only	13-Fire Service	05-2"	991	0
03-Stormwater Only	13-Fire Service	06-3"	0	0
03-Stormwater Only	13-Fire Service	07-4"	316	0
03-Stormwater Only	13-Fire Service	08-6"	209	0
03-Stormwater Only	13-Fire Service	09-8"	68	0
03-Stormwater Only	13-Fire Service	10-10"	1	0
03-Stormwater Only	13-Fire Service	11-12"	12	0
03-Stormwater Only	13-Fire Service	12-Unknown	0	0
03-Stormwater Only	13-Fire Service	A-Unknown	1541	0
03-Stormwater Only	14-City Government	01-5/8"	997	10.66
03-Stormwater Only	14-City Government	02-3/4"	12	0
03-Stormwater Only	14-City Government	03-1"	25	0
03-Stormwater Only	14-City Government	04-1.5"	0	0
03-Stormwater Only	14-City Government	05-2"	17	0
03-Stormwater Only	14-City Government	06-3"	0	0
03-Stormwater Only	14-City Government	07-4"	12	0
03-Stormwater Only	14-City Government	08-6"	0	0
03-Stormwater Only	14-City Government	09-8"	12	0
03-Stormwater Only	14-City Government	12-Unknown	0	0
03-Stormwater Only	14-City Government	A-Unknown	10129	-15.14
04-Sewer and Stormwater	01-General Service-Residential	01-5/8"	269	0
04-Sewer and Stormwater	01-General Service-Residential	02-3/4"	10	0
04-Sewer and Stormwater	01-General Service-Residential	07-4"	0	0
04-Sewer and Stormwater	01-General Service-Residential	08-6"	0	0

Rpt1b v5 2015.02			FY13	
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
04-Sewer and Stormwater	01-General Service-Residential	A-Unknown	25	0
04-Sewer and Stormwater	02-General Service-Commercial	01-5/8"	0	0
04-Sewer and Stormwater	02-General Service-Commercial	05-2"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	04-1.5"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	05-2"	5	0
04-Sewer and Stormwater	03-General Service-Industrial	06-3"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	11-12"	0	0
04-Sewer and Stormwater	04-General Service-Public Utilities	03-1"	0	0
04-Sewer and Stormwater	06-Charity/Non-Public Schools	03-1"	11	0
04-Sewer and Stormwater	09-Hand Bill	01-5/8"	149	0
04-Sewer and Stormwater	09-Hand Bill	04-1.5"	0	0
04-Sewer and Stormwater	09-Hand Bill	05-2"	25	0
04-Sewer and Stormwater	09-Hand Bill	06-3"	13	0
04-Sewer and Stormwater	09-Hand Bill	08-6"	25	0
04-Sewer and Stormwater	09-Hand Bill	09-8"	29	0
04-Sewer and Stormwater	09-Hand Bill	10-10"	0	0
04-Sewer and Stormwater	11-Hospital/University	01-5/8"	0	0
05-Water and Stormwater	01-General Service-Residential	01-5/8"	11948	75192.79
05-Water and Stormwater	01-General Service-Residential	02-3/4"	12	86.67
05-Water and Stormwater	01-General Service-Residential	03-1"	1845	18047.78
05-Water and Stormwater	01-General Service-Residential	04-1.5"	132	1677.64
05-Water and Stormwater	01-General Service-Residential	05-2"	542	1032.38
05-Water and Stormwater	01-General Service-Residential	06-3"	0	0
05-Water and Stormwater	01-General Service-Residential	07-4"	46	0
05-Water and Stormwater	01-General Service-Residential	08-6"	0	0
05-Water and Stormwater	01-General Service-Residential	09-8"	0	0
05-Water and Stormwater	01-General Service-Residential	10-10"	0	0
05-Water and Stormwater	01-General Service-Residential	11-12"	0	0
05-Water and Stormwater	01-General Service-Residential	Y-Unknown	0	0
05-Water and Stormwater	02-General Service-Commercial	01-5/8"	815	5848.99

Rpt1b v5 2015.02			FY13	
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
05-Water and Stormwater	02-General Service-Commercial	03-1"	232	2106.6
05-Water and Stormwater	02-General Service-Commercial	04-1.5"	186	2849.43
05-Water and Stormwater	02-General Service-Commercial	05-2"	245	3448.8
05-Water and Stormwater	02-General Service-Commercial	06-3"	10	379.1
05-Water and Stormwater	02-General Service-Commercial	07-4"	105	2691.95
05-Water and Stormwater	02-General Service-Commercial	08-6"	111	9421.98
05-Water and Stormwater	02-General Service-Commercial	09-8"	9	0
05-Water and Stormwater	02-General Service-Commercial	10-10"	0	0
05-Water and Stormwater	02-General Service-Commercial	11-12"	0	0
05-Water and Stormwater	03-General Service-Industrial	01-5/8"	31	206.32
05-Water and Stormwater	03-General Service-Industrial	03-1"	24	229.99
05-Water and Stormwater	03-General Service-Industrial	04-1.5"	8	118.94
05-Water and Stormwater	03-General Service-Industrial	05-2"	38	881.42
05-Water and Stormwater	03-General Service-Industrial	06-3"	31	1285.32
05-Water and Stormwater	03-General Service-Industrial	07-4"	24	1778.48
05-Water and Stormwater	03-General Service-Industrial	08-6"	24	3045.16
05-Water and Stormwater	03-General Service-Industrial	09-8"	0	0
05-Water and Stormwater	03-General Service-Industrial	10-10"	12	3447.52
05-Water and Stormwater	04-General Service-Public Utilities	03-1"	12	115.07
05-Water and Stormwater	04-General Service-Public Utilities	11-12"	0	0
05-Water and Stormwater	05-P.H.A	01-5/8"	0	0
05-Water and Stormwater	05-P.H.A	03-1"	73	0
05-Water and Stormwater	05-P.H.A	05-2"	5	104.69
05-Water and Stormwater	05-P.H.A	07-4"	6	0
05-Water and Stormwater	05-P.H.A	08-6"	0	0
05-Water and Stormwater	05-P.H.A	09-8"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	01-5/8"	102	422.69
05-Water and Stormwater	06-Charity/Non-Public Schools	03-1"	31	222.71
05-Water and Stormwater	06-Charity/Non-Public Schools	04-1.5"	21	299.86
05-Water and Stormwater	06-Charity/Non-Public Schools	05-2"	40	991.04

Rpt1b v5 2015.02			FY13	
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
05-Water and Stormwater	06-Charity/Non-Public Schools	06-3"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	07-4"	6	0
05-Water and Stormwater	06-Charity/Non-Public Schools	08-6"	4	0
05-Water and Stormwater	06-Charity/Non-Public Schools	09-8"	1	0
05-Water and Stormwater	07-Public Schools	06-3"	0	0
05-Water and Stormwater	07-Public Schools	07-4"	13	0
05-Water and Stormwater	07-Public Schools	08-6"	5	0
05-Water and Stormwater	07-Public Schools	09-8"	0	0
05-Water and Stormwater	07-Public Schools	10-10"	0	0
05-Water and Stormwater	08-Senior Citizens Discount	01-5/8"	160	750.7
05-Water and Stormwater	08-Senior Citizens Discount	05-2"	0	0
05-Water and Stormwater	09-Hand Bill	01-5/8"	16	131.32
05-Water and Stormwater	09-Hand Bill	06-3"	0	0
05-Water and Stormwater	09-Hand Bill	08-6"	12	2793.38
05-Water and Stormwater	09-Hand Bill	09-8"	12	2372.11
05-Water and Stormwater	09-Hand Bill	10-10"	0	0
05-Water and Stormwater	10-City Leased	01-5/8"	62	386.83
05-Water and Stormwater	10-City Leased	03-1"	35	335.41
05-Water and Stormwater	10-City Leased	04-1.5"	5	74.37
05-Water and Stormwater	10-City Leased	05-2"	12	285.15
05-Water and Stormwater	10-City Leased	06-3"	24	902.89
05-Water and Stormwater	10-City Leased	07-4"	31	2168.12
05-Water and Stormwater	10-City Leased	08-6"	36	4950.43
05-Water and Stormwater	10-City Leased	09-8"	5	997.1
05-Water and Stormwater	10-City Leased	10-10"	0	0
05-Water and Stormwater	11-Hospital/University	01-5/8"	24	112.78
05-Water and Stormwater	11-Hospital/University	06-3"	0	0
05-Water and Stormwater	11-Hospital/University	07-4"	0	0
05-Water and Stormwater	11-Hospital/University	08-6"	5	0
05-Water and Stormwater	11-Hospital/University	09-8"	0	0

Rpt1b v5 2015.02			FY13	
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
05-Water and Stormwater	11-Hospital/University	10-10"	0	0
05-Water and Stormwater	13-Fire Service	01-5/8"	43	150
05-Water and Stormwater	13-Fire Service	03-1"	40	0
05-Water and Stormwater	13-Fire Service	04-1.5"	26	0
05-Water and Stormwater	13-Fire Service	05-2"	691	0
05-Water and Stormwater	13-Fire Service	06-3"	0	0
05-Water and Stormwater	13-Fire Service	07-4"	97	0
05-Water and Stormwater	13-Fire Service	08-6"	61	0
05-Water and Stormwater	13-Fire Service	09-8"	46	0
05-Water and Stormwater	13-Fire Service	10-10"	16	0
05-Water and Stormwater	13-Fire Service	11-12"	0	0
05-Water and Stormwater	14-City Government	01-5/8"	187	1145.63
05-Water and Stormwater	14-City Government	02-3/4"	60	432.6
05-Water and Stormwater	14-City Government	03-1"	67	642.98
05-Water and Stormwater	14-City Government	04-1.5"	30	460.41
05-Water and Stormwater	14-City Government	05-2"	64	1251.05
05-Water and Stormwater	14-City Government	06-3"	0	0
05-Water and Stormwater	14-City Government	07-4"	0	0
05-Water and Stormwater	14-City Government	08-6"	12	1524.91
05-Water and Stormwater	14-City Government	09-8"	0	0
05-Water and Stormwater	14-City Government	10-10"	0	0
06-Sewer Only	01-General Service-Residential	01-5/8"	1	0
06-Sewer Only	02-General Service-Commercial	01-5/8"	0	0
06-Sewer Only	02-General Service-Commercial	05-2"	0	0
06-Sewer Only	03-General Service-Industrial	02-3/4"	10	0
06-Sewer Only	03-General Service-Industrial	10-10"	3	0
06-Sewer Only	04-General Service-Public Utilities	07-4"	0	0
06-Sewer Only	06-Charity/Non-Public Schools	03-1"	1	0
06-Sewer Only	09-Hand Bill	01-5/8"	4	0
06-Sewer Only	09-Hand Bill	05-2"	4	0

Rpt1b v5 2015.02			FY13	
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
06-Sewer Only	13-Fire Service	01-5/8"	0	0
06-Sewer Only	14-City Government	07-4"	0	0
07-Water and Sewer	01-General Service-Residential	01-5/8"	1032	5973.85
07-Water and Sewer	01-General Service-Residential	02-3/4"	1	7.31
07-Water and Sewer	01-General Service-Residential	03-1"	4	38.6
07-Water and Sewer	01-General Service-Residential	05-2"	0	0
07-Water and Sewer	01-General Service-Residential	06-3"	1	37.27
07-Water and Sewer	02-General Service-Commercial	01-5/8"	135	1100.67
07-Water and Sewer	02-General Service-Commercial	02-3/4"	4	29.24
07-Water and Sewer	02-General Service-Commercial	03-1"	46	441.57
07-Water and Sewer	02-General Service-Commercial	04-1.5"	12	178.16
07-Water and Sewer	02-General Service-Commercial	05-2"	37	811.65
07-Water and Sewer	02-General Service-Commercial	06-3"	0	0
07-Water and Sewer	02-General Service-Commercial	07-4"	1	65.1
07-Water and Sewer	02-General Service-Commercial	09-8"	1	195.78
07-Water and Sewer	03-General Service-Industrial	01-5/8"	1	6.37
07-Water and Sewer	05-P.H.A	01-5/8"	14	83.45
07-Water and Sewer	05-P.H.A	03-1"	1	9.17
07-Water and Sewer	05-P.H.A	06-3"	12	429.13
07-Water and Sewer	06-Charity/Non-Public Schools	01-5/8"	1	4.78
07-Water and Sewer	06-Charity/Non-Public Schools	03-1"	12	86.31
07-Water and Sewer	06-Charity/Non-Public Schools	04-1.5"	24	267.28
07-Water and Sewer	06-Charity/Non-Public Schools	05-2"	12	197.41
07-Water and Sewer	07-Public Schools	07-4"	11	1770.82
07-Water and Sewer	07-Public Schools	08-6"	2	0
07-Water and Sewer	08-Senior Citizens Discount	01-5/8"	14	65.92
07-Water and Sewer	09-Hand Bill	04-1.5"	1	-2.05
07-Water and Sewer	09-Hand Bill	05-2"	10	0
07-Water and Sewer	11-Hospital/University	05-2"	1	16.36
07-Water and Sewer	13-Fire Service	01-5/8"	2	12.74

Rpt1b v5 2015.02		FY13		
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
07-Water and Sewer	13-Fire Service	03-1"	1	9.65
07-Water and Sewer	13-Fire Service	05-2"	5	109.1
07-Water and Sewer	13-Fire Service	12-Unknown	5	81.53
07-Water and Sewer	14-City Government	01-5/8"	2	12.74
07-Water and Sewer	14-City Government	03-1"	14	134.61
07-Water and Sewer	14-City Government	06-3"	3	111.81
07-Water and Sewer	14-City Government	08-6"	12	1523.2
08-RFSS, All Services	01-General Service-Residential	01-5/8"	10	0
08-RFSS, All Services	01-General Service-Residential	02-3/4"	30	108.1
08-RFSS, All Services	01-General Service-Residential	03-1"	1039	3739.83
08-RFSS, All Services	01-General Service-Residential	04-1.5"	227	1679.48
08-RFSS, All Services	01-General Service-Residential	05-2"	156	1487.22
08-RFSS, All Services	02-General Service-Commercial	01-5/8"	0	0
08-RFSS, All Services	02-General Service-Commercial	02-3/4"	4	21.93
08-RFSS, All Services	02-General Service-Commercial	03-1"	91	510.04
08-RFSS, All Services	02-General Service-Commercial	04-1.5"	23	69.78
08-RFSS, All Services	02-General Service-Commercial	05-2"	8	37.3
08-RFSS, All Services	03-General Service-Industrial	03-1"	0	0
08-RFSS, All Services	04-General Service-Public Utilities	03-1"	0	0
08-RFSS, All Services	05-P.H.A	03-1"	2	4.73
08-RFSS, All Services	05-P.H.A	04-1.5"	0	0
08-RFSS, All Services	05-P.H.A	05-2"	0	0
08-RFSS, All Services	08-Senior Citizens Discount	03-1"	0	0
08-RFSS, All Services	13-Fire Service	03-1"	0	0
08-RFSS, All Services	13-Fire Service	04-1.5"	0	0
08-RFSS, All Services	14-City Government	03-1"	9	7.78
09-RFSS, No Sewer	01-General Service-Residential	03-1"	0	0
09-RFSS, No Sewer	01-General Service-Residential	05-2"	0	0
09-RFSS, No Sewer	02-General Service-Commercial	03-1"	0	0
10-Unknown	01-General Service-Residential	01-5/8"	16	30.79

Rpt1b v5 2015.02	Customer Type	Meter Size	FY13	
			fy13 # of Original Bills Issued	fy13 Water Usage Charges
10-Unknown	01-General Service-Residential	03-1"	11	134.16
10-Unknown	01-General Service-Residential	04-1.5"	36	879.55
10-Unknown	01-General Service-Residential	05-2"	98	0
10-Unknown	01-General Service-Residential	06-3"	0	0
10-Unknown	01-General Service-Residential	07-4"	1	0
10-Unknown	01-General Service-Residential	08-6"	0	0
10-Unknown	01-General Service-Residential	09-8"	0	0
10-Unknown	01-General Service-Residential	12-Unknown	1067	-719.07
10-Unknown	01-General Service-Residential	A-Unknown	3	0.41
10-Unknown	02-General Service-Commercial	01-5/8"	6	30.76
10-Unknown	02-General Service-Commercial	02-3/4"	1	0
10-Unknown	02-General Service-Commercial	03-1"	6	43.43
10-Unknown	02-General Service-Commercial	04-1.5"	0	0
10-Unknown	02-General Service-Commercial	05-2"	4	0
10-Unknown	02-General Service-Commercial	06-3"	0	0
10-Unknown	02-General Service-Commercial	07-4"	7	0
10-Unknown	02-General Service-Commercial	08-6"	0	0
10-Unknown	02-General Service-Commercial	09-8"	6	0
10-Unknown	02-General Service-Commercial	10-10"	0	0
10-Unknown	02-General Service-Commercial	12-Unknown	4570	-8019.24
10-Unknown	02-General Service-Commercial	A-Unknown	7	45.45
10-Unknown	03-General Service-Industrial	01-5/8"	0	0
10-Unknown	03-General Service-Industrial	12-Unknown	173	-177.3
10-Unknown	04-General Service-Public Utilities	12-Unknown	102	0
10-Unknown	05-P.H.A	07-4"	0	0
10-Unknown	05-P.H.A	12-Unknown	31	33.53
10-Unknown	06-Charity/Non-Public Schools	01-5/8"	1	61.7
10-Unknown	06-Charity/Non-Public Schools	09-8"	1	0
10-Unknown	06-Charity/Non-Public Schools	12-Unknown	15	-136.4
10-Unknown	07-Public Schools	12-Unknown	8	-139.99

Rpt1b v5 2015.02			FY13	
Service Type	Customer Type	Meter Size	fy13 # of Original Bills Issued	fy13 Water Usage Charges
10-Unknown	08-Senior Citizens Discount	01-5/8"	0	0
10-Unknown	08-Senior Citizens Discount	12-Unknown	0	0
10-Unknown	09-Hand Bill	08-6"	3	0
10-Unknown	09-Hand Bill	10-10"	0	0
10-Unknown	09-Hand Bill	12-Unknown	475	-118.75
10-Unknown	10-City Leased	12-Unknown	0	0
10-Unknown	11-Hospital/University	06-3"	0	0
10-Unknown	11-Hospital/University	07-4"	0	0
10-Unknown	11-Hospital/University	08-6"	0	0
10-Unknown	11-Hospital/University	09-8"	0	0
10-Unknown	11-Hospital/University	12-Unknown	16	5.8
10-Unknown	13-Fire Service	03-1"	0	0
10-Unknown	13-Fire Service	04-1.5"	3	0
10-Unknown	13-Fire Service	05-2"	26	0
10-Unknown	13-Fire Service	06-3"	0	0
10-Unknown	13-Fire Service	07-4"	11	0
10-Unknown	13-Fire Service	08-6"	10	0
10-Unknown	13-Fire Service	09-8"	1	0
10-Unknown	13-Fire Service	10-10"	0	0
10-Unknown	13-Fire Service	12-Unknown	5	0
10-Unknown	14-City Government	01-5/8"	2	0.39
10-Unknown	14-City Government	05-2"	0	0
10-Unknown	14-City Government	08-6"	0	0
10-Unknown	14-City Government	12-Unknown	241	-105.63
				38121611.3

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	01-5/8"	25863666.72
01-Water,Sewer,Stormwater	01-General Service-Residential	02-3/4"	2286.32
01-Water,Sewer,Stormwater	01-General Service-Residential	03-1"	385638.02
01-Water,Sewer,Stormwater	01-General Service-Residential	04-1.5"	220151.59
01-Water,Sewer,Stormwater	01-General Service-Residential	05-2"	239094.83
01-Water,Sewer,Stormwater	01-General Service-Residential	06-3"	162122.21
01-Water,Sewer,Stormwater	01-General Service-Residential	07-4"	85737.64
01-Water,Sewer,Stormwater	01-General Service-Residential	08-6"	43651.53
01-Water,Sewer,Stormwater	01-General Service-Residential	09-8"	17445.8
01-Water,Sewer,Stormwater	01-General Service-Residential	11-12"	0
01-Water,Sewer,Stormwater	02-General Service-Commercial	01-5/8"	1819206.97
01-Water,Sewer,Stormwater	02-General Service-Commercial	02-3/4"	1554.02
01-Water,Sewer,Stormwater	02-General Service-Commercial	03-1"	559457.15
01-Water,Sewer,Stormwater	02-General Service-Commercial	04-1.5"	445706.12
01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	990524.35
01-Water,Sewer,Stormwater	02-General Service-Commercial	06-3"	593630.35
01-Water,Sewer,Stormwater	02-General Service-Commercial	07-4"	516531.72
01-Water,Sewer,Stormwater	02-General Service-Commercial	08-6"	319490.52
01-Water,Sewer,Stormwater	02-General Service-Commercial	09-8"	92726.81
01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	61528.54
01-Water,Sewer,Stormwater	03-General Service-Industrial	01-5/8"	33880.14
01-Water,Sewer,Stormwater	03-General Service-Industrial	03-1"	60303.53
01-Water,Sewer,Stormwater	03-General Service-Industrial	04-1.5"	32389.15
01-Water,Sewer,Stormwater	03-General Service-Industrial	05-2"	68123.25
01-Water,Sewer,Stormwater	03-General Service-Industrial	06-3"	52604.9
01-Water,Sewer,Stormwater	03-General Service-Industrial	07-4"	27782.1
01-Water,Sewer,Stormwater	03-General Service-Industrial	08-6"	26435.65
01-Water,Sewer,Stormwater	03-General Service-Industrial	10-10"	0
01-Water,Sewer,Stormwater	03-General Service-Industrial	11-12"	0
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	01-5/8"	2621.71

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	03-1"	5566.01
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	04-1.5"	4035.66
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	05-2"	11062.47
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	06-3"	13836.61
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	07-4"	7374.63
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	08-6"	19820.43
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	09-8"	0
01-Water,Sewer,Stormwater	05-P.H.A	01-5/8"	354976.03
01-Water,Sewer,Stormwater	05-P.H.A	02-3/4"	0
01-Water,Sewer,Stormwater	05-P.H.A	03-1"	3264.54
01-Water,Sewer,Stormwater	05-P.H.A	04-1.5"	3798.19
01-Water,Sewer,Stormwater	05-P.H.A	05-2"	9257.35
01-Water,Sewer,Stormwater	05-P.H.A	06-3"	38557.81
01-Water,Sewer,Stormwater	05-P.H.A	07-4"	36867.08
01-Water,Sewer,Stormwater	05-P.H.A	08-6"	49434.36
01-Water,Sewer,Stormwater	05-P.H.A	09-8"	39325.16
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	01-5/8"	60854.24
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	02-3/4"	0
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	03-1"	54339.19
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	04-1.5"	46991.6
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	05-2"	101860.73
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	06-3"	125686.83
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	07-4"	156168.82
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	08-6"	41273.38
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	09-8"	8510.23
01-Water,Sewer,Stormwater	07-Public Schools	01-5/8"	535.11
01-Water,Sewer,Stormwater	07-Public Schools	03-1"	2134.92
01-Water,Sewer,Stormwater	07-Public Schools	04-1.5"	2034.24
01-Water,Sewer,Stormwater	07-Public Schools	05-2"	19499.78
01-Water,Sewer,Stormwater	07-Public Schools	06-3"	85870.34

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
01-Water,Sewer,Stormwater	07-Public Schools	07-4"	273889.93
01-Water,Sewer,Stormwater	07-Public Schools	08-6"	57584.84
01-Water,Sewer,Stormwater	07-Public Schools	09-8"	11465.67
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	01-5/8"	928036.77
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	02-3/4"	0
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	03-1"	479.63
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	04-1.5"	286.28
01-Water,Sewer,Stormwater	09-Hand Bill	01-5/8"	695.96
01-Water,Sewer,Stormwater	09-Hand Bill	03-1"	3584.31
01-Water,Sewer,Stormwater	09-Hand Bill	04-1.5"	4249.79
01-Water,Sewer,Stormwater	09-Hand Bill	05-2"	34068.14
01-Water,Sewer,Stormwater	09-Hand Bill	06-3"	78075.89
01-Water,Sewer,Stormwater	09-Hand Bill	07-4"	146628.65
01-Water,Sewer,Stormwater	09-Hand Bill	08-6"	91754.28
01-Water,Sewer,Stormwater	09-Hand Bill	09-8"	35205.27
01-Water,Sewer,Stormwater	09-Hand Bill	10-10"	34155.48
01-Water,Sewer,Stormwater	10-City Leased	01-5/8"	693.99
01-Water,Sewer,Stormwater	10-City Leased	03-1"	1075.51
01-Water,Sewer,Stormwater	10-City Leased	04-1.5"	2675.9
01-Water,Sewer,Stormwater	10-City Leased	05-2"	7047.11
01-Water,Sewer,Stormwater	10-City Leased	06-3"	7110.95
01-Water,Sewer,Stormwater	10-City Leased	07-4"	16929.47
01-Water,Sewer,Stormwater	10-City Leased	08-6"	0
01-Water,Sewer,Stormwater	10-City Leased	09-8"	0
01-Water,Sewer,Stormwater	11-Hospital/University	01-5/8"	2405.65
01-Water,Sewer,Stormwater	11-Hospital/University	02-3/4"	0
01-Water,Sewer,Stormwater	11-Hospital/University	03-1"	3868.31
01-Water,Sewer,Stormwater	11-Hospital/University	04-1.5"	17870.77
01-Water,Sewer,Stormwater	11-Hospital/University	05-2"	24304.87
01-Water,Sewer,Stormwater	11-Hospital/University	06-3"	78089.97

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
01-Water,Sewer,Stormwater	11-Hospital/University	07-4"	165846.51
01-Water,Sewer,Stormwater	11-Hospital/University	08-6"	149390.59
01-Water,Sewer,Stormwater	11-Hospital/University	09-8"	29463.82
01-Water,Sewer,Stormwater	11-Hospital/University	10-10"	12385.57
01-Water,Sewer,Stormwater	12-Scheduled	01-5/8"	170.48
01-Water,Sewer,Stormwater	13-Fire Service	01-5/8"	2523.33
01-Water,Sewer,Stormwater	13-Fire Service	03-1"	3060.4
01-Water,Sewer,Stormwater	13-Fire Service	04-1.5"	3028.48
01-Water,Sewer,Stormwater	13-Fire Service	05-2"	6757.39
01-Water,Sewer,Stormwater	13-Fire Service	06-3"	5381.91
01-Water,Sewer,Stormwater	13-Fire Service	07-4"	9824.57
01-Water,Sewer,Stormwater	13-Fire Service	08-6"	12338.07
01-Water,Sewer,Stormwater	13-Fire Service	09-8"	0
01-Water,Sewer,Stormwater	13-Fire Service	10-10"	0
01-Water,Sewer,Stormwater	14-City Government	01-5/8"	17435.83
01-Water,Sewer,Stormwater	14-City Government	02-3/4"	139.7
01-Water,Sewer,Stormwater	14-City Government	03-1"	27609.05
01-Water,Sewer,Stormwater	14-City Government	04-1.5"	28269.48
01-Water,Sewer,Stormwater	14-City Government	05-2"	149141.23
01-Water,Sewer,Stormwater	14-City Government	06-3"	151830.08
01-Water,Sewer,Stormwater	14-City Government	07-4"	119873.21
01-Water,Sewer,Stormwater	14-City Government	08-6"	129730.5
01-Water,Sewer,Stormwater	14-City Government	09-8"	75974.68
01-Water,Sewer,Stormwater	14-City Government	10-10"	151129.47
01-Water,Sewer,Stormwater	14-City Government	11-12"	14686.3
02-Water Only	01-General Service-Residential	01-5/8"	0
02-Water Only	01-General Service-Residential	03-1"	0
02-Water Only	01-General Service-Residential	04-1.5"	0
02-Water Only	01-General Service-Residential	05-2"	0
02-Water Only	01-General Service-Residential	06-3"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
02-Water Only	01-General Service-Residential	07-4"	0
02-Water Only	01-General Service-Residential	08-6"	0
02-Water Only	01-General Service-Residential	09-8"	0
02-Water Only	01-General Service-Residential	10-10"	0
02-Water Only	01-General Service-Residential	11-12"	0
02-Water Only	01-General Service-Residential	Y-Unknown	0
02-Water Only	02-General Service-Commercial	01-5/8"	0
02-Water Only	02-General Service-Commercial	03-1"	0
02-Water Only	02-General Service-Commercial	04-1.5"	0
02-Water Only	02-General Service-Commercial	05-2"	0
02-Water Only	02-General Service-Commercial	06-3"	0
02-Water Only	02-General Service-Commercial	07-4"	0
02-Water Only	02-General Service-Commercial	08-6"	0
02-Water Only	02-General Service-Commercial	09-8"	0
02-Water Only	02-General Service-Commercial	10-10"	0
02-Water Only	02-General Service-Commercial	11-12"	0
02-Water Only	03-General Service-Industrial	05-2"	0
02-Water Only	03-General Service-Industrial	07-4"	0
02-Water Only	03-General Service-Industrial	08-6"	0
02-Water Only	03-General Service-Industrial	09-8"	0
02-Water Only	03-General Service-Industrial	10-10"	0
02-Water Only	04-General Service-Public Utilities	05-2"	0
02-Water Only	04-General Service-Public Utilities	11-12"	0
02-Water Only	05-P.H.A	01-5/8"	0
02-Water Only	05-P.H.A	03-1"	0
02-Water Only	05-P.H.A	05-2"	0
02-Water Only	05-P.H.A	07-4"	0
02-Water Only	05-P.H.A	08-6"	0
02-Water Only	05-P.H.A	09-8"	0
02-Water Only	06-Charity/Non-Public Schools	01-5/8"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
02-Water Only	06-Charity/Non-Public Schools	03-1"	0
02-Water Only	06-Charity/Non-Public Schools	05-2"	0
02-Water Only	06-Charity/Non-Public Schools	06-3"	0
02-Water Only	06-Charity/Non-Public Schools	07-4"	0
02-Water Only	06-Charity/Non-Public Schools	08-6"	0
02-Water Only	06-Charity/Non-Public Schools	09-8"	0
02-Water Only	07-Public Schools	06-3"	0
02-Water Only	07-Public Schools	07-4"	0
02-Water Only	07-Public Schools	08-6"	0
02-Water Only	07-Public Schools	09-8"	0
02-Water Only	07-Public Schools	10-10"	0
02-Water Only	08-Senior Citizens Discount	05-2"	0
02-Water Only	09-Hand Bill	06-3"	0
02-Water Only	09-Hand Bill	07-4"	0
02-Water Only	09-Hand Bill	08-6"	0
02-Water Only	09-Hand Bill	09-8"	0
02-Water Only	10-City Leased	04-1.5"	0
02-Water Only	10-City Leased	05-2"	0
02-Water Only	10-City Leased	07-4"	0
02-Water Only	10-City Leased	08-6"	0
02-Water Only	10-City Leased	09-8"	0
02-Water Only	10-City Leased	10-10"	0
02-Water Only	11-Hospital/University	01-5/8"	0
02-Water Only	11-Hospital/University	03-1"	0
02-Water Only	11-Hospital/University	06-3"	0
02-Water Only	11-Hospital/University	07-4"	0
02-Water Only	11-Hospital/University	08-6"	0
02-Water Only	11-Hospital/University	09-8"	0
02-Water Only	11-Hospital/University	10-10"	0
02-Water Only	13-Fire Service	01-5/8"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
02-Water Only	13-Fire Service	03-1"	0
02-Water Only	13-Fire Service	04-1.5"	0
02-Water Only	13-Fire Service	05-2"	0
02-Water Only	13-Fire Service	06-3"	0
02-Water Only	13-Fire Service	07-4"	0
02-Water Only	13-Fire Service	08-6"	0
02-Water Only	13-Fire Service	09-8"	0
02-Water Only	13-Fire Service	10-10"	0
02-Water Only	13-Fire Service	11-12"	0
02-Water Only	14-City Government	03-1"	0
02-Water Only	14-City Government	05-2"	0
02-Water Only	14-City Government	06-3"	0
02-Water Only	14-City Government	07-4"	0
02-Water Only	14-City Government	08-6"	0
02-Water Only	14-City Government	09-8"	0
02-Water Only	14-City Government	10-10"	0
03-Stormwater Only	01-General Service-Residential	01-5/8"	30307.77
03-Stormwater Only	01-General Service-Residential	02-3/4"	0
03-Stormwater Only	01-General Service-Residential	03-1"	17.95
03-Stormwater Only	01-General Service-Residential	04-1.5"	91.84
03-Stormwater Only	01-General Service-Residential	05-2"	29.05
03-Stormwater Only	01-General Service-Residential	06-3"	0
03-Stormwater Only	01-General Service-Residential	07-4"	0
03-Stormwater Only	01-General Service-Residential	08-6"	0
03-Stormwater Only	01-General Service-Residential	09-8"	0
03-Stormwater Only	01-General Service-Residential	10-10"	0
03-Stormwater Only	01-General Service-Residential	12-Unknown	0
03-Stormwater Only	01-General Service-Residential	A-Unknown	98.04
03-Stormwater Only	02-General Service-Commercial	01-5/8"	450.36
03-Stormwater Only	02-General Service-Commercial	02-3/4"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
03-Stormwater Only	02-General Service-Commercial	03-1"	4252.71
03-Stormwater Only	02-General Service-Commercial	04-1.5"	12.76
03-Stormwater Only	02-General Service-Commercial	05-2"	14.04
03-Stormwater Only	02-General Service-Commercial	06-3"	-1518.92
03-Stormwater Only	02-General Service-Commercial	07-4"	0
03-Stormwater Only	02-General Service-Commercial	08-6"	0
03-Stormwater Only	02-General Service-Commercial	09-8"	0
03-Stormwater Only	02-General Service-Commercial	12-Unknown	0
03-Stormwater Only	02-General Service-Commercial	A-Unknown	623.69
03-Stormwater Only	02-General Service-Commercial	Y-Unknown	0
03-Stormwater Only	03-General Service-Industrial	01-5/8"	0
03-Stormwater Only	03-General Service-Industrial	03-1"	4.52
03-Stormwater Only	03-General Service-Industrial	04-1.5"	0
03-Stormwater Only	03-General Service-Industrial	05-2"	0
03-Stormwater Only	03-General Service-Industrial	06-3"	0
03-Stormwater Only	03-General Service-Industrial	07-4"	0
03-Stormwater Only	03-General Service-Industrial	08-6"	0
03-Stormwater Only	03-General Service-Industrial	12-Unknown	0
03-Stormwater Only	03-General Service-Industrial	A-Unknown	0
03-Stormwater Only	03-General Service-Industrial	Y-Unknown	0
03-Stormwater Only	04-General Service-Public Utilities	01-5/8"	0
03-Stormwater Only	04-General Service-Public Utilities	03-1"	0
03-Stormwater Only	04-General Service-Public Utilities	05-2"	0
03-Stormwater Only	04-General Service-Public Utilities	A-Unknown	0
03-Stormwater Only	05-P.H.A	01-5/8"	0.95
03-Stormwater Only	05-P.H.A	03-1"	0
03-Stormwater Only	05-P.H.A	05-2"	0
03-Stormwater Only	05-P.H.A	A-Unknown	0
03-Stormwater Only	06-Charity/Non-Public Schools	01-5/8"	1.66
03-Stormwater Only	06-Charity/Non-Public Schools	03-1"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
03-Stormwater Only	06-Charity/Non-Public Schools	04-1.5"	0
03-Stormwater Only	06-Charity/Non-Public Schools	05-2"	0
03-Stormwater Only	06-Charity/Non-Public Schools	07-4"	0
03-Stormwater Only	06-Charity/Non-Public Schools	09-8"	0
03-Stormwater Only	06-Charity/Non-Public Schools	A-Unknown	0
03-Stormwater Only	07-Public Schools	01-5/8"	0
03-Stormwater Only	07-Public Schools	08-6"	0
03-Stormwater Only	07-Public Schools	09-8"	0
03-Stormwater Only	07-Public Schools	12-Unknown	0
03-Stormwater Only	07-Public Schools	A-Unknown	0
03-Stormwater Only	08-Senior Citizens Discount	01-5/8"	517.76
03-Stormwater Only	08-Senior Citizens Discount	A-Unknown	0
03-Stormwater Only	09-Hand Bill	01-5/8"	0
03-Stormwater Only	09-Hand Bill	05-2"	0
03-Stormwater Only	09-Hand Bill	06-3"	0
03-Stormwater Only	09-Hand Bill	08-6"	0
03-Stormwater Only	09-Hand Bill	09-8"	0
03-Stormwater Only	09-Hand Bill	10-10"	0
03-Stormwater Only	09-Hand Bill	A-Unknown	0
03-Stormwater Only	10-City Leased	01-5/8"	0
03-Stormwater Only	10-City Leased	03-1"	0
03-Stormwater Only	10-City Leased	05-2"	0
03-Stormwater Only	10-City Leased	06-3"	0
03-Stormwater Only	10-City Leased	07-4"	0
03-Stormwater Only	10-City Leased	08-6"	0
03-Stormwater Only	10-City Leased	09-8"	0
03-Stormwater Only	11-Hospital/University	01-5/8"	0
03-Stormwater Only	11-Hospital/University	03-1"	0
03-Stormwater Only	11-Hospital/University	05-2"	0
03-Stormwater Only	11-Hospital/University	08-6"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
03-Stormwater Only	11-Hospital/University	A-Unknown	0
03-Stormwater Only	12-Scheduled	01-5/8"	0
03-Stormwater Only	12-Scheduled	A-Unknown	0
03-Stormwater Only	13-Fire Service	01-5/8"	0
03-Stormwater Only	13-Fire Service	03-1"	0
03-Stormwater Only	13-Fire Service	04-1.5"	0
03-Stormwater Only	13-Fire Service	05-2"	0
03-Stormwater Only	13-Fire Service	06-3"	0
03-Stormwater Only	13-Fire Service	07-4"	0
03-Stormwater Only	13-Fire Service	08-6"	0
03-Stormwater Only	13-Fire Service	09-8"	0
03-Stormwater Only	13-Fire Service	10-10"	0
03-Stormwater Only	13-Fire Service	11-12"	0
03-Stormwater Only	13-Fire Service	12-Unknown	0
03-Stormwater Only	13-Fire Service	A-Unknown	0
03-Stormwater Only	14-City Government	01-5/8"	10.94
03-Stormwater Only	14-City Government	02-3/4"	0
03-Stormwater Only	14-City Government	03-1"	0
03-Stormwater Only	14-City Government	04-1.5"	0
03-Stormwater Only	14-City Government	05-2"	0
03-Stormwater Only	14-City Government	06-3"	0
03-Stormwater Only	14-City Government	07-4"	0
03-Stormwater Only	14-City Government	08-6"	0
03-Stormwater Only	14-City Government	09-8"	0
03-Stormwater Only	14-City Government	12-Unknown	0
03-Stormwater Only	14-City Government	A-Unknown	-49.23
04-Sewer and Stormwater	01-General Service-Residential	01-5/8"	1470.54
04-Sewer and Stormwater	01-General Service-Residential	02-3/4"	144.99
04-Sewer and Stormwater	01-General Service-Residential	07-4"	0
04-Sewer and Stormwater	01-General Service-Residential	08-6"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
04-Sewer and Stormwater	01-General Service-Residential	A-Unknown	115.14
04-Sewer and Stormwater	02-General Service-Commercial	01-5/8"	0
04-Sewer and Stormwater	02-General Service-Commercial	05-2"	0
04-Sewer and Stormwater	03-General Service-Industrial	04-1.5"	0
04-Sewer and Stormwater	03-General Service-Industrial	05-2"	593.46
04-Sewer and Stormwater	03-General Service-Industrial	06-3"	0
04-Sewer and Stormwater	03-General Service-Industrial	11-12"	0
04-Sewer and Stormwater	04-General Service-Public Utilities	03-1"	216.85
04-Sewer and Stormwater	06-Charity/Non-Public Schools	03-1"	159.27
04-Sewer and Stormwater	09-Hand Bill	01-5/8"	866.47
04-Sewer and Stormwater	09-Hand Bill	04-1.5"	0
04-Sewer and Stormwater	09-Hand Bill	05-2"	1789.41
04-Sewer and Stormwater	09-Hand Bill	06-3"	1077.83
04-Sewer and Stormwater	09-Hand Bill	08-6"	8247.17
04-Sewer and Stormwater	09-Hand Bill	09-8"	16121.95
04-Sewer and Stormwater	09-Hand Bill	10-10"	0
04-Sewer and Stormwater	11-Hospital/University	01-5/8"	0
05-Water and Stormwater	01-General Service-Residential	01-5/8"	73.73
05-Water and Stormwater	01-General Service-Residential	02-3/4"	0
05-Water and Stormwater	01-General Service-Residential	03-1"	0
05-Water and Stormwater	01-General Service-Residential	04-1.5"	0
05-Water and Stormwater	01-General Service-Residential	05-2"	0
05-Water and Stormwater	01-General Service-Residential	06-3"	0
05-Water and Stormwater	01-General Service-Residential	07-4"	0
05-Water and Stormwater	01-General Service-Residential	08-6"	0
05-Water and Stormwater	01-General Service-Residential	09-8"	0
05-Water and Stormwater	01-General Service-Residential	10-10"	0
05-Water and Stormwater	01-General Service-Residential	11-12"	0
05-Water and Stormwater	01-General Service-Residential	Y-Unknown	0
05-Water and Stormwater	02-General Service-Commercial	01-5/8"	110.6

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
05-Water and Stormwater	02-General Service-Commercial	03-1"	0
05-Water and Stormwater	02-General Service-Commercial	04-1.5"	0
05-Water and Stormwater	02-General Service-Commercial	05-2"	0
05-Water and Stormwater	02-General Service-Commercial	06-3"	0
05-Water and Stormwater	02-General Service-Commercial	07-4"	0
05-Water and Stormwater	02-General Service-Commercial	08-6"	0
05-Water and Stormwater	02-General Service-Commercial	09-8"	0
05-Water and Stormwater	02-General Service-Commercial	10-10"	0
05-Water and Stormwater	02-General Service-Commercial	11-12"	0
05-Water and Stormwater	03-General Service-Industrial	01-5/8"	0
05-Water and Stormwater	03-General Service-Industrial	03-1"	0
05-Water and Stormwater	03-General Service-Industrial	04-1.5"	0
05-Water and Stormwater	03-General Service-Industrial	05-2"	0
05-Water and Stormwater	03-General Service-Industrial	06-3"	0
05-Water and Stormwater	03-General Service-Industrial	07-4"	0
05-Water and Stormwater	03-General Service-Industrial	08-6"	0
05-Water and Stormwater	03-General Service-Industrial	09-8"	0
05-Water and Stormwater	03-General Service-Industrial	10-10"	0
05-Water and Stormwater	04-General Service-Public Utilities	03-1"	0
05-Water and Stormwater	04-General Service-Public Utilities	11-12"	0
05-Water and Stormwater	05-P.H.A	01-5/8"	0
05-Water and Stormwater	05-P.H.A	03-1"	0
05-Water and Stormwater	05-P.H.A	05-2"	0
05-Water and Stormwater	05-P.H.A	07-4"	0
05-Water and Stormwater	05-P.H.A	08-6"	0
05-Water and Stormwater	05-P.H.A	09-8"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	01-5/8"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	03-1"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	04-1.5"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	05-2"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
05-Water and Stormwater	06-Charity/Non-Public Schools	06-3"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	07-4"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	08-6"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	09-8"	0
05-Water and Stormwater	07-Public Schools	06-3"	0
05-Water and Stormwater	07-Public Schools	07-4"	0
05-Water and Stormwater	07-Public Schools	08-6"	0
05-Water and Stormwater	07-Public Schools	09-8"	0
05-Water and Stormwater	07-Public Schools	10-10"	0
05-Water and Stormwater	08-Senior Citizens Discount	01-5/8"	0
05-Water and Stormwater	08-Senior Citizens Discount	05-2"	0
05-Water and Stormwater	09-Hand Bill	01-5/8"	0
05-Water and Stormwater	09-Hand Bill	06-3"	0
05-Water and Stormwater	09-Hand Bill	08-6"	0
05-Water and Stormwater	09-Hand Bill	09-8"	0
05-Water and Stormwater	09-Hand Bill	10-10"	0
05-Water and Stormwater	10-City Leased	01-5/8"	0
05-Water and Stormwater	10-City Leased	03-1"	0
05-Water and Stormwater	10-City Leased	04-1.5"	0
05-Water and Stormwater	10-City Leased	05-2"	0
05-Water and Stormwater	10-City Leased	06-3"	0
05-Water and Stormwater	10-City Leased	07-4"	0
05-Water and Stormwater	10-City Leased	08-6"	0
05-Water and Stormwater	10-City Leased	09-8"	0
05-Water and Stormwater	10-City Leased	10-10"	0
05-Water and Stormwater	11-Hospital/University	01-5/8"	0
05-Water and Stormwater	11-Hospital/University	06-3"	0
05-Water and Stormwater	11-Hospital/University	07-4"	0
05-Water and Stormwater	11-Hospital/University	08-6"	0
05-Water and Stormwater	11-Hospital/University	09-8"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
05-Water and Stormwater	11-Hospital/University	10-10"	0
05-Water and Stormwater	13-Fire Service	01-5/8"	0
05-Water and Stormwater	13-Fire Service	03-1"	0
05-Water and Stormwater	13-Fire Service	04-1.5"	0
05-Water and Stormwater	13-Fire Service	05-2"	0
05-Water and Stormwater	13-Fire Service	06-3"	0
05-Water and Stormwater	13-Fire Service	07-4"	0
05-Water and Stormwater	13-Fire Service	08-6"	0
05-Water and Stormwater	13-Fire Service	09-8"	0
05-Water and Stormwater	13-Fire Service	10-10"	0
05-Water and Stormwater	13-Fire Service	11-12"	0
05-Water and Stormwater	14-City Government	01-5/8"	0
05-Water and Stormwater	14-City Government	02-3/4"	0
05-Water and Stormwater	14-City Government	03-1"	0
05-Water and Stormwater	14-City Government	04-1.5"	0
05-Water and Stormwater	14-City Government	05-2"	0
05-Water and Stormwater	14-City Government	06-3"	0
05-Water and Stormwater	14-City Government	07-4"	0
05-Water and Stormwater	14-City Government	08-6"	0
05-Water and Stormwater	14-City Government	09-8"	0
05-Water and Stormwater	14-City Government	10-10"	0
06-Sewer Only	01-General Service-Residential	01-5/8"	4.41
06-Sewer Only	02-General Service-Commercial	01-5/8"	0
06-Sewer Only	02-General Service-Commercial	05-2"	0
06-Sewer Only	03-General Service-Industrial	02-3/4"	111.78
06-Sewer Only	03-General Service-Industrial	10-10"	2909.58
06-Sewer Only	04-General Service-Public Utilities	07-4"	0
06-Sewer Only	06-Charity/Non-Public Schools	03-1"	17.66
06-Sewer Only	09-Hand Bill	01-5/8"	26.46
06-Sewer Only	09-Hand Bill	05-2"	111.44

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
06-Sewer Only	13-Fire Service	01-5/8"	0
06-Sewer Only	14-City Government	07-4"	0
07-Water and Sewer	01-General Service-Residential	01-5/8"	4380.22
07-Water and Sewer	01-General Service-Residential	02-3/4"	15.21
07-Water and Sewer	01-General Service-Residential	03-1"	94.2
07-Water and Sewer	01-General Service-Residential	05-2"	0
07-Water and Sewer	01-General Service-Residential	06-3"	126.64
07-Water and Sewer	02-General Service-Commercial	01-5/8"	840.29
07-Water and Sewer	02-General Service-Commercial	02-3/4"	60.84
07-Water and Sewer	02-General Service-Commercial	03-1"	872.57
07-Water and Sewer	02-General Service-Commercial	04-1.5"	385.83
07-Water and Sewer	02-General Service-Commercial	05-2"	1916.92
07-Water and Sewer	02-General Service-Commercial	06-3"	0
07-Water and Sewer	02-General Service-Commercial	07-4"	213.19
07-Water and Sewer	02-General Service-Commercial	09-8"	673.29
07-Water and Sewer	03-General Service-Industrial	01-5/8"	4.41
07-Water and Sewer	05-P.H.A	01-5/8"	67.96
07-Water and Sewer	05-P.H.A	03-1"	22.37
07-Water and Sewer	05-P.H.A	06-3"	1036.64
07-Water and Sewer	06-Charity/Non-Public Schools	01-5/8"	3.31
07-Water and Sewer	06-Charity/Non-Public Schools	03-1"	162.94
07-Water and Sewer	06-Charity/Non-Public Schools	04-1.5"	584.32
07-Water and Sewer	06-Charity/Non-Public Schools	05-2"	461.32
07-Water and Sewer	07-Public Schools	07-4"	6570.52
07-Water and Sewer	07-Public Schools	08-6"	0
07-Water and Sewer	08-Senior Citizens Discount	01-5/8"	53.71
07-Water and Sewer	09-Hand Bill	04-1.5"	-41.73
07-Water and Sewer	09-Hand Bill	05-2"	648.14
07-Water and Sewer	11-Hospital/University	05-2"	51.69
07-Water and Sewer	13-Fire Service	01-5/8"	8.82

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
07-Water and Sewer	13-Fire Service	03-1"	23.55
07-Water and Sewer	13-Fire Service	05-2"	344.6
07-Water and Sewer	13-Fire Service	12-Unknown	68.73
07-Water and Sewer	14-City Government	01-5/8"	8.82
07-Water and Sewer	14-City Government	03-1"	285.59
07-Water and Sewer	14-City Government	06-3"	379.92
07-Water and Sewer	14-City Government	08-6"	3625.66
08-RFSS, All Services	01-General Service-Residential	01-5/8"	0
08-RFSS, All Services	01-General Service-Residential	02-3/4"	203.72
08-RFSS, All Services	01-General Service-Residential	03-1"	9155.29
08-RFSS, All Services	01-General Service-Residential	04-1.5"	4935.91
08-RFSS, All Services	01-General Service-Residential	05-2"	4310.83
08-RFSS, All Services	02-General Service-Commercial	01-5/8"	0
08-RFSS, All Services	02-General Service-Commercial	02-3/4"	45.63
08-RFSS, All Services	02-General Service-Commercial	03-1"	1255.44
08-RFSS, All Services	02-General Service-Commercial	04-1.5"	183.82
08-RFSS, All Services	02-General Service-Commercial	05-2"	117.84
08-RFSS, All Services	03-General Service-Industrial	03-1"	0
08-RFSS, All Services	04-General Service-Public Utilities	03-1"	0
08-RFSS, All Services	05-P.H.A	03-1"	11.54
08-RFSS, All Services	05-P.H.A	04-1.5"	0
08-RFSS, All Services	05-P.H.A	05-2"	0
08-RFSS, All Services	08-Senior Citizens Discount	03-1"	0
08-RFSS, All Services	13-Fire Service	03-1"	0
08-RFSS, All Services	13-Fire Service	04-1.5"	0
08-RFSS, All Services	14-City Government	03-1"	18.99
09-RFSS, No Sewer	01-General Service-Residential	03-1"	0
09-RFSS, No Sewer	01-General Service-Residential	05-2"	0
09-RFSS, No Sewer	02-General Service-Commercial	03-1"	0
10-Unknown	01-General Service-Residential	01-5/8"	28.56

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
10-Unknown	01-General Service-Residential	03-1"	327.42
10-Unknown	01-General Service-Residential	04-1.5"	2608.27
10-Unknown	01-General Service-Residential	05-2"	0
10-Unknown	01-General Service-Residential	06-3"	0
10-Unknown	01-General Service-Residential	07-4"	0
10-Unknown	01-General Service-Residential	08-6"	0
10-Unknown	01-General Service-Residential	09-8"	0
10-Unknown	01-General Service-Residential	12-Unknown	-1040.43
10-Unknown	01-General Service-Residential	A-Unknown	0.42
10-Unknown	02-General Service-Commercial	01-5/8"	32.04
10-Unknown	02-General Service-Commercial	02-3/4"	0
10-Unknown	02-General Service-Commercial	03-1"	49.73
10-Unknown	02-General Service-Commercial	04-1.5"	0
10-Unknown	02-General Service-Commercial	05-2"	0
10-Unknown	02-General Service-Commercial	06-3"	0
10-Unknown	02-General Service-Commercial	07-4"	0
10-Unknown	02-General Service-Commercial	08-6"	0
10-Unknown	02-General Service-Commercial	09-8"	0
10-Unknown	02-General Service-Commercial	10-10"	0
10-Unknown	02-General Service-Commercial	12-Unknown	-1766.81
10-Unknown	02-General Service-Commercial	A-Unknown	110.91
10-Unknown	03-General Service-Industrial	01-5/8"	0
10-Unknown	03-General Service-Industrial	12-Unknown	-1052.32
10-Unknown	04-General Service-Public Utilities	12-Unknown	0
10-Unknown	05-P.H.A	07-4"	0
10-Unknown	05-P.H.A	12-Unknown	-7.91
10-Unknown	06-Charity/Non-Public Schools	01-5/8"	0
10-Unknown	06-Charity/Non-Public Schools	09-8"	0
10-Unknown	06-Charity/Non-Public Schools	12-Unknown	-4929.49
10-Unknown	07-Public Schools	12-Unknown	-3881.19

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy13 Sewer Usage Charges
10-Unknown	08-Senior Citizens Discount	01-5/8"	0
10-Unknown	08-Senior Citizens Discount	12-Unknown	0
10-Unknown	09-Hand Bill	08-6"	0
10-Unknown	09-Hand Bill	10-10"	0
10-Unknown	09-Hand Bill	12-Unknown	-458.68
10-Unknown	10-City Leased	12-Unknown	0
10-Unknown	11-Hospital/University	06-3"	0
10-Unknown	11-Hospital/University	07-4"	0
10-Unknown	11-Hospital/University	08-6"	0
10-Unknown	11-Hospital/University	09-8"	0
10-Unknown	11-Hospital/University	12-Unknown	18.34
10-Unknown	13-Fire Service	03-1"	0
10-Unknown	13-Fire Service	04-1.5"	0
10-Unknown	13-Fire Service	05-2"	0
10-Unknown	13-Fire Service	06-3"	0
10-Unknown	13-Fire Service	07-4"	0
10-Unknown	13-Fire Service	08-6"	0
10-Unknown	13-Fire Service	09-8"	0
10-Unknown	13-Fire Service	10-10"	0
10-Unknown	13-Fire Service	12-Unknown	0
10-Unknown	14-City Government	01-5/8"	0.41
10-Unknown	14-City Government	05-2"	0
10-Unknown	14-City Government	08-6"	0
10-Unknown	14-City Government	12-Unknown	-3023.92
			37255690.9

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
01-Water,Sewer,Stormwater	01-General Service-Residential	01-5/8"	4911174	409265
01-Water,Sewer,Stormwater	01-General Service-Residential	02-3/4"	203	17
01-Water,Sewer,Stormwater	01-General Service-Residential	03-1"	21121	1760
01-Water,Sewer,Stormwater	01-General Service-Residential	04-1.5"	6362	530
01-Water,Sewer,Stormwater	01-General Service-Residential	05-2"	4555	380
01-Water,Sewer,Stormwater	01-General Service-Residential	06-3"	1675	140
01-Water,Sewer,Stormwater	01-General Service-Residential	07-4"	505	42
01-Water,Sewer,Stormwater	01-General Service-Residential	08-6"	140	12
01-Water,Sewer,Stormwater	01-General Service-Residential	09-8"	36	3
01-Water,Sewer,Stormwater	01-General Service-Residential	11-12"	0	0
01-Water,Sewer,Stormwater	02-General Service-Commercial	01-5/8"	334622	27885
01-Water,Sewer,Stormwater	02-General Service-Commercial	02-3/4"	136	11
01-Water,Sewer,Stormwater	02-General Service-Commercial	03-1"	30050	2504
01-Water,Sewer,Stormwater	02-General Service-Commercial	04-1.5"	12446	1037
01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	16732	1394
01-Water,Sewer,Stormwater	02-General Service-Commercial	06-3"	5910	493
01-Water,Sewer,Stormwater	02-General Service-Commercial	07-4"	3105	259
01-Water,Sewer,Stormwater	02-General Service-Commercial	08-6"	1063	89
01-Water,Sewer,Stormwater	02-General Service-Commercial	09-8"	214	18
01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	58	5
01-Water,Sewer,Stormwater	03-General Service-Industrial	01-5/8"	6404	534
01-Water,Sewer,Stormwater	03-General Service-Industrial	03-1"	3034	253
01-Water,Sewer,Stormwater	03-General Service-Industrial	04-1.5"	1008	84
01-Water,Sewer,Stormwater	03-General Service-Industrial	05-2"	1309	109
01-Water,Sewer,Stormwater	03-General Service-Industrial	06-3"	564	47
01-Water,Sewer,Stormwater	03-General Service-Industrial	07-4"	155	13
01-Water,Sewer,Stormwater	03-General Service-Industrial	08-6"	89	7
01-Water,Sewer,Stormwater	03-General Service-Industrial	10-10"	0	0
01-Water,Sewer,Stormwater	03-General Service-Industrial	11-12"	0	0
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	01-5/8"	449	37

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	03-1"	326	27
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	04-1.5"	118	10
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	05-2"	225	19
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	06-3"	153	13
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	07-4"	50	4
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	08-6"	57	5
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	09-8"	10	1
01-Water,Sewer,Stormwater	05-P.H.A	01-5/8"	68901	5742
01-Water,Sewer,Stormwater	05-P.H.A	02-3/4"	0	0
01-Water,Sewer,Stormwater	05-P.H.A	03-1"	152	13
01-Water,Sewer,Stormwater	05-P.H.A	04-1.5"	90	8
01-Water,Sewer,Stormwater	05-P.H.A	05-2"	185	15
01-Water,Sewer,Stormwater	05-P.H.A	06-3"	437	36
01-Water,Sewer,Stormwater	05-P.H.A	07-4"	240	20
01-Water,Sewer,Stormwater	05-P.H.A	08-6"	165	14
01-Water,Sewer,Stormwater	05-P.H.A	09-8"	83	7
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	01-5/8"	15027	1252
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	02-3/4"	0	0
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	03-1"	3879	323
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	04-1.5"	1860	155
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	05-2"	2556	213
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	06-3"	1706	142
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	07-4"	1319	110
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	08-6"	175	15
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	09-8"	22	2
01-Water,Sewer,Stormwater	07-Public Schools	01-5/8"	129	11
01-Water,Sewer,Stormwater	07-Public Schools	03-1"	121	10
01-Water,Sewer,Stormwater	07-Public Schools	04-1.5"	83	7
01-Water,Sewer,Stormwater	07-Public Schools	05-2"	504	42
01-Water,Sewer,Stormwater	07-Public Schools	06-3"	1231	103

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
01-Water,Sewer,Stormwater	07-Public Schools	07-4"	2343	195
01-Water,Sewer,Stormwater	07-Public Schools	08-6"	223	19
01-Water,Sewer,Stormwater	07-Public Schools	09-8"	36	3
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	01-5/8"	233996	19500
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	02-3/4"	0	0
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	03-1"	31	3
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	04-1.5"	12	1
01-Water,Sewer,Stormwater	09-Hand Bill	01-5/8"	132	11
01-Water,Sewer,Stormwater	09-Hand Bill	03-1"	176	15
01-Water,Sewer,Stormwater	09-Hand Bill	04-1.5"	132	11
01-Water,Sewer,Stormwater	09-Hand Bill	05-2"	440	37
01-Water,Sewer,Stormwater	09-Hand Bill	06-3"	836	70
01-Water,Sewer,Stormwater	09-Hand Bill	07-4"	920	77
01-Water,Sewer,Stormwater	09-Hand Bill	08-6"	285	24
01-Water,Sewer,Stormwater	09-Hand Bill	09-8"	72	6
01-Water,Sewer,Stormwater	09-Hand Bill	10-10"	40	3
01-Water,Sewer,Stormwater	10-City Leased	01-5/8"	129	11
01-Water,Sewer,Stormwater	10-City Leased	03-1"	55	5
01-Water,Sewer,Stormwater	10-City Leased	04-1.5"	63	5
01-Water,Sewer,Stormwater	10-City Leased	05-2"	137	11
01-Water,Sewer,Stormwater	10-City Leased	06-3"	57	5
01-Water,Sewer,Stormwater	10-City Leased	07-4"	86	7
01-Water,Sewer,Stormwater	10-City Leased	08-6"	0	0
01-Water,Sewer,Stormwater	10-City Leased	09-8"	0	0
01-Water,Sewer,Stormwater	11-Hospital/University	01-5/8"	518	43
01-Water,Sewer,Stormwater	11-Hospital/University	02-3/4"	0	0
01-Water,Sewer,Stormwater	11-Hospital/University	03-1"	331	28
01-Water,Sewer,Stormwater	11-Hospital/University	04-1.5"	159	13
01-Water,Sewer,Stormwater	11-Hospital/University	05-2"	649	54
01-Water,Sewer,Stormwater	11-Hospital/University	06-3"	1067	89

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
01-Water,Sewer,Stormwater	11-Hospital/University	07-4"	1090	91
01-Water,Sewer,Stormwater	11-Hospital/University	08-6"	607	51
01-Water,Sewer,Stormwater	11-Hospital/University	09-8"	60	5
01-Water,Sewer,Stormwater	11-Hospital/University	10-10"	16	1
01-Water,Sewer,Stormwater	12-Scheduled	01-5/8"	24	2
01-Water,Sewer,Stormwater	13-Fire Service	01-5/8"	637	53
01-Water,Sewer,Stormwater	13-Fire Service	03-1"	92	8
01-Water,Sewer,Stormwater	13-Fire Service	04-1.5"	34	3
01-Water,Sewer,Stormwater	13-Fire Service	05-2"	109	9
01-Water,Sewer,Stormwater	13-Fire Service	06-3"	15	1
01-Water,Sewer,Stormwater	13-Fire Service	07-4"	34	3
01-Water,Sewer,Stormwater	13-Fire Service	08-6"	14	1
01-Water,Sewer,Stormwater	13-Fire Service	09-8"	0	0
01-Water,Sewer,Stormwater	13-Fire Service	10-10"	0	0
01-Water,Sewer,Stormwater	14-City Government	01-5/8"	2460	205
01-Water,Sewer,Stormwater	14-City Government	02-3/4"	12	1
01-Water,Sewer,Stormwater	14-City Government	03-1"	1369	114
01-Water,Sewer,Stormwater	14-City Government	04-1.5"	832	69
01-Water,Sewer,Stormwater	14-City Government	05-2"	2852	238
01-Water,Sewer,Stormwater	14-City Government	06-3"	1531	128
01-Water,Sewer,Stormwater	14-City Government	07-4"	718	60
01-Water,Sewer,Stormwater	14-City Government	08-6"	377	31
01-Water,Sewer,Stormwater	14-City Government	09-8"	146	12
01-Water,Sewer,Stormwater	14-City Government	10-10"	183	15
01-Water,Sewer,Stormwater	14-City Government	11-12"	9	1
02-Water Only	01-General Service-Residential	01-5/8"	223	19
02-Water Only	01-General Service-Residential	03-1"	165	14
02-Water Only	01-General Service-Residential	04-1.5"	203	17
02-Water Only	01-General Service-Residential	05-2"	4985	415
02-Water Only	01-General Service-Residential	06-3"	146	12

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
02-Water Only	01-General Service-Residential	07-4"	470	39
02-Water Only	01-General Service-Residential	08-6"	764	64
02-Water Only	01-General Service-Residential	09-8"	300	25
02-Water Only	01-General Service-Residential	10-10"	30	3
02-Water Only	01-General Service-Residential	11-12"	10	1
02-Water Only	01-General Service-Residential	Y-Unknown	8	1
02-Water Only	02-General Service-Commercial	01-5/8"	46	4
02-Water Only	02-General Service-Commercial	03-1"	41	3
02-Water Only	02-General Service-Commercial	04-1.5"	0	0
02-Water Only	02-General Service-Commercial	05-2"	817	68
02-Water Only	02-General Service-Commercial	06-3"	107	9
02-Water Only	02-General Service-Commercial	07-4"	1240	103
02-Water Only	02-General Service-Commercial	08-6"	1854	155
02-Water Only	02-General Service-Commercial	09-8"	883	74
02-Water Only	02-General Service-Commercial	10-10"	87	7
02-Water Only	02-General Service-Commercial	11-12"	36	3
02-Water Only	03-General Service-Industrial	05-2"	24	2
02-Water Only	03-General Service-Industrial	07-4"	50	4
02-Water Only	03-General Service-Industrial	08-6"	103	9
02-Water Only	03-General Service-Industrial	09-8"	80	7
02-Water Only	03-General Service-Industrial	10-10"	10	1
02-Water Only	04-General Service-Public Utilities	05-2"	10	1
02-Water Only	04-General Service-Public Utilities	11-12"	9	1
02-Water Only	05-P.H.A	01-5/8"	50	4
02-Water Only	05-P.H.A	03-1"	600	50
02-Water Only	05-P.H.A	05-2"	550	46
02-Water Only	05-P.H.A	07-4"	84	7
02-Water Only	05-P.H.A	08-6"	114	10
02-Water Only	05-P.H.A	09-8"	20	2
02-Water Only	06-Charity/Non-Public Schools	01-5/8"	6	1

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
02-Water Only	06-Charity/Non-Public Schools	03-1"	8	1
02-Water Only	06-Charity/Non-Public Schools	05-2"	10	1
02-Water Only	06-Charity/Non-Public Schools	06-3"	8	1
02-Water Only	06-Charity/Non-Public Schools	07-4"	112	9
02-Water Only	06-Charity/Non-Public Schools	08-6"	118	10
02-Water Only	06-Charity/Non-Public Schools	09-8"	8	1
02-Water Only	07-Public Schools	06-3"	30	3
02-Water Only	07-Public Schools	07-4"	119	10
02-Water Only	07-Public Schools	08-6"	498	42
02-Water Only	07-Public Schools	09-8"	150	13
02-Water Only	07-Public Schools	10-10"	20	2
02-Water Only	08-Senior Citizens Discount	05-2"	10	1
02-Water Only	09-Hand Bill	06-3"	10	1
02-Water Only	09-Hand Bill	07-4"	8	1
02-Water Only	09-Hand Bill	08-6"	93	8
02-Water Only	09-Hand Bill	09-8"	60	5
02-Water Only	10-City Leased	04-1.5"	0	0
02-Water Only	10-City Leased	05-2"	9	1
02-Water Only	10-City Leased	07-4"	39	3
02-Water Only	10-City Leased	08-6"	10	1
02-Water Only	10-City Leased	09-8"	10	1
02-Water Only	10-City Leased	10-10"	9	1
02-Water Only	11-Hospital/University	01-5/8"	10	1
02-Water Only	11-Hospital/University	03-1"	2	0
02-Water Only	11-Hospital/University	06-3"	13	1
02-Water Only	11-Hospital/University	07-4"	114	10
02-Water Only	11-Hospital/University	08-6"	355	30
02-Water Only	11-Hospital/University	09-8"	58	5
02-Water Only	11-Hospital/University	10-10"	20	2
02-Water Only	13-Fire Service	01-5/8"	304	25

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
02-Water Only	13-Fire Service	03-1"	307	26
02-Water Only	13-Fire Service	04-1.5"	178	15
02-Water Only	13-Fire Service	05-2"	5411	451
02-Water Only	13-Fire Service	06-3"	1930	161
02-Water Only	13-Fire Service	07-4"	10138	845
02-Water Only	13-Fire Service	08-6"	16078	1340
02-Water Only	13-Fire Service	09-8"	5007	417
02-Water Only	13-Fire Service	10-10"	741	62
02-Water Only	13-Fire Service	11-12"	112	9
02-Water Only	14-City Government	03-1"	0	0
02-Water Only	14-City Government	05-2"	8	1
02-Water Only	14-City Government	06-3"	28	2
02-Water Only	14-City Government	07-4"	174	15
02-Water Only	14-City Government	08-6"	378	32
02-Water Only	14-City Government	09-8"	146	12
02-Water Only	14-City Government	10-10"	21	2
03-Stormwater Only	01-General Service-Residential	01-5/8"	230022	19169
03-Stormwater Only	01-General Service-Residential	02-3/4"	121	10
03-Stormwater Only	01-General Service-Residential	03-1"	692	58
03-Stormwater Only	01-General Service-Residential	04-1.5"	51	4
03-Stormwater Only	01-General Service-Residential	05-2"	181	15
03-Stormwater Only	01-General Service-Residential	06-3"	10	1
03-Stormwater Only	01-General Service-Residential	07-4"	70	6
03-Stormwater Only	01-General Service-Residential	08-6"	91	8
03-Stormwater Only	01-General Service-Residential	09-8"	50	4
03-Stormwater Only	01-General Service-Residential	10-10"	0	0
03-Stormwater Only	01-General Service-Residential	12-Unknown	0	0
03-Stormwater Only	01-General Service-Residential	A-Unknown	145311	12109
03-Stormwater Only	02-General Service-Commercial	01-5/8"	3168	264
03-Stormwater Only	02-General Service-Commercial	02-3/4"	30	3

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
03-Stormwater Only	02-General Service-Commercial	03-1"	507	42
03-Stormwater Only	02-General Service-Commercial	04-1.5"	87	7
03-Stormwater Only	02-General Service-Commercial	05-2"	189	16
03-Stormwater Only	02-General Service-Commercial	06-3"	10	1
03-Stormwater Only	02-General Service-Commercial	07-4"	12	1
03-Stormwater Only	02-General Service-Commercial	08-6"	22	2
03-Stormwater Only	02-General Service-Commercial	09-8"	22	2
03-Stormwater Only	02-General Service-Commercial	12-Unknown	0	0
03-Stormwater Only	02-General Service-Commercial	A-Unknown	413350	34446
03-Stormwater Only	02-General Service-Commercial	Y-Unknown	0	0
03-Stormwater Only	03-General Service-Industrial	01-5/8"	10	1
03-Stormwater Only	03-General Service-Industrial	03-1"	29	2
03-Stormwater Only	03-General Service-Industrial	04-1.5"	0	0
03-Stormwater Only	03-General Service-Industrial	05-2"	0	0
03-Stormwater Only	03-General Service-Industrial	06-3"	0	0
03-Stormwater Only	03-General Service-Industrial	07-4"	11	1
03-Stormwater Only	03-General Service-Industrial	08-6"	0	0
03-Stormwater Only	03-General Service-Industrial	12-Unknown	0	0
03-Stormwater Only	03-General Service-Industrial	A-Unknown	116	10
03-Stormwater Only	03-General Service-Industrial	Y-Unknown	0	0
03-Stormwater Only	04-General Service-Public Utilities	01-5/8"	8	1
03-Stormwater Only	04-General Service-Public Utilities	03-1"	18	2
03-Stormwater Only	04-General Service-Public Utilities	05-2"	8	1
03-Stormwater Only	04-General Service-Public Utilities	A-Unknown	15355	1280
03-Stormwater Only	05-P.H.A	01-5/8"	679	57
03-Stormwater Only	05-P.H.A	03-1"	13	1
03-Stormwater Only	05-P.H.A	05-2"	0	0
03-Stormwater Only	05-P.H.A	A-Unknown	13225	1102
03-Stormwater Only	06-Charity/Non-Public Schools	01-5/8"	102	9
03-Stormwater Only	06-Charity/Non-Public Schools	03-1"	8	1

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
03-Stormwater Only	06-Charity/Non-Public Schools	04-1.5"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	05-2"	6	1
03-Stormwater Only	06-Charity/Non-Public Schools	07-4"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	09-8"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	A-Unknown	1097	91
03-Stormwater Only	07-Public Schools	01-5/8"	12	1
03-Stormwater Only	07-Public Schools	08-6"	0	0
03-Stormwater Only	07-Public Schools	09-8"	0	0
03-Stormwater Only	07-Public Schools	12-Unknown	0	0
03-Stormwater Only	07-Public Schools	A-Unknown	986	82
03-Stormwater Only	08-Senior Citizens Discount	01-5/8"	3562	297
03-Stormwater Only	08-Senior Citizens Discount	A-Unknown	12	1
03-Stormwater Only	09-Hand Bill	01-5/8"	12	1
03-Stormwater Only	09-Hand Bill	05-2"	40	3
03-Stormwater Only	09-Hand Bill	06-3"	10	1
03-Stormwater Only	09-Hand Bill	08-6"	0	0
03-Stormwater Only	09-Hand Bill	09-8"	0	0
03-Stormwater Only	09-Hand Bill	10-10"	11	1
03-Stormwater Only	09-Hand Bill	A-Unknown	66	6
03-Stormwater Only	10-City Leased	01-5/8"	0	0
03-Stormwater Only	10-City Leased	03-1"	0	0
03-Stormwater Only	10-City Leased	05-2"	0	0
03-Stormwater Only	10-City Leased	06-3"	0	0
03-Stormwater Only	10-City Leased	07-4"	0	0
03-Stormwater Only	10-City Leased	08-6"	0	0
03-Stormwater Only	10-City Leased	09-8"	0	0
03-Stormwater Only	11-Hospital/University	01-5/8"	12	1
03-Stormwater Only	11-Hospital/University	03-1"	2	0
03-Stormwater Only	11-Hospital/University	05-2"	0	0
03-Stormwater Only	11-Hospital/University	08-6"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
03-Stormwater Only	11-Hospital/University	A-Unknown	1874	156
03-Stormwater Only	12-Scheduled	01-5/8"	13	1
03-Stormwater Only	12-Scheduled	A-Unknown	12	1
03-Stormwater Only	13-Fire Service	01-5/8"	0	0
03-Stormwater Only	13-Fire Service	03-1"	80	7
03-Stormwater Only	13-Fire Service	04-1.5"	40	3
03-Stormwater Only	13-Fire Service	05-2"	630	53
03-Stormwater Only	13-Fire Service	06-3"	0	0
03-Stormwater Only	13-Fire Service	07-4"	219	18
03-Stormwater Only	13-Fire Service	08-6"	172	14
03-Stormwater Only	13-Fire Service	09-8"	48	4
03-Stormwater Only	13-Fire Service	10-10"	0	0
03-Stormwater Only	13-Fire Service	11-12"	10	1
03-Stormwater Only	13-Fire Service	12-Unknown	0	0
03-Stormwater Only	13-Fire Service	A-Unknown	1303	109
03-Stormwater Only	14-City Government	01-5/8"	1037	86
03-Stormwater Only	14-City Government	02-3/4"	12	1
03-Stormwater Only	14-City Government	03-1"	24	2
03-Stormwater Only	14-City Government	04-1.5"	0	0
03-Stormwater Only	14-City Government	05-2"	10	1
03-Stormwater Only	14-City Government	06-3"	0	0
03-Stormwater Only	14-City Government	07-4"	12	1
03-Stormwater Only	14-City Government	08-6"	0	0
03-Stormwater Only	14-City Government	09-8"	10	1
03-Stormwater Only	14-City Government	12-Unknown	0	0
03-Stormwater Only	14-City Government	A-Unknown	7884	657
04-Sewer and Stormwater	01-General Service-Residential	01-5/8"	378	32
04-Sewer and Stormwater	01-General Service-Residential	02-3/4"	12	1
04-Sewer and Stormwater	01-General Service-Residential	07-4"	1	0
04-Sewer and Stormwater	01-General Service-Residential	08-6"	1	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
04-Sewer and Stormwater	01-General Service-Residential	A-Unknown	35	3
04-Sewer and Stormwater	02-General Service-Commercial	01-5/8"	0	0
04-Sewer and Stormwater	02-General Service-Commercial	05-2"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	04-1.5"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	05-2"	12	1
04-Sewer and Stormwater	03-General Service-Industrial	06-3"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	11-12"	0	0
04-Sewer and Stormwater	04-General Service-Public Utilities	03-1"	4	0
04-Sewer and Stormwater	06-Charity/Non-Public Schools	03-1"	11	1
04-Sewer and Stormwater	09-Hand Bill	01-5/8"	139	12
04-Sewer and Stormwater	09-Hand Bill	04-1.5"	0	0
04-Sewer and Stormwater	09-Hand Bill	05-2"	29	2
04-Sewer and Stormwater	09-Hand Bill	06-3"	11	1
04-Sewer and Stormwater	09-Hand Bill	08-6"	21	2
04-Sewer and Stormwater	09-Hand Bill	09-8"	20	2
04-Sewer and Stormwater	09-Hand Bill	10-10"	0	0
04-Sewer and Stormwater	11-Hospital/University	01-5/8"	12	1
05-Water and Stormwater	01-General Service-Residential	01-5/8"	14975	1248
05-Water and Stormwater	01-General Service-Residential	02-3/4"	12	1
05-Water and Stormwater	01-General Service-Residential	03-1"	1980	165
05-Water and Stormwater	01-General Service-Residential	04-1.5"	142	12
05-Water and Stormwater	01-General Service-Residential	05-2"	298	25
05-Water and Stormwater	01-General Service-Residential	06-3"	0	0
05-Water and Stormwater	01-General Service-Residential	07-4"	26	2
05-Water and Stormwater	01-General Service-Residential	08-6"	0	0
05-Water and Stormwater	01-General Service-Residential	09-8"	0	0
05-Water and Stormwater	01-General Service-Residential	10-10"	0	0
05-Water and Stormwater	01-General Service-Residential	11-12"	0	0
05-Water and Stormwater	01-General Service-Residential	Y-Unknown	1	0
05-Water and Stormwater	02-General Service-Commercial	01-5/8"	963	80

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
05-Water and Stormwater	02-General Service-Commercial	03-1"	266	22
05-Water and Stormwater	02-General Service-Commercial	04-1.5"	203	17
05-Water and Stormwater	02-General Service-Commercial	05-2"	204	17
05-Water and Stormwater	02-General Service-Commercial	06-3"	24	2
05-Water and Stormwater	02-General Service-Commercial	07-4"	81	7
05-Water and Stormwater	02-General Service-Commercial	08-6"	102	9
05-Water and Stormwater	02-General Service-Commercial	09-8"	18	2
05-Water and Stormwater	02-General Service-Commercial	10-10"	0	0
05-Water and Stormwater	02-General Service-Commercial	11-12"	0	0
05-Water and Stormwater	03-General Service-Industrial	01-5/8"	36	3
05-Water and Stormwater	03-General Service-Industrial	03-1"	24	2
05-Water and Stormwater	03-General Service-Industrial	04-1.5"	11	1
05-Water and Stormwater	03-General Service-Industrial	05-2"	45	4
05-Water and Stormwater	03-General Service-Industrial	06-3"	36	3
05-Water and Stormwater	03-General Service-Industrial	07-4"	20	2
05-Water and Stormwater	03-General Service-Industrial	08-6"	24	2
05-Water and Stormwater	03-General Service-Industrial	09-8"	0	0
05-Water and Stormwater	03-General Service-Industrial	10-10"	11	1
05-Water and Stormwater	04-General Service-Public Utilities	03-1"	12	1
05-Water and Stormwater	04-General Service-Public Utilities	11-12"	0	0
05-Water and Stormwater	05-P.H.A	01-5/8"	0	0
05-Water and Stormwater	05-P.H.A	03-1"	30	3
05-Water and Stormwater	05-P.H.A	05-2"	22	2
05-Water and Stormwater	05-P.H.A	07-4"	2	0
05-Water and Stormwater	05-P.H.A	08-6"	0	0
05-Water and Stormwater	05-P.H.A	09-8"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	01-5/8"	232	19
05-Water and Stormwater	06-Charity/Non-Public Schools	03-1"	43	4
05-Water and Stormwater	06-Charity/Non-Public Schools	04-1.5"	44	4
05-Water and Stormwater	06-Charity/Non-Public Schools	05-2"	36	3

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
05-Water and Stormwater	06-Charity/Non-Public Schools	06-3"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	07-4"	2	0
05-Water and Stormwater	06-Charity/Non-Public Schools	08-6"	2	0
05-Water and Stormwater	06-Charity/Non-Public Schools	09-8"	6	1
05-Water and Stormwater	07-Public Schools	06-3"	0	0
05-Water and Stormwater	07-Public Schools	07-4"	4	0
05-Water and Stormwater	07-Public Schools	08-6"	4	0
05-Water and Stormwater	07-Public Schools	09-8"	0	0
05-Water and Stormwater	07-Public Schools	10-10"	0	0
05-Water and Stormwater	08-Senior Citizens Discount	01-5/8"	204	17
05-Water and Stormwater	08-Senior Citizens Discount	05-2"	0	0
05-Water and Stormwater	09-Hand Bill	01-5/8"	12	1
05-Water and Stormwater	09-Hand Bill	06-3"	0	0
05-Water and Stormwater	09-Hand Bill	08-6"	16	1
05-Water and Stormwater	09-Hand Bill	09-8"	10	1
05-Water and Stormwater	09-Hand Bill	10-10"	0	0
05-Water and Stormwater	10-City Leased	01-5/8"	67	6
05-Water and Stormwater	10-City Leased	03-1"	34	3
05-Water and Stormwater	10-City Leased	04-1.5"	12	1
05-Water and Stormwater	10-City Leased	05-2"	12	1
05-Water and Stormwater	10-City Leased	06-3"	21	2
05-Water and Stormwater	10-City Leased	07-4"	32	3
05-Water and Stormwater	10-City Leased	08-6"	47	4
05-Water and Stormwater	10-City Leased	09-8"	12	1
05-Water and Stormwater	10-City Leased	10-10"	0	0
05-Water and Stormwater	11-Hospital/University	01-5/8"	41	3
05-Water and Stormwater	11-Hospital/University	06-3"	0	0
05-Water and Stormwater	11-Hospital/University	07-4"	0	0
05-Water and Stormwater	11-Hospital/University	08-6"	2	0
05-Water and Stormwater	11-Hospital/University	09-8"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
05-Water and Stormwater	11-Hospital/University	10-10"	0	0
05-Water and Stormwater	13-Fire Service	01-5/8"	10	1
05-Water and Stormwater	13-Fire Service	03-1"	44	4
05-Water and Stormwater	13-Fire Service	04-1.5"	8	1
05-Water and Stormwater	13-Fire Service	05-2"	654	55
05-Water and Stormwater	13-Fire Service	06-3"	0	0
05-Water and Stormwater	13-Fire Service	07-4"	110	9
05-Water and Stormwater	13-Fire Service	08-6"	70	6
05-Water and Stormwater	13-Fire Service	09-8"	27	2
05-Water and Stormwater	13-Fire Service	10-10"	11	1
05-Water and Stormwater	13-Fire Service	11-12"	0	0
05-Water and Stormwater	14-City Government	01-5/8"	154	13
05-Water and Stormwater	14-City Government	02-3/4"	50	4
05-Water and Stormwater	14-City Government	03-1"	64	5
05-Water and Stormwater	14-City Government	04-1.5"	36	3
05-Water and Stormwater	14-City Government	05-2"	47	4
05-Water and Stormwater	14-City Government	06-3"	0	0
05-Water and Stormwater	14-City Government	07-4"	0	0
05-Water and Stormwater	14-City Government	08-6"	9	1
05-Water and Stormwater	14-City Government	09-8"	0	0
05-Water and Stormwater	14-City Government	10-10"	0	0
06-Sewer Only	01-General Service-Residential	01-5/8"	3	0
06-Sewer Only	02-General Service-Commercial	01-5/8"	2	0
06-Sewer Only	02-General Service-Commercial	05-2"	0	0
06-Sewer Only	03-General Service-Industrial	02-3/4"	3	0
06-Sewer Only	03-General Service-Industrial	10-10"	0	0
06-Sewer Only	04-General Service-Public Utilities	07-4"	0	0
06-Sewer Only	06-Charity/Non-Public Schools	03-1"	0	0
06-Sewer Only	09-Hand Bill	01-5/8"	0	0
06-Sewer Only	09-Hand Bill	05-2"	12	1

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
06-Sewer Only	13-Fire Service	01-5/8"	5	0
06-Sewer Only	14-City Government	07-4"	0	0
07-Water and Sewer	01-General Service-Residential	01-5/8"	203	17
07-Water and Sewer	01-General Service-Residential	02-3/4"	0	0
07-Water and Sewer	01-General Service-Residential	03-1"	0	0
07-Water and Sewer	01-General Service-Residential	05-2"	0	0
07-Water and Sewer	01-General Service-Residential	06-3"	0	0
07-Water and Sewer	02-General Service-Commercial	01-5/8"	101	8
07-Water and Sewer	02-General Service-Commercial	02-3/4"	0	0
07-Water and Sewer	02-General Service-Commercial	03-1"	47	4
07-Water and Sewer	02-General Service-Commercial	04-1.5"	12	1
07-Water and Sewer	02-General Service-Commercial	05-2"	33	3
07-Water and Sewer	02-General Service-Commercial	06-3"	9	1
07-Water and Sewer	02-General Service-Commercial	07-4"	0	0
07-Water and Sewer	02-General Service-Commercial	09-8"	0	0
07-Water and Sewer	03-General Service-Industrial	01-5/8"	0	0
07-Water and Sewer	05-P.H.A	01-5/8"	13	1
07-Water and Sewer	05-P.H.A	03-1"	0	0
07-Water and Sewer	05-P.H.A	06-3"	12	1
07-Water and Sewer	06-Charity/Non-Public Schools	01-5/8"	0	0
07-Water and Sewer	06-Charity/Non-Public Schools	03-1"	12	1
07-Water and Sewer	06-Charity/Non-Public Schools	04-1.5"	13	1
07-Water and Sewer	06-Charity/Non-Public Schools	05-2"	12	1
07-Water and Sewer	07-Public Schools	07-4"	12	1
07-Water and Sewer	07-Public Schools	08-6"	0	0
07-Water and Sewer	08-Senior Citizens Discount	01-5/8"	12	1
07-Water and Sewer	09-Hand Bill	04-1.5"	0	0
07-Water and Sewer	09-Hand Bill	05-2"	0	0
07-Water and Sewer	11-Hospital/University	05-2"	0	0
07-Water and Sewer	13-Fire Service	01-5/8"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
07-Water and Sewer	13-Fire Service	03-1"	0	0
07-Water and Sewer	13-Fire Service	05-2"	0	0
07-Water and Sewer	13-Fire Service	12-Unknown	10	1
07-Water and Sewer	14-City Government	01-5/8"	0	0
07-Water and Sewer	14-City Government	03-1"	0	0
07-Water and Sewer	14-City Government	06-3"	0	0
07-Water and Sewer	14-City Government	08-6"	12	1
08-RFSS, All Services	01-General Service-Residential	01-5/8"	49	4
08-RFSS, All Services	01-General Service-Residential	02-3/4"	190	16
08-RFSS, All Services	01-General Service-Residential	03-1"	4977	415
08-RFSS, All Services	01-General Service-Residential	04-1.5"	937	78
08-RFSS, All Services	01-General Service-Residential	05-2"	870	73
08-RFSS, All Services	02-General Service-Commercial	01-5/8"	9	1
08-RFSS, All Services	02-General Service-Commercial	02-3/4"	33	3
08-RFSS, All Services	02-General Service-Commercial	03-1"	346	29
08-RFSS, All Services	02-General Service-Commercial	04-1.5"	63	5
08-RFSS, All Services	02-General Service-Commercial	05-2"	25	2
08-RFSS, All Services	03-General Service-Industrial	03-1"	0	0
08-RFSS, All Services	04-General Service-Public Utilities	03-1"	1	0
08-RFSS, All Services	05-P.H.A	03-1"	0	0
08-RFSS, All Services	05-P.H.A	04-1.5"	0	0
08-RFSS, All Services	05-P.H.A	05-2"	0	0
08-RFSS, All Services	08-Senior Citizens Discount	03-1"	0	0
08-RFSS, All Services	13-Fire Service	03-1"	22	2
08-RFSS, All Services	13-Fire Service	04-1.5"	2	0
08-RFSS, All Services	14-City Government	03-1"	23	2
09-RFSS, No Sewer	01-General Service-Residential	03-1"	9	1
09-RFSS, No Sewer	01-General Service-Residential	05-2"	0	0
09-RFSS, No Sewer	02-General Service-Commercial	03-1"	0	0
10-Unknown	01-General Service-Residential	01-5/8"	14	1

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
10-Unknown	01-General Service-Residential	03-1"	80	7
10-Unknown	01-General Service-Residential	04-1.5"	9	1
10-Unknown	01-General Service-Residential	05-2"	195	16
10-Unknown	01-General Service-Residential	06-3"	0	0
10-Unknown	01-General Service-Residential	07-4"	12	1
10-Unknown	01-General Service-Residential	08-6"	0	0
10-Unknown	01-General Service-Residential	09-8"	0	0
10-Unknown	01-General Service-Residential	12-Unknown	724	60
10-Unknown	01-General Service-Residential	A-Unknown	0	0
10-Unknown	02-General Service-Commercial	01-5/8"	2	0
10-Unknown	02-General Service-Commercial	02-3/4"	0	0
10-Unknown	02-General Service-Commercial	03-1"	4	0
10-Unknown	02-General Service-Commercial	04-1.5"	0	0
10-Unknown	02-General Service-Commercial	05-2"	66	6
10-Unknown	02-General Service-Commercial	06-3"	2	0
10-Unknown	02-General Service-Commercial	07-4"	29	2
10-Unknown	02-General Service-Commercial	08-6"	35	3
10-Unknown	02-General Service-Commercial	09-8"	8	1
10-Unknown	02-General Service-Commercial	10-10"	0	0
10-Unknown	02-General Service-Commercial	12-Unknown	4765	397
10-Unknown	02-General Service-Commercial	A-Unknown	8	1
10-Unknown	03-General Service-Industrial	01-5/8"	0	0
10-Unknown	03-General Service-Industrial	12-Unknown	194	16
10-Unknown	04-General Service-Public Utilities	12-Unknown	92	8
10-Unknown	05-P.H.A	07-4"	0	0
10-Unknown	05-P.H.A	12-Unknown	10	1
10-Unknown	06-Charity/Non-Public Schools	01-5/8"	0	0
10-Unknown	06-Charity/Non-Public Schools	09-8"	2	0
10-Unknown	06-Charity/Non-Public Schools	12-Unknown	8	1
10-Unknown	07-Public Schools	12-Unknown	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts
10-Unknown	08-Senior Citizens Discount	01-5/8"	0	0
10-Unknown	08-Senior Citizens Discount	12-Unknown	1	0
10-Unknown	09-Hand Bill	08-6"	1	0
10-Unknown	09-Hand Bill	10-10"	12	1
10-Unknown	09-Hand Bill	12-Unknown	436	36
10-Unknown	10-City Leased	12-Unknown	0	0
10-Unknown	11-Hospital/University	06-3"	0	0
10-Unknown	11-Hospital/University	07-4"	0	0
10-Unknown	11-Hospital/University	08-6"	0	0
10-Unknown	11-Hospital/University	09-8"	2	0
10-Unknown	11-Hospital/University	12-Unknown	22	2
10-Unknown	13-Fire Service	03-1"	47	4
10-Unknown	13-Fire Service	04-1.5"	19	2
10-Unknown	13-Fire Service	05-2"	869	72
10-Unknown	13-Fire Service	06-3"	9	1
10-Unknown	13-Fire Service	07-4"	98	8
10-Unknown	13-Fire Service	08-6"	122	10
10-Unknown	13-Fire Service	09-8"	16	1
10-Unknown	13-Fire Service	10-10"	9	1
10-Unknown	13-Fire Service	12-Unknown	18	2
10-Unknown	14-City Government	01-5/8"	0	0
10-Unknown	14-City Government	05-2"	1	0
10-Unknown	14-City Government	08-6"	0	0
10-Unknown	14-City Government	12-Unknown	110	9

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	01-5/8"	4959038	31331558.89
01-Water,Sewer,Stormwater	01-General Service-Residential	02-3/4"	204	1514.87
01-Water,Sewer,Stormwater	01-General Service-Residential	03-1"	21390	215320.32
01-Water,Sewer,Stormwater	01-General Service-Residential	04-1.5"	6452	100945.55
01-Water,Sewer,Stormwater	01-General Service-Residential	05-2"	4640	107456.08
01-Water,Sewer,Stormwater	01-General Service-Residential	06-3"	1704	67601.41
01-Water,Sewer,Stormwater	01-General Service-Residential	07-4"	518	39082.89
01-Water,Sewer,Stormwater	01-General Service-Residential	08-6"	142	22648.78
01-Water,Sewer,Stormwater	01-General Service-Residential	09-8"	36	7501.61
01-Water,Sewer,Stormwater	01-General Service-Residential	11-12"	0	0
01-Water,Sewer,Stormwater	02-General Service-Commercial	01-5/8"	336696	2186244.34
01-Water,Sewer,Stormwater	02-General Service-Commercial	02-3/4"	139	1035.58
01-Water,Sewer,Stormwater	02-General Service-Commercial	03-1"	30264	307158.38
01-Water,Sewer,Stormwater	02-General Service-Commercial	04-1.5"	12544	197687
01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	16885	399485.38
01-Water,Sewer,Stormwater	02-General Service-Commercial	06-3"	5945	243518.44
01-Water,Sewer,Stormwater	02-General Service-Commercial	07-4"	3148	229034.78
01-Water,Sewer,Stormwater	02-General Service-Commercial	08-6"	1076	148132.8
01-Water,Sewer,Stormwater	02-General Service-Commercial	09-8"	216	46560.48
01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	58	18168.97
01-Water,Sewer,Stormwater	03-General Service-Industrial	01-5/8"	6433	41741.15
01-Water,Sewer,Stormwater	03-General Service-Industrial	03-1"	3050	30701.02
01-Water,Sewer,Stormwater	03-General Service-Industrial	04-1.5"	1018	17082.21
01-Water,Sewer,Stormwater	03-General Service-Industrial	05-2"	1319	31089.4
01-Water,Sewer,Stormwater	03-General Service-Industrial	06-3"	570	23229.69
01-Water,Sewer,Stormwater	03-General Service-Industrial	07-4"	156	10753.45
01-Water,Sewer,Stormwater	03-General Service-Industrial	08-6"	91	12821.78
01-Water,Sewer,Stormwater	03-General Service-Industrial	10-10"	0	0
01-Water,Sewer,Stormwater	03-General Service-Industrial	11-12"	0	0
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	01-5/8"	455	3549.58

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	03-1"	326	3259.68
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	04-1.5"	120	1863.78
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	05-2"	225	5187.78
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	06-3"	153	6172.11
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	07-4"	50	3343.77
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	08-6"	57	7606.5
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	09-8"	10	2046.81
01-Water,Sewer,Stormwater	05-P.H.A	01-5/8"	69169	423182.77
01-Water,Sewer,Stormwater	05-P.H.A	02-3/4"	0	0
01-Water,Sewer,Stormwater	05-P.H.A	03-1"	154	1478.4
01-Water,Sewer,Stormwater	05-P.H.A	04-1.5"	96	1417.18
01-Water,Sewer,Stormwater	05-P.H.A	05-2"	191	4201.01
01-Water,Sewer,Stormwater	05-P.H.A	06-3"	441	16713.93
01-Water,Sewer,Stormwater	05-P.H.A	07-4"	240	15713.73
01-Water,Sewer,Stormwater	05-P.H.A	08-6"	165	21292.38
01-Water,Sewer,Stormwater	05-P.H.A	09-8"	83	16627.94
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	01-5/8"	15223	73837.69
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	02-3/4"	0	0
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	03-1"	3935	29382.94
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	04-1.5"	1877	21910.42
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	05-2"	2587	44911.5
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	06-3"	1734	52412.06
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	07-4"	1340	69797.08
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	08-6"	184	19215.78
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	09-8"	24	3755.28
01-Water,Sewer,Stormwater	07-Public Schools	01-5/8"	131	638.37
01-Water,Sewer,Stormwater	07-Public Schools	03-1"	125	932.77
01-Water,Sewer,Stormwater	07-Public Schools	04-1.5"	83	974.54
01-Water,Sewer,Stormwater	07-Public Schools	05-2"	516	8932.24
01-Water,Sewer,Stormwater	07-Public Schools	06-3"	1242	37494.43

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
01-Water,Sewer,Stormwater	07-Public Schools	07-4"	2363	124919.2
01-Water,Sewer,Stormwater	07-Public Schools	08-6"	229	24038.17
01-Water,Sewer,Stormwater	07-Public Schools	09-8"	36	5628.51
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	01-5/8"	236284	1133019.51
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	02-3/4"	0	0
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	03-1"	33	246.31
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	04-1.5"	12	139.89
01-Water,Sewer,Stormwater	09-Hand Bill	01-5/8"	132	848.47
01-Water,Sewer,Stormwater	09-Hand Bill	03-1"	178	1771.2
01-Water,Sewer,Stormwater	09-Hand Bill	04-1.5"	132	2051.39
01-Water,Sewer,Stormwater	09-Hand Bill	05-2"	440	10266.73
01-Water,Sewer,Stormwater	09-Hand Bill	06-3"	843	34152.22
01-Water,Sewer,Stormwater	09-Hand Bill	07-4"	921	63652.74
01-Water,Sewer,Stormwater	09-Hand Bill	08-6"	285	39105.58
01-Water,Sewer,Stormwater	09-Hand Bill	09-8"	72	14999.33
01-Water,Sewer,Stormwater	09-Hand Bill	10-10"	40	14496.38
01-Water,Sewer,Stormwater	10-City Leased	01-5/8"	130	842.16
01-Water,Sewer,Stormwater	10-City Leased	03-1"	58	587.43
01-Water,Sewer,Stormwater	10-City Leased	04-1.5"	66	1196.33
01-Water,Sewer,Stormwater	10-City Leased	05-2"	137	3492.68
01-Water,Sewer,Stormwater	10-City Leased	06-3"	57	2852.23
01-Water,Sewer,Stormwater	10-City Leased	07-4"	86	7290.11
01-Water,Sewer,Stormwater	10-City Leased	08-6"	0	0
01-Water,Sewer,Stormwater	10-City Leased	09-8"	0	0
01-Water,Sewer,Stormwater	11-Hospital/University	01-5/8"	533	2609.37
01-Water,Sewer,Stormwater	11-Hospital/University	02-3/4"	0	0
01-Water,Sewer,Stormwater	11-Hospital/University	03-1"	331	2469.21
01-Water,Sewer,Stormwater	11-Hospital/University	04-1.5"	159	1956.53
01-Water,Sewer,Stormwater	11-Hospital/University	05-2"	654	11371.96
01-Water,Sewer,Stormwater	11-Hospital/University	06-3"	1078	34066.47

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
01-Water,Sewer,Stormwater	11-Hospital/University	07-4"	1107	63871.3
01-Water,Sewer,Stormwater	11-Hospital/University	08-6"	616	65236.06
01-Water,Sewer,Stormwater	11-Hospital/University	09-8"	64	17652.29
01-Water,Sewer,Stormwater	11-Hospital/University	10-10"	17	5217.67
01-Water,Sewer,Stormwater	12-Scheduled	01-5/8"	24	154.66
01-Water,Sewer,Stormwater	13-Fire Service	01-5/8"	641	4123.25
01-Water,Sewer,Stormwater	13-Fire Service	03-1"	94	934.43
01-Water,Sewer,Stormwater	13-Fire Service	04-1.5"	34	519.77
01-Water,Sewer,Stormwater	13-Fire Service	05-2"	109	2530.77
01-Water,Sewer,Stormwater	13-Fire Service	06-3"	15	633.85
01-Water,Sewer,Stormwater	13-Fire Service	07-4"	34	2338.76
01-Water,Sewer,Stormwater	13-Fire Service	08-6"	14	1868.42
01-Water,Sewer,Stormwater	13-Fire Service	09-8"	0	0
01-Water,Sewer,Stormwater	13-Fire Service	10-10"	0	0
01-Water,Sewer,Stormwater	14-City Government	01-5/8"	2562	17101.76
01-Water,Sewer,Stormwater	14-City Government	02-3/4"	12	89.54
01-Water,Sewer,Stormwater	14-City Government	03-1"	1417	14702.43
01-Water,Sewer,Stormwater	14-City Government	04-1.5"	858	13546.58
01-Water,Sewer,Stormwater	14-City Government	05-2"	2906	69585.74
01-Water,Sewer,Stormwater	14-City Government	06-3"	1563	65132.98
01-Water,Sewer,Stormwater	14-City Government	07-4"	733	51576.19
01-Water,Sewer,Stormwater	14-City Government	08-6"	384	53011.5
01-Water,Sewer,Stormwater	14-City Government	09-8"	149	32104.56
01-Water,Sewer,Stormwater	14-City Government	10-10"	184	61058.39
01-Water,Sewer,Stormwater	14-City Government	11-12"	10	5839.57
02-Water Only	01-General Service-Residential	01-5/8"	247	693.47
02-Water Only	01-General Service-Residential	03-1"	192	599.26
02-Water Only	01-General Service-Residential	04-1.5"	244	0
02-Water Only	01-General Service-Residential	05-2"	6005	461.2
02-Water Only	01-General Service-Residential	06-3"	175	0

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
02-Water Only	01-General Service-Residential	07-4"	565	0
02-Water Only	01-General Service-Residential	08-6"	917	0
02-Water Only	01-General Service-Residential	09-8"	360	0
02-Water Only	01-General Service-Residential	10-10"	36	0
02-Water Only	01-General Service-Residential	11-12"	12	0
02-Water Only	01-General Service-Residential	Y-Unknown	10	0
02-Water Only	02-General Service-Commercial	01-5/8"	52	112.73
02-Water Only	02-General Service-Commercial	03-1"	49	0
02-Water Only	02-General Service-Commercial	04-1.5"	0	0
02-Water Only	02-General Service-Commercial	05-2"	986	0
02-Water Only	02-General Service-Commercial	06-3"	123	0
02-Water Only	02-General Service-Commercial	07-4"	1485	0
02-Water Only	02-General Service-Commercial	08-6"	2207	0
02-Water Only	02-General Service-Commercial	09-8"	1029	0
02-Water Only	02-General Service-Commercial	10-10"	100	0
02-Water Only	02-General Service-Commercial	11-12"	43	0
02-Water Only	03-General Service-Industrial	05-2"	28	92.24
02-Water Only	03-General Service-Industrial	07-4"	60	0
02-Water Only	03-General Service-Industrial	08-6"	123	0
02-Water Only	03-General Service-Industrial	09-8"	96	0
02-Water Only	03-General Service-Industrial	10-10"	12	0
02-Water Only	04-General Service-Public Utilities	05-2"	12	0
02-Water Only	04-General Service-Public Utilities	11-12"	12	0
02-Water Only	05-P.H.A	01-5/8"	60	0
02-Water Only	05-P.H.A	03-1"	724	0
02-Water Only	05-P.H.A	05-2"	660	0
02-Water Only	05-P.H.A	07-4"	101	0
02-Water Only	05-P.H.A	08-6"	137	0
02-Water Only	05-P.H.A	09-8"	24	0
02-Water Only	06-Charity/Non-Public Schools	01-5/8"	6	23.68

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
02-Water Only	06-Charity/Non-Public Schools	03-1"	10	0
02-Water Only	06-Charity/Non-Public Schools	05-2"	12	0
02-Water Only	06-Charity/Non-Public Schools	06-3"	10	0
02-Water Only	06-Charity/Non-Public Schools	07-4"	137	621.48
02-Water Only	06-Charity/Non-Public Schools	08-6"	145	0
02-Water Only	06-Charity/Non-Public Schools	09-8"	9	0
02-Water Only	07-Public Schools	06-3"	36	0
02-Water Only	07-Public Schools	07-4"	139	0
02-Water Only	07-Public Schools	08-6"	596	0
02-Water Only	07-Public Schools	09-8"	180	0
02-Water Only	07-Public Schools	10-10"	24	0
02-Water Only	08-Senior Citizens Discount	05-2"	12	0
02-Water Only	09-Hand Bill	06-3"	12	0
02-Water Only	09-Hand Bill	07-4"	10	0
02-Water Only	09-Hand Bill	08-6"	111	0
02-Water Only	09-Hand Bill	09-8"	72	0
02-Water Only	10-City Leased	04-1.5"	0	0
02-Water Only	10-City Leased	05-2"	10	0
02-Water Only	10-City Leased	07-4"	44	0
02-Water Only	10-City Leased	08-6"	12	0
02-Water Only	10-City Leased	09-8"	12	0
02-Water Only	10-City Leased	10-10"	10	0
02-Water Only	11-Hospital/University	01-5/8"	12	0
02-Water Only	11-Hospital/University	03-1"	2	0
02-Water Only	11-Hospital/University	06-3"	13	0
02-Water Only	11-Hospital/University	07-4"	134	0
02-Water Only	11-Hospital/University	08-6"	413	0
02-Water Only	11-Hospital/University	09-8"	70	0
02-Water Only	11-Hospital/University	10-10"	24	0
02-Water Only	13-Fire Service	01-5/8"	365	0

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
02-Water Only	13-Fire Service	03-1"	363	0
02-Water Only	13-Fire Service	04-1.5"	214	0
02-Water Only	13-Fire Service	05-2"	6536	863.79
02-Water Only	13-Fire Service	06-3"	2307	0
02-Water Only	13-Fire Service	07-4"	12153	828.6
02-Water Only	13-Fire Service	08-6"	19214	0
02-Water Only	13-Fire Service	09-8"	5939	0
02-Water Only	13-Fire Service	10-10"	869	0
02-Water Only	13-Fire Service	11-12"	130	0
02-Water Only	14-City Government	03-1"	0	0
02-Water Only	14-City Government	05-2"	10	0
02-Water Only	14-City Government	06-3"	30	0
02-Water Only	14-City Government	07-4"	178	0
02-Water Only	14-City Government	08-6"	396	0
02-Water Only	14-City Government	09-8"	156	0
02-Water Only	14-City Government	10-10"	23	0
03-Stormwater Only	01-General Service-Residential	01-5/8"	231926	17583.63
03-Stormwater Only	01-General Service-Residential	02-3/4"	123	0.24
03-Stormwater Only	01-General Service-Residential	03-1"	708	35.87
03-Stormwater Only	01-General Service-Residential	04-1.5"	51	14.05
03-Stormwater Only	01-General Service-Residential	05-2"	201	0
03-Stormwater Only	01-General Service-Residential	06-3"	12	0
03-Stormwater Only	01-General Service-Residential	07-4"	84	0
03-Stormwater Only	01-General Service-Residential	08-6"	108	0
03-Stormwater Only	01-General Service-Residential	09-8"	60	0
03-Stormwater Only	01-General Service-Residential	10-10"	0	0
03-Stormwater Only	01-General Service-Residential	12-Unknown	0	0
03-Stormwater Only	01-General Service-Residential	A-Unknown	146422	0
03-Stormwater Only	02-General Service-Commercial	01-5/8"	3207	1246.99
03-Stormwater Only	02-General Service-Commercial	02-3/4"	30	0

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
03-Stormwater Only	02-General Service-Commercial	03-1"	516	9.12
03-Stormwater Only	02-General Service-Commercial	04-1.5"	91	0.4
03-Stormwater Only	02-General Service-Commercial	05-2"	195	5.95
03-Stormwater Only	02-General Service-Commercial	06-3"	10	39.69
03-Stormwater Only	02-General Service-Commercial	07-4"	12	0
03-Stormwater Only	02-General Service-Commercial	08-6"	24	0
03-Stormwater Only	02-General Service-Commercial	09-8"	22	0
03-Stormwater Only	02-General Service-Commercial	12-Unknown	0	0
03-Stormwater Only	02-General Service-Commercial	A-Unknown	419213	0
03-Stormwater Only	02-General Service-Commercial	Y-Unknown	0	0
03-Stormwater Only	03-General Service-Industrial	01-5/8"	12	0
03-Stormwater Only	03-General Service-Industrial	03-1"	32	0
03-Stormwater Only	03-General Service-Industrial	04-1.5"	0	0
03-Stormwater Only	03-General Service-Industrial	05-2"	0	0
03-Stormwater Only	03-General Service-Industrial	06-3"	0	0
03-Stormwater Only	03-General Service-Industrial	07-4"	11	0
03-Stormwater Only	03-General Service-Industrial	08-6"	0	0
03-Stormwater Only	03-General Service-Industrial	12-Unknown	0	0
03-Stormwater Only	03-General Service-Industrial	A-Unknown	116	0
03-Stormwater Only	03-General Service-Industrial	Y-Unknown	0	0
03-Stormwater Only	04-General Service-Public Utilities	01-5/8"	8	0
03-Stormwater Only	04-General Service-Public Utilities	03-1"	18	0
03-Stormwater Only	04-General Service-Public Utilities	05-2"	8	0
03-Stormwater Only	04-General Service-Public Utilities	A-Unknown	15437	0
03-Stormwater Only	05-P.H.A	01-5/8"	688	0
03-Stormwater Only	05-P.H.A	03-1"	15	0
03-Stormwater Only	05-P.H.A	05-2"	0	0
03-Stormwater Only	05-P.H.A	A-Unknown	13781	0
03-Stormwater Only	06-Charity/Non-Public Schools	01-5/8"	104	0
03-Stormwater Only	06-Charity/Non-Public Schools	03-1"	8	0

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
03-Stormwater Only	06-Charity/Non-Public Schools	04-1.5"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	05-2"	6	0
03-Stormwater Only	06-Charity/Non-Public Schools	07-4"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	09-8"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	A-Unknown	1099	0
03-Stormwater Only	07-Public Schools	01-5/8"	12	0
03-Stormwater Only	07-Public Schools	08-6"	0	0
03-Stormwater Only	07-Public Schools	09-8"	0	0
03-Stormwater Only	07-Public Schools	12-Unknown	0	0
03-Stormwater Only	07-Public Schools	A-Unknown	996	0
03-Stormwater Only	08-Senior Citizens Discount	01-5/8"	3597	222.81
03-Stormwater Only	08-Senior Citizens Discount	A-Unknown	12	0
03-Stormwater Only	09-Hand Bill	01-5/8"	12	0
03-Stormwater Only	09-Hand Bill	05-2"	44	0
03-Stormwater Only	09-Hand Bill	06-3"	12	0
03-Stormwater Only	09-Hand Bill	08-6"	0	0
03-Stormwater Only	09-Hand Bill	09-8"	0	0
03-Stormwater Only	09-Hand Bill	10-10"	12	0
03-Stormwater Only	09-Hand Bill	A-Unknown	70	0
03-Stormwater Only	10-City Leased	01-5/8"	0	0
03-Stormwater Only	10-City Leased	03-1"	0	0
03-Stormwater Only	10-City Leased	05-2"	0	0
03-Stormwater Only	10-City Leased	06-3"	0	0
03-Stormwater Only	10-City Leased	07-4"	0	0
03-Stormwater Only	10-City Leased	08-6"	0	0
03-Stormwater Only	10-City Leased	09-8"	0	0
03-Stormwater Only	11-Hospital/University	01-5/8"	12	0
03-Stormwater Only	11-Hospital/University	03-1"	2	0
03-Stormwater Only	11-Hospital/University	05-2"	0	0
03-Stormwater Only	11-Hospital/University	08-6"	0	0

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
03-Stormwater Only	11-Hospital/University	A-Unknown	1896	0
03-Stormwater Only	12-Scheduled	01-5/8"	13	0
03-Stormwater Only	12-Scheduled	A-Unknown	12	0
03-Stormwater Only	13-Fire Service	01-5/8"	0	0
03-Stormwater Only	13-Fire Service	03-1"	94	0
03-Stormwater Only	13-Fire Service	04-1.5"	48	0
03-Stormwater Only	13-Fire Service	05-2"	749	0
03-Stormwater Only	13-Fire Service	06-3"	0	0
03-Stormwater Only	13-Fire Service	07-4"	261	0
03-Stormwater Only	13-Fire Service	08-6"	204	0
03-Stormwater Only	13-Fire Service	09-8"	57	0
03-Stormwater Only	13-Fire Service	10-10"	0	0
03-Stormwater Only	13-Fire Service	11-12"	12	0
03-Stormwater Only	13-Fire Service	12-Unknown	0	0
03-Stormwater Only	13-Fire Service	A-Unknown	1541	0
03-Stormwater Only	14-City Government	01-5/8"	1057	0.36
03-Stormwater Only	14-City Government	02-3/4"	12	0
03-Stormwater Only	14-City Government	03-1"	24	0
03-Stormwater Only	14-City Government	04-1.5"	0	0
03-Stormwater Only	14-City Government	05-2"	12	0
03-Stormwater Only	14-City Government	06-3"	0	0
03-Stormwater Only	14-City Government	07-4"	12	0
03-Stormwater Only	14-City Government	08-6"	0	0
03-Stormwater Only	14-City Government	09-8"	12	0
03-Stormwater Only	14-City Government	12-Unknown	0	0
03-Stormwater Only	14-City Government	A-Unknown	8017	0
04-Sewer and Stormwater	01-General Service-Residential	01-5/8"	383	135.32
04-Sewer and Stormwater	01-General Service-Residential	02-3/4"	12	0
04-Sewer and Stormwater	01-General Service-Residential	07-4"	1	0
04-Sewer and Stormwater	01-General Service-Residential	08-6"	1	0

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
04-Sewer and Stormwater	01-General Service-Residential	A-Unknown	35	0
04-Sewer and Stormwater	02-General Service-Commercial	01-5/8"	0	0
04-Sewer and Stormwater	02-General Service-Commercial	05-2"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	04-1.5"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	05-2"	12	0
04-Sewer and Stormwater	03-General Service-Industrial	06-3"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	11-12"	0	0
04-Sewer and Stormwater	04-General Service-Public Utilities	03-1"	4	0
04-Sewer and Stormwater	06-Charity/Non-Public Schools	03-1"	11	0
04-Sewer and Stormwater	09-Hand Bill	01-5/8"	140	0
04-Sewer and Stormwater	09-Hand Bill	04-1.5"	0	0
04-Sewer and Stormwater	09-Hand Bill	05-2"	30	0
04-Sewer and Stormwater	09-Hand Bill	06-3"	11	0
04-Sewer and Stormwater	09-Hand Bill	08-6"	21	0
04-Sewer and Stormwater	09-Hand Bill	09-8"	22	0
04-Sewer and Stormwater	09-Hand Bill	10-10"	0	0
04-Sewer and Stormwater	11-Hospital/University	01-5/8"	12	0
05-Water and Stormwater	01-General Service-Residential	01-5/8"	15064	96475.05
05-Water and Stormwater	01-General Service-Residential	02-3/4"	12	89.38
05-Water and Stormwater	01-General Service-Residential	03-1"	1986	19333.55
05-Water and Stormwater	01-General Service-Residential	04-1.5"	146	1862.18
05-Water and Stormwater	01-General Service-Residential	05-2"	321	1380.28
05-Water and Stormwater	01-General Service-Residential	06-3"	0	0
05-Water and Stormwater	01-General Service-Residential	07-4"	30	0
05-Water and Stormwater	01-General Service-Residential	08-6"	0	0
05-Water and Stormwater	01-General Service-Residential	09-8"	0	0
05-Water and Stormwater	01-General Service-Residential	10-10"	0	0
05-Water and Stormwater	01-General Service-Residential	11-12"	0	0
05-Water and Stormwater	01-General Service-Residential	Y-Unknown	1	0
05-Water and Stormwater	02-General Service-Commercial	01-5/8"	972	6326.04

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
05-Water and Stormwater	02-General Service-Commercial	03-1"	268	2637.11
05-Water and Stormwater	02-General Service-Commercial	04-1.5"	203	3160.67
05-Water and Stormwater	02-General Service-Commercial	05-2"	207	3847.93
05-Water and Stormwater	02-General Service-Commercial	06-3"	24	950.62
05-Water and Stormwater	02-General Service-Commercial	07-4"	86	3308.06
05-Water and Stormwater	02-General Service-Commercial	08-6"	105	11201.47
05-Water and Stormwater	02-General Service-Commercial	09-8"	20	0
05-Water and Stormwater	02-General Service-Commercial	10-10"	0	0
05-Water and Stormwater	02-General Service-Commercial	11-12"	0	0
05-Water and Stormwater	03-General Service-Industrial	01-5/8"	36	232.41
05-Water and Stormwater	03-General Service-Industrial	03-1"	24	239.08
05-Water and Stormwater	03-General Service-Industrial	04-1.5"	11	186.61
05-Water and Stormwater	03-General Service-Industrial	05-2"	45	1036.22
05-Water and Stormwater	03-General Service-Industrial	06-3"	36	1425.65
05-Water and Stormwater	03-General Service-Industrial	07-4"	20	1652.46
05-Water and Stormwater	03-General Service-Industrial	08-6"	24	3203.18
05-Water and Stormwater	03-General Service-Industrial	09-8"	0	0
05-Water and Stormwater	03-General Service-Industrial	10-10"	11	3631.32
05-Water and Stormwater	04-General Service-Public Utilities	03-1"	12	119.29
05-Water and Stormwater	04-General Service-Public Utilities	11-12"	0	0
05-Water and Stormwater	05-P.H.A	01-5/8"	0	0
05-Water and Stormwater	05-P.H.A	03-1"	32	0
05-Water and Stormwater	05-P.H.A	05-2"	24	262.37
05-Water and Stormwater	05-P.H.A	07-4"	2	0
05-Water and Stormwater	05-P.H.A	08-6"	0	0
05-Water and Stormwater	05-P.H.A	09-8"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	01-5/8"	236	1207.72
05-Water and Stormwater	06-Charity/Non-Public Schools	03-1"	43	312.67
05-Water and Stormwater	06-Charity/Non-Public Schools	04-1.5"	44	670.13
05-Water and Stormwater	06-Charity/Non-Public Schools	05-2"	36	620.89

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
05-Water and Stormwater	06-Charity/Non-Public Schools	06-3"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	07-4"	2	0
05-Water and Stormwater	06-Charity/Non-Public Schools	08-6"	2	0
05-Water and Stormwater	06-Charity/Non-Public Schools	09-8"	7	0
05-Water and Stormwater	07-Public Schools	06-3"	0	0
05-Water and Stormwater	07-Public Schools	07-4"	4	0
05-Water and Stormwater	07-Public Schools	08-6"	4	0
05-Water and Stormwater	07-Public Schools	09-8"	0	0
05-Water and Stormwater	07-Public Schools	10-10"	0	0
05-Water and Stormwater	08-Senior Citizens Discount	01-5/8"	204	985.5
05-Water and Stormwater	08-Senior Citizens Discount	05-2"	0	0
05-Water and Stormwater	09-Hand Bill	01-5/8"	12	77.19
05-Water and Stormwater	09-Hand Bill	06-3"	0	0
05-Water and Stormwater	09-Hand Bill	08-6"	16	3336.19
05-Water and Stormwater	09-Hand Bill	09-8"	10	2496.25
05-Water and Stormwater	09-Hand Bill	10-10"	0	0
05-Water and Stormwater	10-City Leased	01-5/8"	70	456.47
05-Water and Stormwater	10-City Leased	03-1"	36	358.32
05-Water and Stormwater	10-City Leased	04-1.5"	12	186.54
05-Water and Stormwater	10-City Leased	05-2"	12	276.08
05-Water and Stormwater	10-City Leased	06-3"	21	950.18
05-Water and Stormwater	10-City Leased	07-4"	36	2483.53
05-Water and Stormwater	10-City Leased	08-6"	47	6923.87
05-Water and Stormwater	10-City Leased	09-8"	12	2501
05-Water and Stormwater	10-City Leased	10-10"	0	0
05-Water and Stormwater	11-Hospital/University	01-5/8"	41	197.61
05-Water and Stormwater	11-Hospital/University	06-3"	0	0
05-Water and Stormwater	11-Hospital/University	07-4"	0	0
05-Water and Stormwater	11-Hospital/University	08-6"	2	0
05-Water and Stormwater	11-Hospital/University	09-8"	0	0

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
05-Water and Stormwater	11-Hospital/University	10-10"	0	0
05-Water and Stormwater	13-Fire Service	01-5/8"	10	25.62
05-Water and Stormwater	13-Fire Service	03-1"	50	0
05-Water and Stormwater	13-Fire Service	04-1.5"	8	0
05-Water and Stormwater	13-Fire Service	05-2"	756	0
05-Water and Stormwater	13-Fire Service	06-3"	0	0
05-Water and Stormwater	13-Fire Service	07-4"	131	0
05-Water and Stormwater	13-Fire Service	08-6"	81	0
05-Water and Stormwater	13-Fire Service	09-8"	29	0
05-Water and Stormwater	13-Fire Service	10-10"	11	0
05-Water and Stormwater	13-Fire Service	11-12"	0	0
05-Water and Stormwater	14-City Government	01-5/8"	162	1080.16
05-Water and Stormwater	14-City Government	02-3/4"	50	410.85
05-Water and Stormwater	14-City Government	03-1"	66	676.59
05-Water and Stormwater	14-City Government	04-1.5"	36	559.02
05-Water and Stormwater	14-City Government	05-2"	48	1081.68
05-Water and Stormwater	14-City Government	06-3"	0	0
05-Water and Stormwater	14-City Government	07-4"	0	0
05-Water and Stormwater	14-City Government	08-6"	10	1471.03
05-Water and Stormwater	14-City Government	09-8"	0	0
05-Water and Stormwater	14-City Government	10-10"	0	0
06-Sewer Only	01-General Service-Residential	01-5/8"	3	18.46
06-Sewer Only	02-General Service-Commercial	01-5/8"	2	36.11
06-Sewer Only	02-General Service-Commercial	05-2"	0	0
06-Sewer Only	03-General Service-Industrial	02-3/4"	3	0
06-Sewer Only	03-General Service-Industrial	10-10"	0	0
06-Sewer Only	04-General Service-Public Utilities	07-4"	0	0
06-Sewer Only	06-Charity/Non-Public Schools	03-1"	0	0
06-Sewer Only	09-Hand Bill	01-5/8"	0	0
06-Sewer Only	09-Hand Bill	05-2"	12	0

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
06-Sewer Only	13-Fire Service	01-5/8"	6	145.26
06-Sewer Only	14-City Government	07-4"	0	0
07-Water and Sewer	01-General Service-Residential	01-5/8"	209	1340.44
07-Water and Sewer	01-General Service-Residential	02-3/4"	0	0
07-Water and Sewer	01-General Service-Residential	03-1"	0	0
07-Water and Sewer	01-General Service-Residential	05-2"	0	0
07-Water and Sewer	01-General Service-Residential	06-3"	0	0
07-Water and Sewer	02-General Service-Commercial	01-5/8"	103	669.38
07-Water and Sewer	02-General Service-Commercial	02-3/4"	0	0
07-Water and Sewer	02-General Service-Commercial	03-1"	47	467.67
07-Water and Sewer	02-General Service-Commercial	04-1.5"	12	186.41
07-Water and Sewer	02-General Service-Commercial	05-2"	37	850.75
07-Water and Sewer	02-General Service-Commercial	06-3"	11	432.62
07-Water and Sewer	02-General Service-Commercial	07-4"	0	0
07-Water and Sewer	02-General Service-Commercial	09-8"	0	0
07-Water and Sewer	03-General Service-Industrial	01-5/8"	0	0
07-Water and Sewer	05-P.H.A	01-5/8"	13	79.31
07-Water and Sewer	05-P.H.A	03-1"	0	0
07-Water and Sewer	05-P.H.A	06-3"	12	451.85
07-Water and Sewer	06-Charity/Non-Public Schools	01-5/8"	0	0
07-Water and Sewer	06-Charity/Non-Public Schools	03-1"	12	89.47
07-Water and Sewer	06-Charity/Non-Public Schools	04-1.5"	13	151.09
07-Water and Sewer	06-Charity/Non-Public Schools	05-2"	12	206.88
07-Water and Sewer	07-Public Schools	07-4"	12	620.56
07-Water and Sewer	07-Public Schools	08-6"	0	0
07-Water and Sewer	08-Senior Citizens Discount	01-5/8"	12	57.77
07-Water and Sewer	09-Hand Bill	04-1.5"	0	0
07-Water and Sewer	09-Hand Bill	05-2"	0	0
07-Water and Sewer	11-Hospital/University	05-2"	0	0
07-Water and Sewer	13-Fire Service	01-5/8"	0	0

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
07-Water and Sewer	13-Fire Service	03-1"	0	0
07-Water and Sewer	13-Fire Service	05-2"	0	0
07-Water and Sewer	13-Fire Service	12-Unknown	12	77.28
07-Water and Sewer	14-City Government	01-5/8"	0	0
07-Water and Sewer	14-City Government	03-1"	0	0
07-Water and Sewer	14-City Government	06-3"	0	0
07-Water and Sewer	14-City Government	08-6"	12	1602.95
08-RFSS, All Services	01-General Service-Residential	01-5/8"	49	0
08-RFSS, All Services	01-General Service-Residential	02-3/4"	192	0
08-RFSS, All Services	01-General Service-Residential	03-1"	5005	235.38
08-RFSS, All Services	01-General Service-Residential	04-1.5"	939	0.61
08-RFSS, All Services	01-General Service-Residential	05-2"	872	0
08-RFSS, All Services	02-General Service-Commercial	01-5/8"	9	0
08-RFSS, All Services	02-General Service-Commercial	02-3/4"	33	0
08-RFSS, All Services	02-General Service-Commercial	03-1"	346	0
08-RFSS, All Services	02-General Service-Commercial	04-1.5"	63	0
08-RFSS, All Services	02-General Service-Commercial	05-2"	25	0
08-RFSS, All Services	03-General Service-Industrial	03-1"	0	0
08-RFSS, All Services	04-General Service-Public Utilities	03-1"	1	0
08-RFSS, All Services	05-P.H.A	03-1"	0	0
08-RFSS, All Services	05-P.H.A	04-1.5"	0	0
08-RFSS, All Services	05-P.H.A	05-2"	0	0
08-RFSS, All Services	08-Senior Citizens Discount	03-1"	0	0
08-RFSS, All Services	13-Fire Service	03-1"	22	0
08-RFSS, All Services	13-Fire Service	04-1.5"	2	0
08-RFSS, All Services	14-City Government	03-1"	23	0
09-RFSS, No Sewer	01-General Service-Residential	03-1"	9	0
09-RFSS, No Sewer	01-General Service-Residential	05-2"	0	0
09-RFSS, No Sewer	02-General Service-Commercial	03-1"	0	0
10-Unknown	01-General Service-Residential	01-5/8"	17	3.62

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
10-Unknown	01-General Service-Residential	03-1"	91	0
10-Unknown	01-General Service-Residential	04-1.5"	9	0
10-Unknown	01-General Service-Residential	05-2"	241	0
10-Unknown	01-General Service-Residential	06-3"	0	0
10-Unknown	01-General Service-Residential	07-4"	15	0
10-Unknown	01-General Service-Residential	08-6"	0	0
10-Unknown	01-General Service-Residential	09-8"	0	0
10-Unknown	01-General Service-Residential	12-Unknown	912	1403.67
10-Unknown	01-General Service-Residential	A-Unknown	0	0
10-Unknown	02-General Service-Commercial	01-5/8"	2	6.21
10-Unknown	02-General Service-Commercial	02-3/4"	0	0
10-Unknown	02-General Service-Commercial	03-1"	4	9.77
10-Unknown	02-General Service-Commercial	04-1.5"	0	0
10-Unknown	02-General Service-Commercial	05-2"	88	0
10-Unknown	02-General Service-Commercial	06-3"	2	352.32
10-Unknown	02-General Service-Commercial	07-4"	37	0
10-Unknown	02-General Service-Commercial	08-6"	42	0
10-Unknown	02-General Service-Commercial	09-8"	8	0
10-Unknown	02-General Service-Commercial	10-10"	0	0
10-Unknown	02-General Service-Commercial	12-Unknown	5206	1648.71
10-Unknown	02-General Service-Commercial	A-Unknown	8	0
10-Unknown	03-General Service-Industrial	01-5/8"	0	0
10-Unknown	03-General Service-Industrial	12-Unknown	206	105.67
10-Unknown	04-General Service-Public Utilities	12-Unknown	124	0
10-Unknown	05-P.H.A	07-4"	0	0
10-Unknown	05-P.H.A	12-Unknown	12	77.29
10-Unknown	06-Charity/Non-Public Schools	01-5/8"	0	0
10-Unknown	06-Charity/Non-Public Schools	09-8"	2	0
10-Unknown	06-Charity/Non-Public Schools	12-Unknown	10	65.33
10-Unknown	07-Public Schools	12-Unknown	0	0

Rpt1b v5 2015.02			FY14	
Service Type	Customer Type	Meter Size	fy14 # of Original Bills Issued	fy14 Water Usage Charges
10-Unknown	08-Senior Citizens Discount	01-5/8"	0	0
10-Unknown	08-Senior Citizens Discount	12-Unknown	2	8.05
10-Unknown	09-Hand Bill	08-6"	1	0
10-Unknown	09-Hand Bill	10-10"	12	0
10-Unknown	09-Hand Bill	12-Unknown	438	0.77
10-Unknown	10-City Leased	12-Unknown	0	0
10-Unknown	11-Hospital/University	06-3"	0	0
10-Unknown	11-Hospital/University	07-4"	0	0
10-Unknown	11-Hospital/University	08-6"	0	0
10-Unknown	11-Hospital/University	09-8"	2	0
10-Unknown	11-Hospital/University	12-Unknown	26	253.06
10-Unknown	13-Fire Service	03-1"	61	0
10-Unknown	13-Fire Service	04-1.5"	23	0
10-Unknown	13-Fire Service	05-2"	1093	662.74
10-Unknown	13-Fire Service	06-3"	11	0
10-Unknown	13-Fire Service	07-4"	119	0
10-Unknown	13-Fire Service	08-6"	148	0
10-Unknown	13-Fire Service	09-8"	19	0
10-Unknown	13-Fire Service	10-10"	12	0
10-Unknown	13-Fire Service	12-Unknown	19	2.11
10-Unknown	14-City Government	01-5/8"	0	0
10-Unknown	14-City Government	05-2"	1	0
10-Unknown	14-City Government	08-6"	0	0
10-Unknown	14-City Government	12-Unknown	117	436.48
				39051081.23

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	01-5/8"	31016585.68
01-Water,Sewer,Stormwater	01-General Service-Residential	02-3/4"	1577.54
01-Water,Sewer,Stormwater	01-General Service-Residential	03-1"	243572.96
01-Water,Sewer,Stormwater	01-General Service-Residential	04-1.5"	121140.43
01-Water,Sewer,Stormwater	01-General Service-Residential	05-2"	132254.56
01-Water,Sewer,Stormwater	01-General Service-Residential	06-3"	87779.54
01-Water,Sewer,Stormwater	01-General Service-Residential	07-4"	59284.94
01-Water,Sewer,Stormwater	01-General Service-Residential	08-6"	33962.73
01-Water,Sewer,Stormwater	01-General Service-Residential	09-8"	9573.81
01-Water,Sewer,Stormwater	01-General Service-Residential	11-12"	0
01-Water,Sewer,Stormwater	02-General Service-Commercial	01-5/8"	2170142.66
01-Water,Sewer,Stormwater	02-General Service-Commercial	02-3/4"	1079.78
01-Water,Sewer,Stormwater	02-General Service-Commercial	03-1"	349527.32
01-Water,Sewer,Stormwater	02-General Service-Commercial	04-1.5"	228463.41
01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	515041.3
01-Water,Sewer,Stormwater	02-General Service-Commercial	06-3"	310984.69
01-Water,Sewer,Stormwater	02-General Service-Commercial	07-4"	376144.87
01-Water,Sewer,Stormwater	02-General Service-Commercial	08-6"	187332.6
01-Water,Sewer,Stormwater	02-General Service-Commercial	09-8"	59418.91
01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	23107.2
01-Water,Sewer,Stormwater	03-General Service-Industrial	01-5/8"	41275.33
01-Water,Sewer,Stormwater	03-General Service-Industrial	03-1"	34200.49
01-Water,Sewer,Stormwater	03-General Service-Industrial	04-1.5"	32131.15
01-Water,Sewer,Stormwater	03-General Service-Industrial	05-2"	38493.71
01-Water,Sewer,Stormwater	03-General Service-Industrial	06-3"	29494.63
01-Water,Sewer,Stormwater	03-General Service-Industrial	07-4"	13438.8
01-Water,Sewer,Stormwater	03-General Service-Industrial	08-6"	16209.93
01-Water,Sewer,Stormwater	03-General Service-Industrial	10-10"	0
01-Water,Sewer,Stormwater	03-General Service-Industrial	11-12"	0
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	01-5/8"	3957.87

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	03-1"	3617.99
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	04-1.5"	2234.38
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	05-2"	6384.48
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	06-3"	7834.72
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	07-4"	4177.72
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	08-6"	9620.99
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	09-8"	2609.9
01-Water,Sewer,Stormwater	05-P.H.A	01-5/8"	418404.8
01-Water,Sewer,Stormwater	05-P.H.A	02-3/4"	0
01-Water,Sewer,Stormwater	05-P.H.A	03-1"	1641.33
01-Water,Sewer,Stormwater	05-P.H.A	04-1.5"	1698.39
01-Water,Sewer,Stormwater	05-P.H.A	05-2"	5167.71
01-Water,Sewer,Stormwater	05-P.H.A	06-3"	21215.43
01-Water,Sewer,Stormwater	05-P.H.A	07-4"	19639.62
01-Water,Sewer,Stormwater	05-P.H.A	08-6"	26935.34
01-Water,Sewer,Stormwater	05-P.H.A	09-8"	21221.51
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	01-5/8"	73057.53
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	02-3/4"	0
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	03-1"	32608.93
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	04-1.5"	26259.37
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	05-2"	55284.13
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	06-3"	66532.45
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	07-4"	87233.09
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	08-6"	24300.1
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	09-8"	4789.43
01-Water,Sewer,Stormwater	07-Public Schools	01-5/8"	631.51
01-Water,Sewer,Stormwater	07-Public Schools	03-1"	1035.43
01-Water,Sewer,Stormwater	07-Public Schools	04-1.5"	1167.82
01-Water,Sewer,Stormwater	07-Public Schools	05-2"	10994.84
01-Water,Sewer,Stormwater	07-Public Schools	06-3"	47594.12

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
01-Water,Sewer,Stormwater	07-Public Schools	07-4"	158824.58
01-Water,Sewer,Stormwater	07-Public Schools	08-6"	30395.91
01-Water,Sewer,Stormwater	07-Public Schools	09-8"	7181.55
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	01-5/8"	1121199.09
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	02-3/4"	0
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	03-1"	273.37
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	04-1.5"	167.58
01-Water,Sewer,Stormwater	09-Hand Bill	01-5/8"	839.37
01-Water,Sewer,Stormwater	09-Hand Bill	03-1"	1965.94
01-Water,Sewer,Stormwater	09-Hand Bill	04-1.5"	2458.8
01-Water,Sewer,Stormwater	09-Hand Bill	05-2"	12634.57
01-Water,Sewer,Stormwater	09-Hand Bill	06-3"	43477.89
01-Water,Sewer,Stormwater	09-Hand Bill	07-4"	79552.6
01-Water,Sewer,Stormwater	09-Hand Bill	08-6"	49458.37
01-Water,Sewer,Stormwater	09-Hand Bill	09-8"	19145.33
01-Water,Sewer,Stormwater	09-Hand Bill	10-10"	18446.52
01-Water,Sewer,Stormwater	10-City Leased	01-5/8"	832.88
01-Water,Sewer,Stormwater	10-City Leased	03-1"	651.67
01-Water,Sewer,Stormwater	10-City Leased	04-1.5"	1433.68
01-Water,Sewer,Stormwater	10-City Leased	05-2"	4395.22
01-Water,Sewer,Stormwater	10-City Leased	06-3"	3621.35
01-Water,Sewer,Stormwater	10-City Leased	07-4"	9112.12
01-Water,Sewer,Stormwater	10-City Leased	08-6"	0
01-Water,Sewer,Stormwater	10-City Leased	09-8"	0
01-Water,Sewer,Stormwater	11-Hospital/University	01-5/8"	2581.14
01-Water,Sewer,Stormwater	11-Hospital/University	02-3/4"	0
01-Water,Sewer,Stormwater	11-Hospital/University	03-1"	2740.64
01-Water,Sewer,Stormwater	11-Hospital/University	04-1.5"	2345.1
01-Water,Sewer,Stormwater	11-Hospital/University	05-2"	13998.97
01-Water,Sewer,Stormwater	11-Hospital/University	06-3"	44023.81

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
01-Water,Sewer,Stormwater	11-Hospital/University	07-4"	88191.44
01-Water,Sewer,Stormwater	11-Hospital/University	08-6"	82498.86
01-Water,Sewer,Stormwater	11-Hospital/University	09-8"	30773.17
01-Water,Sewer,Stormwater	11-Hospital/University	10-10"	6633.88
01-Water,Sewer,Stormwater	12-Scheduled	01-5/8"	152.96
01-Water,Sewer,Stormwater	13-Fire Service	01-5/8"	4089.41
01-Water,Sewer,Stormwater	13-Fire Service	03-1"	1037.25
01-Water,Sewer,Stormwater	13-Fire Service	04-1.5"	623.03
01-Water,Sewer,Stormwater	13-Fire Service	05-2"	3115.53
01-Water,Sewer,Stormwater	13-Fire Service	06-3"	804.75
01-Water,Sewer,Stormwater	13-Fire Service	07-4"	2921.57
01-Water,Sewer,Stormwater	13-Fire Service	08-6"	2363.14
01-Water,Sewer,Stormwater	13-Fire Service	09-8"	0
01-Water,Sewer,Stormwater	13-Fire Service	10-10"	0
01-Water,Sewer,Stormwater	14-City Government	01-5/8"	16923.35
01-Water,Sewer,Stormwater	14-City Government	02-3/4"	93.7
01-Water,Sewer,Stormwater	14-City Government	03-1"	16414.76
01-Water,Sewer,Stormwater	14-City Government	04-1.5"	16235.27
01-Water,Sewer,Stormwater	14-City Government	05-2"	101930.08
01-Water,Sewer,Stormwater	14-City Government	06-3"	83500.82
01-Water,Sewer,Stormwater	14-City Government	07-4"	64445.37
01-Water,Sewer,Stormwater	14-City Government	08-6"	67028.04
01-Water,Sewer,Stormwater	14-City Government	09-8"	40963.06
01-Water,Sewer,Stormwater	14-City Government	10-10"	77659.72
01-Water,Sewer,Stormwater	14-City Government	11-12"	7605.18
02-Water Only	01-General Service-Residential	01-5/8"	0
02-Water Only	01-General Service-Residential	03-1"	654.92
02-Water Only	01-General Service-Residential	04-1.5"	0
02-Water Only	01-General Service-Residential	05-2"	0
02-Water Only	01-General Service-Residential	06-3"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
02-Water Only	01-General Service-Residential	07-4"	0
02-Water Only	01-General Service-Residential	08-6"	0
02-Water Only	01-General Service-Residential	09-8"	0
02-Water Only	01-General Service-Residential	10-10"	0
02-Water Only	01-General Service-Residential	11-12"	0
02-Water Only	01-General Service-Residential	Y-Unknown	0
02-Water Only	02-General Service-Commercial	01-5/8"	35.29
02-Water Only	02-General Service-Commercial	03-1"	0
02-Water Only	02-General Service-Commercial	04-1.5"	0
02-Water Only	02-General Service-Commercial	05-2"	0
02-Water Only	02-General Service-Commercial	06-3"	0
02-Water Only	02-General Service-Commercial	07-4"	0
02-Water Only	02-General Service-Commercial	08-6"	0
02-Water Only	02-General Service-Commercial	09-8"	0
02-Water Only	02-General Service-Commercial	10-10"	0
02-Water Only	02-General Service-Commercial	11-12"	0
02-Water Only	03-General Service-Industrial	05-2"	0
02-Water Only	03-General Service-Industrial	07-4"	0
02-Water Only	03-General Service-Industrial	08-6"	0
02-Water Only	03-General Service-Industrial	09-8"	0
02-Water Only	03-General Service-Industrial	10-10"	0
02-Water Only	04-General Service-Public Utilities	05-2"	0
02-Water Only	04-General Service-Public Utilities	11-12"	0
02-Water Only	05-P.H.A	01-5/8"	0
02-Water Only	05-P.H.A	03-1"	0
02-Water Only	05-P.H.A	05-2"	0
02-Water Only	05-P.H.A	07-4"	0
02-Water Only	05-P.H.A	08-6"	0
02-Water Only	05-P.H.A	09-8"	0
02-Water Only	06-Charity/Non-Public Schools	01-5/8"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
02-Water Only	06-Charity/Non-Public Schools	03-1"	0
02-Water Only	06-Charity/Non-Public Schools	05-2"	0
02-Water Only	06-Charity/Non-Public Schools	06-3"	0
02-Water Only	06-Charity/Non-Public Schools	07-4"	0
02-Water Only	06-Charity/Non-Public Schools	08-6"	0
02-Water Only	06-Charity/Non-Public Schools	09-8"	0
02-Water Only	07-Public Schools	06-3"	0
02-Water Only	07-Public Schools	07-4"	0
02-Water Only	07-Public Schools	08-6"	0
02-Water Only	07-Public Schools	09-8"	0
02-Water Only	07-Public Schools	10-10"	0
02-Water Only	08-Senior Citizens Discount	05-2"	0
02-Water Only	09-Hand Bill	06-3"	0
02-Water Only	09-Hand Bill	07-4"	0
02-Water Only	09-Hand Bill	08-6"	0
02-Water Only	09-Hand Bill	09-8"	0
02-Water Only	10-City Leased	04-1.5"	0
02-Water Only	10-City Leased	05-2"	0
02-Water Only	10-City Leased	07-4"	0
02-Water Only	10-City Leased	08-6"	0
02-Water Only	10-City Leased	09-8"	0
02-Water Only	10-City Leased	10-10"	0
02-Water Only	11-Hospital/University	01-5/8"	0
02-Water Only	11-Hospital/University	03-1"	0
02-Water Only	11-Hospital/University	06-3"	0
02-Water Only	11-Hospital/University	07-4"	0
02-Water Only	11-Hospital/University	08-6"	0
02-Water Only	11-Hospital/University	09-8"	0
02-Water Only	11-Hospital/University	10-10"	0
02-Water Only	13-Fire Service	01-5/8"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
02-Water Only	13-Fire Service	03-1"	0
02-Water Only	13-Fire Service	04-1.5"	0
02-Water Only	13-Fire Service	05-2"	0
02-Water Only	13-Fire Service	06-3"	0
02-Water Only	13-Fire Service	07-4"	0
02-Water Only	13-Fire Service	08-6"	0
02-Water Only	13-Fire Service	09-8"	0
02-Water Only	13-Fire Service	10-10"	0
02-Water Only	13-Fire Service	11-12"	0
02-Water Only	14-City Government	03-1"	0
02-Water Only	14-City Government	05-2"	0
02-Water Only	14-City Government	06-3"	0
02-Water Only	14-City Government	07-4"	0
02-Water Only	14-City Government	08-6"	0
02-Water Only	14-City Government	09-8"	0
02-Water Only	14-City Government	10-10"	0
03-Stormwater Only	01-General Service-Residential	01-5/8"	17516.52
03-Stormwater Only	01-General Service-Residential	02-3/4"	0.49
03-Stormwater Only	01-General Service-Residential	03-1"	40.14
03-Stormwater Only	01-General Service-Residential	04-1.5"	16.83
03-Stormwater Only	01-General Service-Residential	05-2"	0
03-Stormwater Only	01-General Service-Residential	06-3"	0
03-Stormwater Only	01-General Service-Residential	07-4"	0
03-Stormwater Only	01-General Service-Residential	08-6"	0
03-Stormwater Only	01-General Service-Residential	09-8"	0
03-Stormwater Only	01-General Service-Residential	10-10"	0
03-Stormwater Only	01-General Service-Residential	12-Unknown	0
03-Stormwater Only	01-General Service-Residential	A-Unknown	0
03-Stormwater Only	02-General Service-Commercial	01-5/8"	1725.21
03-Stormwater Only	02-General Service-Commercial	02-3/4"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
03-Stormwater Only	02-General Service-Commercial	03-1"	31.88
03-Stormwater Only	02-General Service-Commercial	04-1.5"	8.83
03-Stormwater Only	02-General Service-Commercial	05-2"	7.32
03-Stormwater Only	02-General Service-Commercial	06-3"	50.34
03-Stormwater Only	02-General Service-Commercial	07-4"	0
03-Stormwater Only	02-General Service-Commercial	08-6"	0
03-Stormwater Only	02-General Service-Commercial	09-8"	0
03-Stormwater Only	02-General Service-Commercial	12-Unknown	0
03-Stormwater Only	02-General Service-Commercial	A-Unknown	0
03-Stormwater Only	02-General Service-Commercial	Y-Unknown	0
03-Stormwater Only	03-General Service-Industrial	01-5/8"	0
03-Stormwater Only	03-General Service-Industrial	03-1"	0
03-Stormwater Only	03-General Service-Industrial	04-1.5"	0
03-Stormwater Only	03-General Service-Industrial	05-2"	0
03-Stormwater Only	03-General Service-Industrial	06-3"	0
03-Stormwater Only	03-General Service-Industrial	07-4"	0
03-Stormwater Only	03-General Service-Industrial	08-6"	0
03-Stormwater Only	03-General Service-Industrial	12-Unknown	0
03-Stormwater Only	03-General Service-Industrial	A-Unknown	0
03-Stormwater Only	03-General Service-Industrial	Y-Unknown	0
03-Stormwater Only	04-General Service-Public Utilities	01-5/8"	0
03-Stormwater Only	04-General Service-Public Utilities	03-1"	0
03-Stormwater Only	04-General Service-Public Utilities	05-2"	0
03-Stormwater Only	04-General Service-Public Utilities	A-Unknown	0
03-Stormwater Only	05-P.H.A	01-5/8"	0
03-Stormwater Only	05-P.H.A	03-1"	0
03-Stormwater Only	05-P.H.A	05-2"	0
03-Stormwater Only	05-P.H.A	A-Unknown	0
03-Stormwater Only	06-Charity/Non-Public Schools	01-5/8"	0
03-Stormwater Only	06-Charity/Non-Public Schools	03-1"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
03-Stormwater Only	06-Charity/Non-Public Schools	04-1.5"	0
03-Stormwater Only	06-Charity/Non-Public Schools	05-2"	0
03-Stormwater Only	06-Charity/Non-Public Schools	07-4"	0
03-Stormwater Only	06-Charity/Non-Public Schools	09-8"	0
03-Stormwater Only	06-Charity/Non-Public Schools	A-Unknown	0
03-Stormwater Only	07-Public Schools	01-5/8"	0
03-Stormwater Only	07-Public Schools	08-6"	0
03-Stormwater Only	07-Public Schools	09-8"	0
03-Stormwater Only	07-Public Schools	12-Unknown	0
03-Stormwater Only	07-Public Schools	A-Unknown	0
03-Stormwater Only	08-Senior Citizens Discount	01-5/8"	221.81
03-Stormwater Only	08-Senior Citizens Discount	A-Unknown	0
03-Stormwater Only	09-Hand Bill	01-5/8"	0
03-Stormwater Only	09-Hand Bill	05-2"	0
03-Stormwater Only	09-Hand Bill	06-3"	0
03-Stormwater Only	09-Hand Bill	08-6"	0
03-Stormwater Only	09-Hand Bill	09-8"	0
03-Stormwater Only	09-Hand Bill	10-10"	0
03-Stormwater Only	09-Hand Bill	A-Unknown	0
03-Stormwater Only	10-City Leased	01-5/8"	0
03-Stormwater Only	10-City Leased	03-1"	0
03-Stormwater Only	10-City Leased	05-2"	0
03-Stormwater Only	10-City Leased	06-3"	0
03-Stormwater Only	10-City Leased	07-4"	0
03-Stormwater Only	10-City Leased	08-6"	0
03-Stormwater Only	10-City Leased	09-8"	0
03-Stormwater Only	11-Hospital/University	01-5/8"	0
03-Stormwater Only	11-Hospital/University	03-1"	0
03-Stormwater Only	11-Hospital/University	05-2"	0
03-Stormwater Only	11-Hospital/University	08-6"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
03-Stormwater Only	11-Hospital/University	A-Unknown	0
03-Stormwater Only	12-Scheduled	01-5/8"	0
03-Stormwater Only	12-Scheduled	A-Unknown	0
03-Stormwater Only	13-Fire Service	01-5/8"	0
03-Stormwater Only	13-Fire Service	03-1"	0
03-Stormwater Only	13-Fire Service	04-1.5"	0
03-Stormwater Only	13-Fire Service	05-2"	0
03-Stormwater Only	13-Fire Service	06-3"	0
03-Stormwater Only	13-Fire Service	07-4"	0
03-Stormwater Only	13-Fire Service	08-6"	0
03-Stormwater Only	13-Fire Service	09-8"	0
03-Stormwater Only	13-Fire Service	10-10"	0
03-Stormwater Only	13-Fire Service	11-12"	0
03-Stormwater Only	13-Fire Service	12-Unknown	0
03-Stormwater Only	13-Fire Service	A-Unknown	0
03-Stormwater Only	14-City Government	01-5/8"	0.74
03-Stormwater Only	14-City Government	02-3/4"	0
03-Stormwater Only	14-City Government	03-1"	0
03-Stormwater Only	14-City Government	04-1.5"	0
03-Stormwater Only	14-City Government	05-2"	0
03-Stormwater Only	14-City Government	06-3"	0
03-Stormwater Only	14-City Government	07-4"	0
03-Stormwater Only	14-City Government	08-6"	0
03-Stormwater Only	14-City Government	09-8"	0
03-Stormwater Only	14-City Government	12-Unknown	0
03-Stormwater Only	14-City Government	A-Unknown	0
04-Sewer and Stormwater	01-General Service-Residential	01-5/8"	2511.51
04-Sewer and Stormwater	01-General Service-Residential	02-3/4"	93.63
04-Sewer and Stormwater	01-General Service-Residential	07-4"	6.36
04-Sewer and Stormwater	01-General Service-Residential	08-6"	6.36

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
04-Sewer and Stormwater	01-General Service-Residential	A-Unknown	199.76
04-Sewer and Stormwater	02-General Service-Commercial	01-5/8"	0
04-Sewer and Stormwater	02-General Service-Commercial	05-2"	0
04-Sewer and Stormwater	03-General Service-Industrial	04-1.5"	0
04-Sewer and Stormwater	03-General Service-Industrial	05-2"	340.07
04-Sewer and Stormwater	03-General Service-Industrial	06-3"	0
04-Sewer and Stormwater	03-General Service-Industrial	11-12"	0
04-Sewer and Stormwater	04-General Service-Public Utilities	03-1"	132.47
04-Sewer and Stormwater	06-Charity/Non-Public Schools	03-1"	99.41
04-Sewer and Stormwater	09-Hand Bill	01-5/8"	1007.46
04-Sewer and Stormwater	09-Hand Bill	04-1.5"	0
04-Sewer and Stormwater	09-Hand Bill	05-2"	1031.45
04-Sewer and Stormwater	09-Hand Bill	06-3"	623.38
04-Sewer and Stormwater	09-Hand Bill	08-6"	3712.99
04-Sewer and Stormwater	09-Hand Bill	09-8"	6376.84
04-Sewer and Stormwater	09-Hand Bill	10-10"	0
04-Sewer and Stormwater	11-Hospital/University	01-5/8"	55.69
05-Water and Stormwater	01-General Service-Residential	01-5/8"	28.11
05-Water and Stormwater	01-General Service-Residential	02-3/4"	0
05-Water and Stormwater	01-General Service-Residential	03-1"	0
05-Water and Stormwater	01-General Service-Residential	04-1.5"	0
05-Water and Stormwater	01-General Service-Residential	05-2"	0
05-Water and Stormwater	01-General Service-Residential	06-3"	0
05-Water and Stormwater	01-General Service-Residential	07-4"	0
05-Water and Stormwater	01-General Service-Residential	08-6"	0
05-Water and Stormwater	01-General Service-Residential	09-8"	0
05-Water and Stormwater	01-General Service-Residential	10-10"	0
05-Water and Stormwater	01-General Service-Residential	11-12"	0
05-Water and Stormwater	01-General Service-Residential	Y-Unknown	0
05-Water and Stormwater	02-General Service-Commercial	01-5/8"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
05-Water and Stormwater	02-General Service-Commercial	03-1"	0
05-Water and Stormwater	02-General Service-Commercial	04-1.5"	0
05-Water and Stormwater	02-General Service-Commercial	05-2"	232.29
05-Water and Stormwater	02-General Service-Commercial	06-3"	0
05-Water and Stormwater	02-General Service-Commercial	07-4"	0
05-Water and Stormwater	02-General Service-Commercial	08-6"	0
05-Water and Stormwater	02-General Service-Commercial	09-8"	0
05-Water and Stormwater	02-General Service-Commercial	10-10"	0
05-Water and Stormwater	02-General Service-Commercial	11-12"	0
05-Water and Stormwater	03-General Service-Industrial	01-5/8"	0
05-Water and Stormwater	03-General Service-Industrial	03-1"	0
05-Water and Stormwater	03-General Service-Industrial	04-1.5"	0
05-Water and Stormwater	03-General Service-Industrial	05-2"	0
05-Water and Stormwater	03-General Service-Industrial	06-3"	0
05-Water and Stormwater	03-General Service-Industrial	07-4"	0
05-Water and Stormwater	03-General Service-Industrial	08-6"	0
05-Water and Stormwater	03-General Service-Industrial	09-8"	0
05-Water and Stormwater	03-General Service-Industrial	10-10"	0
05-Water and Stormwater	04-General Service-Public Utilities	03-1"	0
05-Water and Stormwater	04-General Service-Public Utilities	11-12"	0
05-Water and Stormwater	05-P.H.A	01-5/8"	0
05-Water and Stormwater	05-P.H.A	03-1"	0
05-Water and Stormwater	05-P.H.A	05-2"	0
05-Water and Stormwater	05-P.H.A	07-4"	0
05-Water and Stormwater	05-P.H.A	08-6"	0
05-Water and Stormwater	05-P.H.A	09-8"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	01-5/8"	18.92
05-Water and Stormwater	06-Charity/Non-Public Schools	03-1"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	04-1.5"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	05-2"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
05-Water and Stormwater	06-Charity/Non-Public Schools	06-3"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	07-4"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	08-6"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	09-8"	0
05-Water and Stormwater	07-Public Schools	06-3"	0
05-Water and Stormwater	07-Public Schools	07-4"	0
05-Water and Stormwater	07-Public Schools	08-6"	0
05-Water and Stormwater	07-Public Schools	09-8"	0
05-Water and Stormwater	07-Public Schools	10-10"	0
05-Water and Stormwater	08-Senior Citizens Discount	01-5/8"	11.13
05-Water and Stormwater	08-Senior Citizens Discount	05-2"	0
05-Water and Stormwater	09-Hand Bill	01-5/8"	0
05-Water and Stormwater	09-Hand Bill	06-3"	0
05-Water and Stormwater	09-Hand Bill	08-6"	0
05-Water and Stormwater	09-Hand Bill	09-8"	0
05-Water and Stormwater	09-Hand Bill	10-10"	0
05-Water and Stormwater	10-City Leased	01-5/8"	0
05-Water and Stormwater	10-City Leased	03-1"	0
05-Water and Stormwater	10-City Leased	04-1.5"	0
05-Water and Stormwater	10-City Leased	05-2"	0
05-Water and Stormwater	10-City Leased	06-3"	0
05-Water and Stormwater	10-City Leased	07-4"	0
05-Water and Stormwater	10-City Leased	08-6"	0
05-Water and Stormwater	10-City Leased	09-8"	0
05-Water and Stormwater	10-City Leased	10-10"	0
05-Water and Stormwater	11-Hospital/University	01-5/8"	0
05-Water and Stormwater	11-Hospital/University	06-3"	0
05-Water and Stormwater	11-Hospital/University	07-4"	0
05-Water and Stormwater	11-Hospital/University	08-6"	0
05-Water and Stormwater	11-Hospital/University	09-8"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
05-Water and Stormwater	11-Hospital/University	10-10"	0
05-Water and Stormwater	13-Fire Service	01-5/8"	0
05-Water and Stormwater	13-Fire Service	03-1"	0
05-Water and Stormwater	13-Fire Service	04-1.5"	0
05-Water and Stormwater	13-Fire Service	05-2"	0
05-Water and Stormwater	13-Fire Service	06-3"	0
05-Water and Stormwater	13-Fire Service	07-4"	0
05-Water and Stormwater	13-Fire Service	08-6"	0
05-Water and Stormwater	13-Fire Service	09-8"	0
05-Water and Stormwater	13-Fire Service	10-10"	0
05-Water and Stormwater	13-Fire Service	11-12"	0
05-Water and Stormwater	14-City Government	01-5/8"	0
05-Water and Stormwater	14-City Government	02-3/4"	0
05-Water and Stormwater	14-City Government	03-1"	0
05-Water and Stormwater	14-City Government	04-1.5"	0
05-Water and Stormwater	14-City Government	05-2"	0
05-Water and Stormwater	14-City Government	06-3"	0
05-Water and Stormwater	14-City Government	07-4"	0
05-Water and Stormwater	14-City Government	08-6"	0
05-Water and Stormwater	14-City Government	09-8"	0
05-Water and Stormwater	14-City Government	10-10"	0
06-Sewer Only	01-General Service-Residential	01-5/8"	18.23
06-Sewer Only	02-General Service-Commercial	01-5/8"	35.66
06-Sewer Only	02-General Service-Commercial	05-2"	0
06-Sewer Only	03-General Service-Industrial	02-3/4"	23.38
06-Sewer Only	03-General Service-Industrial	10-10"	0
06-Sewer Only	04-General Service-Public Utilities	07-4"	0
06-Sewer Only	06-Charity/Non-Public Schools	03-1"	0
06-Sewer Only	09-Hand Bill	01-5/8"	0
06-Sewer Only	09-Hand Bill	05-2"	339.71

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
06-Sewer Only	13-Fire Service	01-5/8"	135.65
06-Sewer Only	14-City Government	07-4"	0
07-Water and Sewer	01-General Service-Residential	01-5/8"	1290.19
07-Water and Sewer	01-General Service-Residential	02-3/4"	0
07-Water and Sewer	01-General Service-Residential	03-1"	0
07-Water and Sewer	01-General Service-Residential	05-2"	0
07-Water and Sewer	01-General Service-Residential	06-3"	0
07-Water and Sewer	02-General Service-Commercial	01-5/8"	661.68
07-Water and Sewer	02-General Service-Commercial	02-3/4"	0
07-Water and Sewer	02-General Service-Commercial	03-1"	518.78
07-Water and Sewer	02-General Service-Commercial	04-1.5"	223.42
07-Water and Sewer	02-General Service-Commercial	05-2"	1047.69
07-Water and Sewer	02-General Service-Commercial	06-3"	548.71
07-Water and Sewer	02-General Service-Commercial	07-4"	0
07-Water and Sewer	02-General Service-Commercial	09-8"	0
07-Water and Sewer	03-General Service-Industrial	01-5/8"	0
07-Water and Sewer	05-P.H.A	01-5/8"	78.47
07-Water and Sewer	05-P.H.A	03-1"	0
07-Water and Sewer	05-P.H.A	06-3"	573.46
07-Water and Sewer	06-Charity/Non-Public Schools	01-5/8"	0
07-Water and Sewer	06-Charity/Non-Public Schools	03-1"	99.38
07-Water and Sewer	06-Charity/Non-Public Schools	04-1.5"	181.33
07-Water and Sewer	06-Charity/Non-Public Schools	05-2"	254.81
07-Water and Sewer	07-Public Schools	07-4"	775.41
07-Water and Sewer	07-Public Schools	08-6"	0
07-Water and Sewer	08-Senior Citizens Discount	01-5/8"	57.2
07-Water and Sewer	09-Hand Bill	04-1.5"	0
07-Water and Sewer	09-Hand Bill	05-2"	0
07-Water and Sewer	11-Hospital/University	05-2"	0
07-Water and Sewer	13-Fire Service	01-5/8"	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
07-Water and Sewer	13-Fire Service	03-1"	0
07-Water and Sewer	13-Fire Service	05-2"	0
07-Water and Sewer	13-Fire Service	12-Unknown	76.32
07-Water and Sewer	14-City Government	01-5/8"	0
07-Water and Sewer	14-City Government	03-1"	0
07-Water and Sewer	14-City Government	06-3"	0
07-Water and Sewer	14-City Government	08-6"	2026.37
08-RFSS, All Services	01-General Service-Residential	01-5/8"	0
08-RFSS, All Services	01-General Service-Residential	02-3/4"	0
08-RFSS, All Services	01-General Service-Residential	03-1"	413.23
08-RFSS, All Services	01-General Service-Residential	04-1.5"	0.63
08-RFSS, All Services	01-General Service-Residential	05-2"	0
08-RFSS, All Services	02-General Service-Commercial	01-5/8"	0
08-RFSS, All Services	02-General Service-Commercial	02-3/4"	0
08-RFSS, All Services	02-General Service-Commercial	03-1"	0
08-RFSS, All Services	02-General Service-Commercial	04-1.5"	0
08-RFSS, All Services	02-General Service-Commercial	05-2"	0
08-RFSS, All Services	03-General Service-Industrial	03-1"	0
08-RFSS, All Services	04-General Service-Public Utilities	03-1"	0
08-RFSS, All Services	05-P.H.A	03-1"	0
08-RFSS, All Services	05-P.H.A	04-1.5"	0
08-RFSS, All Services	05-P.H.A	05-2"	0
08-RFSS, All Services	08-Senior Citizens Discount	03-1"	0
08-RFSS, All Services	13-Fire Service	03-1"	0
08-RFSS, All Services	13-Fire Service	04-1.5"	0
08-RFSS, All Services	14-City Government	03-1"	0
09-RFSS, No Sewer	01-General Service-Residential	03-1"	0
09-RFSS, No Sewer	01-General Service-Residential	05-2"	0
09-RFSS, No Sewer	02-General Service-Commercial	03-1"	0
10-Unknown	01-General Service-Residential	01-5/8"	3.56

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
10-Unknown	01-General Service-Residential	03-1"	0
10-Unknown	01-General Service-Residential	04-1.5"	0
10-Unknown	01-General Service-Residential	05-2"	0
10-Unknown	01-General Service-Residential	06-3"	0
10-Unknown	01-General Service-Residential	07-4"	0
10-Unknown	01-General Service-Residential	08-6"	0
10-Unknown	01-General Service-Residential	09-8"	0
10-Unknown	01-General Service-Residential	12-Unknown	1795.32
10-Unknown	01-General Service-Residential	A-Unknown	0
10-Unknown	02-General Service-Commercial	01-5/8"	6.32
10-Unknown	02-General Service-Commercial	02-3/4"	0
10-Unknown	02-General Service-Commercial	03-1"	10.98
10-Unknown	02-General Service-Commercial	04-1.5"	0
10-Unknown	02-General Service-Commercial	05-2"	0
10-Unknown	02-General Service-Commercial	06-3"	633.97
10-Unknown	02-General Service-Commercial	07-4"	0
10-Unknown	02-General Service-Commercial	08-6"	0
10-Unknown	02-General Service-Commercial	09-8"	0
10-Unknown	02-General Service-Commercial	10-10"	0
10-Unknown	02-General Service-Commercial	12-Unknown	5810.74
10-Unknown	02-General Service-Commercial	A-Unknown	0
10-Unknown	03-General Service-Industrial	01-5/8"	0
10-Unknown	03-General Service-Industrial	12-Unknown	147.34
10-Unknown	04-General Service-Public Utilities	12-Unknown	0
10-Unknown	05-P.H.A	07-4"	0
10-Unknown	05-P.H.A	12-Unknown	71.6
10-Unknown	06-Charity/Non-Public Schools	01-5/8"	0
10-Unknown	06-Charity/Non-Public Schools	09-8"	0
10-Unknown	06-Charity/Non-Public Schools	12-Unknown	75.91
10-Unknown	07-Public Schools	12-Unknown	0

Rpt1b v5 2015.02			
Service Type	Customer Type	Meter Size	fy14 Sewer Usage Charges
10-Unknown	08-Senior Citizens Discount	01-5/8"	0
10-Unknown	08-Senior Citizens Discount	12-Unknown	7.95
10-Unknown	09-Hand Bill	08-6"	0
10-Unknown	09-Hand Bill	10-10"	0
10-Unknown	09-Hand Bill	12-Unknown	0.94
10-Unknown	10-City Leased	12-Unknown	0
10-Unknown	11-Hospital/University	06-3"	0
10-Unknown	11-Hospital/University	07-4"	0
10-Unknown	11-Hospital/University	08-6"	0
10-Unknown	11-Hospital/University	09-8"	0
10-Unknown	11-Hospital/University	12-Unknown	356.52
10-Unknown	13-Fire Service	03-1"	0
10-Unknown	13-Fire Service	04-1.5"	0
10-Unknown	13-Fire Service	05-2"	0
10-Unknown	13-Fire Service	06-3"	0
10-Unknown	13-Fire Service	07-4"	0
10-Unknown	13-Fire Service	08-6"	0
10-Unknown	13-Fire Service	09-8"	0
10-Unknown	13-Fire Service	10-10"	0
10-Unknown	13-Fire Service	12-Unknown	1.49
10-Unknown	14-City Government	01-5/8"	0
10-Unknown	14-City Government	05-2"	0
10-Unknown	14-City Government	08-6"	0
10-Unknown	14-City Government	12-Unknown	548.59
			39523481.38

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
01-Water,Sewer,Stormwater	01-General Service-Residential	01-5/8"	4832510	402709
01-Water,Sewer,Stormwater	01-General Service-Residential	02-3/4"	237	20
01-Water,Sewer,Stormwater	01-General Service-Residential	03-1"	22339	1862
01-Water,Sewer,Stormwater	01-General Service-Residential	04-1.5"	6388	532
01-Water,Sewer,Stormwater	01-General Service-Residential	05-2"	4716	393
01-Water,Sewer,Stormwater	01-General Service-Residential	06-3"	1694	141
01-Water,Sewer,Stormwater	01-General Service-Residential	07-4"	521	43
01-Water,Sewer,Stormwater	01-General Service-Residential	08-6"	143	12
01-Water,Sewer,Stormwater	01-General Service-Residential	09-8"	35	3
01-Water,Sewer,Stormwater	01-General Service-Residential	11-12"	0	0
01-Water,Sewer,Stormwater	02-General Service-Commercial	01-5/8"	333316	27776
01-Water,Sewer,Stormwater	02-General Service-Commercial	02-3/4"	135	11
01-Water,Sewer,Stormwater	02-General Service-Commercial	03-1"	30443	2537
01-Water,Sewer,Stormwater	02-General Service-Commercial	04-1.5"	12712	1059
01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	17281	1440
01-Water,Sewer,Stormwater	02-General Service-Commercial	06-3"	6180	515
01-Water,Sewer,Stormwater	02-General Service-Commercial	07-4"	3258	272
01-Water,Sewer,Stormwater	02-General Service-Commercial	08-6"	1143	95
01-Water,Sewer,Stormwater	02-General Service-Commercial	09-8"	250	21
01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	46	4
01-Water,Sewer,Stormwater	03-General Service-Industrial	01-5/8"	6329	527
01-Water,Sewer,Stormwater	03-General Service-Industrial	03-1"	2977	248
01-Water,Sewer,Stormwater	03-General Service-Industrial	04-1.5"	996	83
01-Water,Sewer,Stormwater	03-General Service-Industrial	05-2"	1321	110
01-Water,Sewer,Stormwater	03-General Service-Industrial	06-3"	590	49
01-Water,Sewer,Stormwater	03-General Service-Industrial	07-4"	151	13
01-Water,Sewer,Stormwater	03-General Service-Industrial	08-6"	89	7
01-Water,Sewer,Stormwater	03-General Service-Industrial	10-10"	0	0
01-Water,Sewer,Stormwater	03-General Service-Industrial	11-12"	0	0
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	01-5/8"	532	44

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	03-1"	335	28
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	04-1.5"	122	10
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	05-2"	236	20
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	06-3"	160	13
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	07-4"	60	5
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	08-6"	38	3
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	09-8"	13	1
01-Water,Sewer,Stormwater	05-P.H.A	01-5/8"	67522	5627
01-Water,Sewer,Stormwater	05-P.H.A	02-3/4"	0	0
01-Water,Sewer,Stormwater	05-P.H.A	03-1"	163	14
01-Water,Sewer,Stormwater	05-P.H.A	04-1.5"	209	17
01-Water,Sewer,Stormwater	05-P.H.A	05-2"	190	16
01-Water,Sewer,Stormwater	05-P.H.A	06-3"	440	37
01-Water,Sewer,Stormwater	05-P.H.A	07-4"	230	19
01-Water,Sewer,Stormwater	05-P.H.A	08-6"	165	14
01-Water,Sewer,Stormwater	05-P.H.A	09-8"	84	7
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	01-5/8"	14583	1215
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	02-3/4"	0	0
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	03-1"	3746	312
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	04-1.5"	1776	148
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	05-2"	2442	204
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	06-3"	1491	124
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	07-4"	1169	97
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	08-6"	178	15
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	09-8"	16	1
01-Water,Sewer,Stormwater	07-Public Schools	01-5/8"	118	10
01-Water,Sewer,Stormwater	07-Public Schools	03-1"	116	10
01-Water,Sewer,Stormwater	07-Public Schools	04-1.5"	81	7
01-Water,Sewer,Stormwater	07-Public Schools	05-2"	492	41
01-Water,Sewer,Stormwater	07-Public Schools	06-3"	1216	101

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
01-Water,Sewer,Stormwater	07-Public Schools	07-4"	2280	190
01-Water,Sewer,Stormwater	07-Public Schools	08-6"	214	18
01-Water,Sewer,Stormwater	07-Public Schools	09-8"	36	3
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	01-5/8"	242045	20170
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	02-3/4"	0	0
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	03-1"	12	1
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	04-1.5"	12	1
01-Water,Sewer,Stormwater	09-Hand Bill	01-5/8"	123	10
01-Water,Sewer,Stormwater	09-Hand Bill	03-1"	170	14
01-Water,Sewer,Stormwater	09-Hand Bill	04-1.5"	125	10
01-Water,Sewer,Stormwater	09-Hand Bill	05-2"	443	37
01-Water,Sewer,Stormwater	09-Hand Bill	06-3"	845	70
01-Water,Sewer,Stormwater	09-Hand Bill	07-4"	876	73
01-Water,Sewer,Stormwater	09-Hand Bill	08-6"	289	24
01-Water,Sewer,Stormwater	09-Hand Bill	09-8"	68	6
01-Water,Sewer,Stormwater	09-Hand Bill	10-10"	40	3
01-Water,Sewer,Stormwater	10-City Leased	01-5/8"	132	11
01-Water,Sewer,Stormwater	10-City Leased	03-1"	52	4
01-Water,Sewer,Stormwater	10-City Leased	04-1.5"	68	6
01-Water,Sewer,Stormwater	10-City Leased	05-2"	154	13
01-Water,Sewer,Stormwater	10-City Leased	06-3"	67	6
01-Water,Sewer,Stormwater	10-City Leased	07-4"	96	8
01-Water,Sewer,Stormwater	10-City Leased	08-6"	0	0
01-Water,Sewer,Stormwater	10-City Leased	09-8"	0	0
01-Water,Sewer,Stormwater	11-Hospital/University	01-5/8"	540	45
01-Water,Sewer,Stormwater	11-Hospital/University	02-3/4"	0	0
01-Water,Sewer,Stormwater	11-Hospital/University	03-1"	402	34
01-Water,Sewer,Stormwater	11-Hospital/University	04-1.5"	172	14
01-Water,Sewer,Stormwater	11-Hospital/University	05-2"	729	61
01-Water,Sewer,Stormwater	11-Hospital/University	06-3"	1278	107

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
01-Water,Sewer,Stormwater	11-Hospital/University	07-4"	1300	108
01-Water,Sewer,Stormwater	11-Hospital/University	08-6"	643	54
01-Water,Sewer,Stormwater	11-Hospital/University	09-8"	70	6
01-Water,Sewer,Stormwater	11-Hospital/University	10-10"	20	2
01-Water,Sewer,Stormwater	12-Scheduled	01-5/8"	27	2
01-Water,Sewer,Stormwater	13-Fire Service	01-5/8"	563	47
01-Water,Sewer,Stormwater	13-Fire Service	03-1"	87	7
01-Water,Sewer,Stormwater	13-Fire Service	04-1.5"	36	3
01-Water,Sewer,Stormwater	13-Fire Service	05-2"	104	9
01-Water,Sewer,Stormwater	13-Fire Service	06-3"	19	2
01-Water,Sewer,Stormwater	13-Fire Service	07-4"	35	3
01-Water,Sewer,Stormwater	13-Fire Service	08-6"	18	2
01-Water,Sewer,Stormwater	13-Fire Service	09-8"	0	0
01-Water,Sewer,Stormwater	13-Fire Service	10-10"	0	0
01-Water,Sewer,Stormwater	14-City Government	01-5/8"	2742	229
01-Water,Sewer,Stormwater	14-City Government	02-3/4"	11	1
01-Water,Sewer,Stormwater	14-City Government	03-1"	1455	121
01-Water,Sewer,Stormwater	14-City Government	04-1.5"	868	72
01-Water,Sewer,Stormwater	14-City Government	05-2"	2894	241
01-Water,Sewer,Stormwater	14-City Government	06-3"	1623	135
01-Water,Sewer,Stormwater	14-City Government	07-4"	743	62
01-Water,Sewer,Stormwater	14-City Government	08-6"	402	34
01-Water,Sewer,Stormwater	14-City Government	09-8"	161	13
01-Water,Sewer,Stormwater	14-City Government	10-10"	205	17
01-Water,Sewer,Stormwater	14-City Government	11-12"	12	1
02-Water Only	01-General Service-Residential	01-5/8"	229	19
02-Water Only	01-General Service-Residential	03-1"	211	18
02-Water Only	01-General Service-Residential	04-1.5"	231	19
02-Water Only	01-General Service-Residential	05-2"	5781	482
02-Water Only	01-General Service-Residential	06-3"	156	13

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
02-Water Only	01-General Service-Residential	07-4"	549	46
02-Water Only	01-General Service-Residential	08-6"	931	78
02-Water Only	01-General Service-Residential	09-8"	331	28
02-Water Only	01-General Service-Residential	10-10"	33	3
02-Water Only	01-General Service-Residential	11-12"	11	1
02-Water Only	01-General Service-Residential	Y-Unknown	11	1
02-Water Only	02-General Service-Commercial	01-5/8"	65	5
02-Water Only	02-General Service-Commercial	03-1"	55	5
02-Water Only	02-General Service-Commercial	04-1.5"	1	0
02-Water Only	02-General Service-Commercial	05-2"	974	81
02-Water Only	02-General Service-Commercial	06-3"	143	12
02-Water Only	02-General Service-Commercial	07-4"	1430	119
02-Water Only	02-General Service-Commercial	08-6"	2095	175
02-Water Only	02-General Service-Commercial	09-8"	972	81
02-Water Only	02-General Service-Commercial	10-10"	88	7
02-Water Only	02-General Service-Commercial	11-12"	45	4
02-Water Only	03-General Service-Industrial	05-2"	22	2
02-Water Only	03-General Service-Industrial	07-4"	55	5
02-Water Only	03-General Service-Industrial	08-6"	120	10
02-Water Only	03-General Service-Industrial	09-8"	94	8
02-Water Only	03-General Service-Industrial	10-10"	11	1
02-Water Only	04-General Service-Public Utilities	05-2"	11	1
02-Water Only	04-General Service-Public Utilities	11-12"	10	1
02-Water Only	05-P.H.A	01-5/8"	55	5
02-Water Only	05-P.H.A	03-1"	682	57
02-Water Only	05-P.H.A	05-2"	605	50
02-Water Only	05-P.H.A	07-4"	79	7
02-Water Only	05-P.H.A	08-6"	132	11
02-Water Only	05-P.H.A	09-8"	22	2
02-Water Only	06-Charity/Non-Public Schools	01-5/8"	7	1

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
02-Water Only	06-Charity/Non-Public Schools	03-1"	0	0
02-Water Only	06-Charity/Non-Public Schools	05-2"	11	1
02-Water Only	06-Charity/Non-Public Schools	06-3"	0	0
02-Water Only	06-Charity/Non-Public Schools	07-4"	53	4
02-Water Only	06-Charity/Non-Public Schools	08-6"	34	3
02-Water Only	06-Charity/Non-Public Schools	09-8"	0	0
02-Water Only	07-Public Schools	06-3"	33	3
02-Water Only	07-Public Schools	07-4"	134	11
02-Water Only	07-Public Schools	08-6"	523	44
02-Water Only	07-Public Schools	09-8"	165	14
02-Water Only	07-Public Schools	10-10"	22	2
02-Water Only	08-Senior Citizens Discount	05-2"	11	1
02-Water Only	09-Hand Bill	06-3"	11	1
02-Water Only	09-Hand Bill	07-4"	11	1
02-Water Only	09-Hand Bill	08-6"	122	10
02-Water Only	09-Hand Bill	09-8"	66	6
02-Water Only	10-City Leased	04-1.5"	0	0
02-Water Only	10-City Leased	05-2"	12	1
02-Water Only	10-City Leased	07-4"	45	4
02-Water Only	10-City Leased	08-6"	23	2
02-Water Only	10-City Leased	09-8"	11	1
02-Water Only	10-City Leased	10-10"	12	1
02-Water Only	11-Hospital/University	01-5/8"	11	1
02-Water Only	11-Hospital/University	03-1"	11	1
02-Water Only	11-Hospital/University	06-3"	12	1
02-Water Only	11-Hospital/University	07-4"	185	15
02-Water Only	11-Hospital/University	08-6"	498	42
02-Water Only	11-Hospital/University	09-8"	66	6
02-Water Only	11-Hospital/University	10-10"	22	2
02-Water Only	13-Fire Service	01-5/8"	341	28

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
02-Water Only	13-Fire Service	03-1"	378	32
02-Water Only	13-Fire Service	04-1.5"	405	34
02-Water Only	13-Fire Service	05-2"	8403	700
02-Water Only	13-Fire Service	06-3"	2100	175
02-Water Only	13-Fire Service	07-4"	11222	935
02-Water Only	13-Fire Service	08-6"	17712	1476
02-Water Only	13-Fire Service	09-8"	5550	463
02-Water Only	13-Fire Service	10-10"	811	68
02-Water Only	13-Fire Service	11-12"	122	10
02-Water Only	14-City Government	03-1"	6	1
02-Water Only	14-City Government	05-2"	11	1
02-Water Only	14-City Government	06-3"	32	3
02-Water Only	14-City Government	07-4"	219	18
02-Water Only	14-City Government	08-6"	464	39
02-Water Only	14-City Government	09-8"	177	15
02-Water Only	14-City Government	10-10"	29	2
03-Stormwater Only	01-General Service-Residential	01-5/8"	277787	23149
03-Stormwater Only	01-General Service-Residential	02-3/4"	117	10
03-Stormwater Only	01-General Service-Residential	03-1"	1270	106
03-Stormwater Only	01-General Service-Residential	04-1.5"	63	5
03-Stormwater Only	01-General Service-Residential	05-2"	164	14
03-Stormwater Only	01-General Service-Residential	06-3"	12	1
03-Stormwater Only	01-General Service-Residential	07-4"	78	7
03-Stormwater Only	01-General Service-Residential	08-6"	96	8
03-Stormwater Only	01-General Service-Residential	09-8"	55	5
03-Stormwater Only	01-General Service-Residential	10-10"	0	0
03-Stormwater Only	01-General Service-Residential	12-Unknown	0	0
03-Stormwater Only	01-General Service-Residential	A-Unknown	141588	11799
03-Stormwater Only	02-General Service-Commercial	01-5/8"	3355	280
03-Stormwater Only	02-General Service-Commercial	02-3/4"	41	3

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
03-Stormwater Only	02-General Service-Commercial	03-1"	629	52
03-Stormwater Only	02-General Service-Commercial	04-1.5"	117	10
03-Stormwater Only	02-General Service-Commercial	05-2"	160	13
03-Stormwater Only	02-General Service-Commercial	06-3"	13	1
03-Stormwater Only	02-General Service-Commercial	07-4"	20	2
03-Stormwater Only	02-General Service-Commercial	08-6"	29	2
03-Stormwater Only	02-General Service-Commercial	09-8"	19	2
03-Stormwater Only	02-General Service-Commercial	12-Unknown	0	0
03-Stormwater Only	02-General Service-Commercial	A-Unknown	400284	33357
03-Stormwater Only	02-General Service-Commercial	Y-Unknown	0	0
03-Stormwater Only	03-General Service-Industrial	01-5/8"	9	1
03-Stormwater Only	03-General Service-Industrial	03-1"	24	2
03-Stormwater Only	03-General Service-Industrial	04-1.5"	0	0
03-Stormwater Only	03-General Service-Industrial	05-2"	0	0
03-Stormwater Only	03-General Service-Industrial	06-3"	0	0
03-Stormwater Only	03-General Service-Industrial	07-4"	12	1
03-Stormwater Only	03-General Service-Industrial	08-6"	0	0
03-Stormwater Only	03-General Service-Industrial	12-Unknown	1	0
03-Stormwater Only	03-General Service-Industrial	A-Unknown	107	9
03-Stormwater Only	03-General Service-Industrial	Y-Unknown	0	0
03-Stormwater Only	04-General Service-Public Utilities	01-5/8"	5	0
03-Stormwater Only	04-General Service-Public Utilities	03-1"	13	1
03-Stormwater Only	04-General Service-Public Utilities	05-2"	3	0
03-Stormwater Only	04-General Service-Public Utilities	A-Unknown	14839	1237
03-Stormwater Only	05-P.H.A	01-5/8"	690	58
03-Stormwater Only	05-P.H.A	03-1"	19	2
03-Stormwater Only	05-P.H.A	05-2"	6	1
03-Stormwater Only	05-P.H.A	A-Unknown	13247	1104
03-Stormwater Only	06-Charity/Non-Public Schools	01-5/8"	217	18
03-Stormwater Only	06-Charity/Non-Public Schools	03-1"	7	1

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
03-Stormwater Only	06-Charity/Non-Public Schools	04-1.5"	7	1
03-Stormwater Only	06-Charity/Non-Public Schools	05-2"	7	1
03-Stormwater Only	06-Charity/Non-Public Schools	07-4"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	09-8"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	A-Unknown	839	70
03-Stormwater Only	07-Public Schools	01-5/8"	12	1
03-Stormwater Only	07-Public Schools	08-6"	0	0
03-Stormwater Only	07-Public Schools	09-8"	0	0
03-Stormwater Only	07-Public Schools	12-Unknown	0	0
03-Stormwater Only	07-Public Schools	A-Unknown	971	81
03-Stormwater Only	08-Senior Citizens Discount	01-5/8"	4491	374
03-Stormwater Only	08-Senior Citizens Discount	A-Unknown	12	1
03-Stormwater Only	09-Hand Bill	01-5/8"	6	1
03-Stormwater Only	09-Hand Bill	05-2"	48	4
03-Stormwater Only	09-Hand Bill	06-3"	8	1
03-Stormwater Only	09-Hand Bill	08-6"	0	0
03-Stormwater Only	09-Hand Bill	09-8"	0	0
03-Stormwater Only	09-Hand Bill	10-10"	5	0
03-Stormwater Only	09-Hand Bill	A-Unknown	48	4
03-Stormwater Only	10-City Leased	01-5/8"	0	0
03-Stormwater Only	10-City Leased	03-1"	0	0
03-Stormwater Only	10-City Leased	05-2"	0	0
03-Stormwater Only	10-City Leased	06-3"	0	0
03-Stormwater Only	10-City Leased	07-4"	0	0
03-Stormwater Only	10-City Leased	08-6"	0	0
03-Stormwater Only	10-City Leased	09-8"	0	0
03-Stormwater Only	11-Hospital/University	01-5/8"	11	1
03-Stormwater Only	11-Hospital/University	03-1"	0	0
03-Stormwater Only	11-Hospital/University	05-2"	0	0
03-Stormwater Only	11-Hospital/University	08-6"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
03-Stormwater Only	11-Hospital/University	A-Unknown	2121	177
03-Stormwater Only	12-Scheduled	01-5/8"	13	1
03-Stormwater Only	12-Scheduled	A-Unknown	8	1
03-Stormwater Only	13-Fire Service	01-5/8"	0	0
03-Stormwater Only	13-Fire Service	03-1"	77	6
03-Stormwater Only	13-Fire Service	04-1.5"	44	4
03-Stormwater Only	13-Fire Service	05-2"	633	53
03-Stormwater Only	13-Fire Service	06-3"	0	0
03-Stormwater Only	13-Fire Service	07-4"	209	17
03-Stormwater Only	13-Fire Service	08-6"	173	14
03-Stormwater Only	13-Fire Service	09-8"	44	4
03-Stormwater Only	13-Fire Service	10-10"	0	0
03-Stormwater Only	13-Fire Service	11-12"	11	1
03-Stormwater Only	13-Fire Service	12-Unknown	0	0
03-Stormwater Only	13-Fire Service	A-Unknown	1292	108
03-Stormwater Only	14-City Government	01-5/8"	1394	116
03-Stormwater Only	14-City Government	02-3/4"	12	1
03-Stormwater Only	14-City Government	03-1"	40	3
03-Stormwater Only	14-City Government	04-1.5"	4	0
03-Stormwater Only	14-City Government	05-2"	11	1
03-Stormwater Only	14-City Government	06-3"	0	0
03-Stormwater Only	14-City Government	07-4"	26	2
03-Stormwater Only	14-City Government	08-6"	15	1
03-Stormwater Only	14-City Government	09-8"	11	1
03-Stormwater Only	14-City Government	12-Unknown	0	0
03-Stormwater Only	14-City Government	A-Unknown	7858	655
04-Sewer and Stormwater	01-General Service-Residential	01-5/8"	428	36
04-Sewer and Stormwater	01-General Service-Residential	02-3/4"	12	1
04-Sewer and Stormwater	01-General Service-Residential	07-4"	0	0
04-Sewer and Stormwater	01-General Service-Residential	08-6"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
04-Sewer and Stormwater	01-General Service-Residential	A-Unknown	0	0
04-Sewer and Stormwater	02-General Service-Commercial	01-5/8"	0	0
04-Sewer and Stormwater	02-General Service-Commercial	05-2"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	04-1.5"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	05-2"	12	1
04-Sewer and Stormwater	03-General Service-Industrial	06-3"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	11-12"	0	0
04-Sewer and Stormwater	04-General Service-Public Utilities	03-1"	12	1
04-Sewer and Stormwater	06-Charity/Non-Public Schools	03-1"	10	1
04-Sewer and Stormwater	09-Hand Bill	01-5/8"	135	11
04-Sewer and Stormwater	09-Hand Bill	04-1.5"	0	0
04-Sewer and Stormwater	09-Hand Bill	05-2"	35	3
04-Sewer and Stormwater	09-Hand Bill	06-3"	18	2
04-Sewer and Stormwater	09-Hand Bill	08-6"	12	1
04-Sewer and Stormwater	09-Hand Bill	09-8"	23	2
04-Sewer and Stormwater	09-Hand Bill	10-10"	6	1
04-Sewer and Stormwater	11-Hospital/University	01-5/8"	12	1
05-Water and Stormwater	01-General Service-Residential	01-5/8"	14874	1240
05-Water and Stormwater	01-General Service-Residential	02-3/4"	12	1
05-Water and Stormwater	01-General Service-Residential	03-1"	2014	168
05-Water and Stormwater	01-General Service-Residential	04-1.5"	160	13
05-Water and Stormwater	01-General Service-Residential	05-2"	230	19
05-Water and Stormwater	01-General Service-Residential	06-3"	0	0
05-Water and Stormwater	01-General Service-Residential	07-4"	22	2
05-Water and Stormwater	01-General Service-Residential	08-6"	0	0
05-Water and Stormwater	01-General Service-Residential	09-8"	0	0
05-Water and Stormwater	01-General Service-Residential	10-10"	0	0
05-Water and Stormwater	01-General Service-Residential	11-12"	0	0
05-Water and Stormwater	01-General Service-Residential	Y-Unknown	0	0
05-Water and Stormwater	02-General Service-Commercial	01-5/8"	963	80

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
05-Water and Stormwater	02-General Service-Commercial	03-1"	257	21
05-Water and Stormwater	02-General Service-Commercial	04-1.5"	199	17
05-Water and Stormwater	02-General Service-Commercial	05-2"	210	18
05-Water and Stormwater	02-General Service-Commercial	06-3"	23	2
05-Water and Stormwater	02-General Service-Commercial	07-4"	99	8
05-Water and Stormwater	02-General Service-Commercial	08-6"	108	9
05-Water and Stormwater	02-General Service-Commercial	09-8"	22	2
05-Water and Stormwater	02-General Service-Commercial	10-10"	0	0
05-Water and Stormwater	02-General Service-Commercial	11-12"	0	0
05-Water and Stormwater	03-General Service-Industrial	01-5/8"	36	3
05-Water and Stormwater	03-General Service-Industrial	03-1"	24	2
05-Water and Stormwater	03-General Service-Industrial	04-1.5"	12	1
05-Water and Stormwater	03-General Service-Industrial	05-2"	30	3
05-Water and Stormwater	03-General Service-Industrial	06-3"	25	2
05-Water and Stormwater	03-General Service-Industrial	07-4"	19	2
05-Water and Stormwater	03-General Service-Industrial	08-6"	30	3
05-Water and Stormwater	03-General Service-Industrial	09-8"	0	0
05-Water and Stormwater	03-General Service-Industrial	10-10"	11	1
05-Water and Stormwater	04-General Service-Public Utilities	03-1"	12	1
05-Water and Stormwater	04-General Service-Public Utilities	11-12"	0	0
05-Water and Stormwater	05-P.H.A	01-5/8"	0	0
05-Water and Stormwater	05-P.H.A	03-1"	11	1
05-Water and Stormwater	05-P.H.A	05-2"	23	2
05-Water and Stormwater	05-P.H.A	07-4"	0	0
05-Water and Stormwater	05-P.H.A	08-6"	0	0
05-Water and Stormwater	05-P.H.A	09-8"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	01-5/8"	169	14
05-Water and Stormwater	06-Charity/Non-Public Schools	03-1"	37	3
05-Water and Stormwater	06-Charity/Non-Public Schools	04-1.5"	33	3
05-Water and Stormwater	06-Charity/Non-Public Schools	05-2"	48	4

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
05-Water and Stormwater	06-Charity/Non-Public Schools	06-3"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	07-4"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	08-6"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	09-8"	0	0
05-Water and Stormwater	07-Public Schools	06-3"	0	0
05-Water and Stormwater	07-Public Schools	07-4"	0	0
05-Water and Stormwater	07-Public Schools	08-6"	4	0
05-Water and Stormwater	07-Public Schools	09-8"	0	0
05-Water and Stormwater	07-Public Schools	10-10"	0	0
05-Water and Stormwater	08-Senior Citizens Discount	01-5/8"	198	17
05-Water and Stormwater	08-Senior Citizens Discount	05-2"	0	0
05-Water and Stormwater	09-Hand Bill	01-5/8"	12	1
05-Water and Stormwater	09-Hand Bill	06-3"	0	0
05-Water and Stormwater	09-Hand Bill	08-6"	22	2
05-Water and Stormwater	09-Hand Bill	09-8"	12	1
05-Water and Stormwater	09-Hand Bill	10-10"	6	1
05-Water and Stormwater	10-City Leased	01-5/8"	77	6
05-Water and Stormwater	10-City Leased	03-1"	34	3
05-Water and Stormwater	10-City Leased	04-1.5"	12	1
05-Water and Stormwater	10-City Leased	05-2"	16	1
05-Water and Stormwater	10-City Leased	06-3"	24	2
05-Water and Stormwater	10-City Leased	07-4"	31	3
05-Water and Stormwater	10-City Leased	08-6"	48	4
05-Water and Stormwater	10-City Leased	09-8"	12	1
05-Water and Stormwater	10-City Leased	10-10"	0	0
05-Water and Stormwater	11-Hospital/University	01-5/8"	36	3
05-Water and Stormwater	11-Hospital/University	06-3"	0	0
05-Water and Stormwater	11-Hospital/University	07-4"	0	0
05-Water and Stormwater	11-Hospital/University	08-6"	0	0
05-Water and Stormwater	11-Hospital/University	09-8"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
05-Water and Stormwater	11-Hospital/University	10-10"	0	0
05-Water and Stormwater	13-Fire Service	01-5/8"	0	0
05-Water and Stormwater	13-Fire Service	03-1"	51	4
05-Water and Stormwater	13-Fire Service	04-1.5"	20	2
05-Water and Stormwater	13-Fire Service	05-2"	931	78
05-Water and Stormwater	13-Fire Service	06-3"	0	0
05-Water and Stormwater	13-Fire Service	07-4"	167	14
05-Water and Stormwater	13-Fire Service	08-6"	81	7
05-Water and Stormwater	13-Fire Service	09-8"	30	3
05-Water and Stormwater	13-Fire Service	10-10"	12	1
05-Water and Stormwater	13-Fire Service	11-12"	0	0
05-Water and Stormwater	14-City Government	01-5/8"	167	14
05-Water and Stormwater	14-City Government	02-3/4"	55	5
05-Water and Stormwater	14-City Government	03-1"	71	6
05-Water and Stormwater	14-City Government	04-1.5"	36	3
05-Water and Stormwater	14-City Government	05-2"	44	4
05-Water and Stormwater	14-City Government	06-3"	0	0
05-Water and Stormwater	14-City Government	07-4"	6	1
05-Water and Stormwater	14-City Government	08-6"	12	1
05-Water and Stormwater	14-City Government	09-8"	0	0
05-Water and Stormwater	14-City Government	10-10"	0	0
06-Sewer Only	01-General Service-Residential	01-5/8"	18	2
06-Sewer Only	02-General Service-Commercial	01-5/8"	0	0
06-Sewer Only	02-General Service-Commercial	05-2"	12	1
06-Sewer Only	03-General Service-Industrial	02-3/4"	0	0
06-Sewer Only	03-General Service-Industrial	10-10"	0	0
06-Sewer Only	04-General Service-Public Utilities	07-4"	3	0
06-Sewer Only	06-Charity/Non-Public Schools	03-1"	0	0
06-Sewer Only	09-Hand Bill	01-5/8"	4	0
06-Sewer Only	09-Hand Bill	05-2"	11	1

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
06-Sewer Only	13-Fire Service	01-5/8"	11	1
06-Sewer Only	14-City Government	07-4"	5	0
07-Water and Sewer	01-General Service-Residential	01-5/8"	208	17
07-Water and Sewer	01-General Service-Residential	02-3/4"	0	0
07-Water and Sewer	01-General Service-Residential	03-1"	14	1
07-Water and Sewer	01-General Service-Residential	05-2"	0	0
07-Water and Sewer	01-General Service-Residential	06-3"	0	0
07-Water and Sewer	02-General Service-Commercial	01-5/8"	118	10
07-Water and Sewer	02-General Service-Commercial	02-3/4"	0	0
07-Water and Sewer	02-General Service-Commercial	03-1"	54	5
07-Water and Sewer	02-General Service-Commercial	04-1.5"	12	1
07-Water and Sewer	02-General Service-Commercial	05-2"	43	4
07-Water and Sewer	02-General Service-Commercial	06-3"	19	2
07-Water and Sewer	02-General Service-Commercial	07-4"	0	0
07-Water and Sewer	02-General Service-Commercial	09-8"	0	0
07-Water and Sewer	03-General Service-Industrial	01-5/8"	0	0
07-Water and Sewer	05-P.H.A	01-5/8"	14	1
07-Water and Sewer	05-P.H.A	03-1"	0	0
07-Water and Sewer	05-P.H.A	06-3"	12	1
07-Water and Sewer	06-Charity/Non-Public Schools	01-5/8"	0	0
07-Water and Sewer	06-Charity/Non-Public Schools	03-1"	12	1
07-Water and Sewer	06-Charity/Non-Public Schools	04-1.5"	10	1
07-Water and Sewer	06-Charity/Non-Public Schools	05-2"	12	1
07-Water and Sewer	07-Public Schools	07-4"	8	1
07-Water and Sewer	07-Public Schools	08-6"	0	0
07-Water and Sewer	08-Senior Citizens Discount	01-5/8"	11	1
07-Water and Sewer	09-Hand Bill	04-1.5"	0	0
07-Water and Sewer	09-Hand Bill	05-2"	0	0
07-Water and Sewer	11-Hospital/University	05-2"	0	0
07-Water and Sewer	13-Fire Service	01-5/8"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
07-Water and Sewer	13-Fire Service	03-1"	0	0
07-Water and Sewer	13-Fire Service	05-2"	0	0
07-Water and Sewer	13-Fire Service	12-Unknown	10	1
07-Water and Sewer	14-City Government	01-5/8"	0	0
07-Water and Sewer	14-City Government	03-1"	0	0
07-Water and Sewer	14-City Government	06-3"	0	0
07-Water and Sewer	14-City Government	08-6"	12	1
08-RFSS, All Services	01-General Service-Residential	01-5/8"	84	7
08-RFSS, All Services	01-General Service-Residential	02-3/4"	343	29
08-RFSS, All Services	01-General Service-Residential	03-1"	8753	729
08-RFSS, All Services	01-General Service-Residential	04-1.5"	977	81
08-RFSS, All Services	01-General Service-Residential	05-2"	1055	88
08-RFSS, All Services	02-General Service-Commercial	01-5/8"	12	1
08-RFSS, All Services	02-General Service-Commercial	02-3/4"	27	2
08-RFSS, All Services	02-General Service-Commercial	03-1"	403	34
08-RFSS, All Services	02-General Service-Commercial	04-1.5"	58	5
08-RFSS, All Services	02-General Service-Commercial	05-2"	12	1
08-RFSS, All Services	03-General Service-Industrial	03-1"	1	0
08-RFSS, All Services	04-General Service-Public Utilities	03-1"	0	0
08-RFSS, All Services	05-P.H.A	03-1"	0	0
08-RFSS, All Services	05-P.H.A	04-1.5"	99	8
08-RFSS, All Services	05-P.H.A	05-2"	1	0
08-RFSS, All Services	08-Senior Citizens Discount	03-1"	8	1
08-RFSS, All Services	13-Fire Service	03-1"	0	0
08-RFSS, All Services	13-Fire Service	04-1.5"	0	0
08-RFSS, All Services	14-City Government	03-1"	12	1
09-RFSS, No Sewer	01-General Service-Residential	03-1"	10	1
09-RFSS, No Sewer	01-General Service-Residential	05-2"	3	0
09-RFSS, No Sewer	02-General Service-Commercial	03-1"	6	1
10-Unknown	01-General Service-Residential	01-5/8"	72	6

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
10-Unknown	01-General Service-Residential	03-1"	137	11
10-Unknown	01-General Service-Residential	04-1.5"	0	0
10-Unknown	01-General Service-Residential	05-2"	373	31
10-Unknown	01-General Service-Residential	06-3"	1	0
10-Unknown	01-General Service-Residential	07-4"	23	2
10-Unknown	01-General Service-Residential	08-6"	8	1
10-Unknown	01-General Service-Residential	09-8"	1	0
10-Unknown	01-General Service-Residential	12-Unknown	796	66
10-Unknown	01-General Service-Residential	A-Unknown	2	0
10-Unknown	02-General Service-Commercial	01-5/8"	2	0
10-Unknown	02-General Service-Commercial	02-3/4"	0	0
10-Unknown	02-General Service-Commercial	03-1"	18	2
10-Unknown	02-General Service-Commercial	04-1.5"	9	1
10-Unknown	02-General Service-Commercial	05-2"	214	18
10-Unknown	02-General Service-Commercial	06-3"	0	0
10-Unknown	02-General Service-Commercial	07-4"	90	8
10-Unknown	02-General Service-Commercial	08-6"	57	5
10-Unknown	02-General Service-Commercial	09-8"	48	4
10-Unknown	02-General Service-Commercial	10-10"	4	0
10-Unknown	02-General Service-Commercial	12-Unknown	5175	431
10-Unknown	02-General Service-Commercial	A-Unknown	12	1
10-Unknown	03-General Service-Industrial	01-5/8"	1	0
10-Unknown	03-General Service-Industrial	12-Unknown	217	18
10-Unknown	04-General Service-Public Utilities	12-Unknown	167	14
10-Unknown	05-P.H.A	07-4"	1	0
10-Unknown	05-P.H.A	12-Unknown	162	14
10-Unknown	06-Charity/Non-Public Schools	01-5/8"	0	0
10-Unknown	06-Charity/Non-Public Schools	09-8"	0	0
10-Unknown	06-Charity/Non-Public Schools	12-Unknown	9	1
10-Unknown	07-Public Schools	12-Unknown	3	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 # of Accounts Months	fy15 # of Accounts
10-Unknown	08-Senior Citizens Discount	01-5/8"	1	0
10-Unknown	08-Senior Citizens Discount	12-Unknown	0	0
10-Unknown	09-Hand Bill	08-6"	0	0
10-Unknown	09-Hand Bill	10-10"	12	1
10-Unknown	09-Hand Bill	12-Unknown	453	38
10-Unknown	10-City Leased	12-Unknown	0	0
10-Unknown	11-Hospital/University	06-3"	1	0
10-Unknown	11-Hospital/University	07-4"	1	0
10-Unknown	11-Hospital/University	08-6"	2	0
10-Unknown	11-Hospital/University	09-8"	22	2
10-Unknown	11-Hospital/University	12-Unknown	18	2
10-Unknown	13-Fire Service	03-1"	108	9
10-Unknown	13-Fire Service	04-1.5"	130	11
10-Unknown	13-Fire Service	05-2"	2325	194
10-Unknown	13-Fire Service	06-3"	18	2
10-Unknown	13-Fire Service	07-4"	188	16
10-Unknown	13-Fire Service	08-6"	325	27
10-Unknown	13-Fire Service	09-8"	43	4
10-Unknown	13-Fire Service	10-10"	14	1
10-Unknown	13-Fire Service	12-Unknown	17	1
10-Unknown	14-City Government	01-5/8"	0	0
10-Unknown	14-City Government	05-2"	0	0
10-Unknown	14-City Government	08-6"	12	1
10-Unknown	14-City Government	12-Unknown	61	5

Rpt1b v5 2015.02		FY15	
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
01-Water,Sewer,Stormwater	01-General Service-Residential	01-5/8"	4903370
01-Water,Sewer,Stormwater	01-General Service-Residential	02-3/4"	237
01-Water,Sewer,Stormwater	01-General Service-Residential	03-1"	22662
01-Water,Sewer,Stormwater	01-General Service-Residential	04-1.5"	6498
01-Water,Sewer,Stormwater	01-General Service-Residential	05-2"	4809
01-Water,Sewer,Stormwater	01-General Service-Residential	06-3"	1734
01-Water,Sewer,Stormwater	01-General Service-Residential	07-4"	534
01-Water,Sewer,Stormwater	01-General Service-Residential	08-6"	145
01-Water,Sewer,Stormwater	01-General Service-Residential	09-8"	35
01-Water,Sewer,Stormwater	01-General Service-Residential	11-12"	0
01-Water,Sewer,Stormwater	02-General Service-Commercial	01-5/8"	336399
01-Water,Sewer,Stormwater	02-General Service-Commercial	02-3/4"	137
01-Water,Sewer,Stormwater	02-General Service-Commercial	03-1"	30712
01-Water,Sewer,Stormwater	02-General Service-Commercial	04-1.5"	12854
01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	17454
01-Water,Sewer,Stormwater	02-General Service-Commercial	06-3"	6232
01-Water,Sewer,Stormwater	02-General Service-Commercial	07-4"	3303
01-Water,Sewer,Stormwater	02-General Service-Commercial	08-6"	1155
01-Water,Sewer,Stormwater	02-General Service-Commercial	09-8"	250
01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	46
01-Water,Sewer,Stormwater	03-General Service-Industrial	01-5/8"	6366
01-Water,Sewer,Stormwater	03-General Service-Industrial	03-1"	2995
01-Water,Sewer,Stormwater	03-General Service-Industrial	04-1.5"	1002
01-Water,Sewer,Stormwater	03-General Service-Industrial	05-2"	1330
01-Water,Sewer,Stormwater	03-General Service-Industrial	06-3"	598
01-Water,Sewer,Stormwater	03-General Service-Industrial	07-4"	153
01-Water,Sewer,Stormwater	03-General Service-Industrial	08-6"	90
01-Water,Sewer,Stormwater	03-General Service-Industrial	10-10"	0
01-Water,Sewer,Stormwater	03-General Service-Industrial	11-12"	0
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	01-5/8"	536

Rpt1b v5 2015.02		FY15	
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	03-1"	337
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	04-1.5"	124
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	05-2"	237
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	06-3"	160
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	07-4"	61
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	08-6"	38
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	09-8"	13
01-Water,Sewer,Stormwater	05-P.H.A	01-5/8"	67849
01-Water,Sewer,Stormwater	05-P.H.A	02-3/4"	0
01-Water,Sewer,Stormwater	05-P.H.A	03-1"	165
01-Water,Sewer,Stormwater	05-P.H.A	04-1.5"	215
01-Water,Sewer,Stormwater	05-P.H.A	05-2"	196
01-Water,Sewer,Stormwater	05-P.H.A	06-3"	444
01-Water,Sewer,Stormwater	05-P.H.A	07-4"	230
01-Water,Sewer,Stormwater	05-P.H.A	08-6"	165
01-Water,Sewer,Stormwater	05-P.H.A	09-8"	84
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	01-5/8"	14837
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	02-3/4"	0
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	03-1"	3811
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	04-1.5"	1803
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	05-2"	2473
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	06-3"	1522
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	07-4"	1194
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	08-6"	184
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	09-8"	19
01-Water,Sewer,Stormwater	07-Public Schools	01-5/8"	120
01-Water,Sewer,Stormwater	07-Public Schools	03-1"	120
01-Water,Sewer,Stormwater	07-Public Schools	04-1.5"	82
01-Water,Sewer,Stormwater	07-Public Schools	05-2"	505
01-Water,Sewer,Stormwater	07-Public Schools	06-3"	1233

Rpt1b v5 2015.02			FY15
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
01-Water,Sewer,Stormwater	07-Public Schools	07-4"	2306
01-Water,Sewer,Stormwater	07-Public Schools	08-6"	218
01-Water,Sewer,Stormwater	07-Public Schools	09-8"	36
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	01-5/8"	245730
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	02-3/4"	0
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	03-1"	12
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	04-1.5"	12
01-Water,Sewer,Stormwater	09-Hand Bill	01-5/8"	124
01-Water,Sewer,Stormwater	09-Hand Bill	03-1"	170
01-Water,Sewer,Stormwater	09-Hand Bill	04-1.5"	125
01-Water,Sewer,Stormwater	09-Hand Bill	05-2"	445
01-Water,Sewer,Stormwater	09-Hand Bill	06-3"	862
01-Water,Sewer,Stormwater	09-Hand Bill	07-4"	879
01-Water,Sewer,Stormwater	09-Hand Bill	08-6"	289
01-Water,Sewer,Stormwater	09-Hand Bill	09-8"	68
01-Water,Sewer,Stormwater	09-Hand Bill	10-10"	41
01-Water,Sewer,Stormwater	10-City Leased	01-5/8"	132
01-Water,Sewer,Stormwater	10-City Leased	03-1"	53
01-Water,Sewer,Stormwater	10-City Leased	04-1.5"	70
01-Water,Sewer,Stormwater	10-City Leased	05-2"	154
01-Water,Sewer,Stormwater	10-City Leased	06-3"	67
01-Water,Sewer,Stormwater	10-City Leased	07-4"	96
01-Water,Sewer,Stormwater	10-City Leased	08-6"	0
01-Water,Sewer,Stormwater	10-City Leased	09-8"	0
01-Water,Sewer,Stormwater	11-Hospital/University	01-5/8"	556
01-Water,Sewer,Stormwater	11-Hospital/University	02-3/4"	0
01-Water,Sewer,Stormwater	11-Hospital/University	03-1"	404
01-Water,Sewer,Stormwater	11-Hospital/University	04-1.5"	172
01-Water,Sewer,Stormwater	11-Hospital/University	05-2"	735
01-Water,Sewer,Stormwater	11-Hospital/University	06-3"	1291

Rpt1b v5 2015.02			FY15
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
01-Water,Sewer,Stormwater	11-Hospital/University	07-4"	1310
01-Water,Sewer,Stormwater	11-Hospital/University	08-6"	650
01-Water,Sewer,Stormwater	11-Hospital/University	09-8"	75
01-Water,Sewer,Stormwater	11-Hospital/University	10-10"	20
01-Water,Sewer,Stormwater	12-Scheduled	01-5/8"	27
01-Water,Sewer,Stormwater	13-Fire Service	01-5/8"	566
01-Water,Sewer,Stormwater	13-Fire Service	03-1"	89
01-Water,Sewer,Stormwater	13-Fire Service	04-1.5"	36
01-Water,Sewer,Stormwater	13-Fire Service	05-2"	104
01-Water,Sewer,Stormwater	13-Fire Service	06-3"	19
01-Water,Sewer,Stormwater	13-Fire Service	07-4"	36
01-Water,Sewer,Stormwater	13-Fire Service	08-6"	18
01-Water,Sewer,Stormwater	13-Fire Service	09-8"	0
01-Water,Sewer,Stormwater	13-Fire Service	10-10"	0
01-Water,Sewer,Stormwater	14-City Government	01-5/8"	2761
01-Water,Sewer,Stormwater	14-City Government	02-3/4"	12
01-Water,Sewer,Stormwater	14-City Government	03-1"	1479
01-Water,Sewer,Stormwater	14-City Government	04-1.5"	877
01-Water,Sewer,Stormwater	14-City Government	05-2"	2934
01-Water,Sewer,Stormwater	14-City Government	06-3"	1638
01-Water,Sewer,Stormwater	14-City Government	07-4"	748
01-Water,Sewer,Stormwater	14-City Government	08-6"	404
01-Water,Sewer,Stormwater	14-City Government	09-8"	161
01-Water,Sewer,Stormwater	14-City Government	10-10"	205
01-Water,Sewer,Stormwater	14-City Government	11-12"	12
02-Water Only	01-General Service-Residential	01-5/8"	240
02-Water Only	01-General Service-Residential	03-1"	229
02-Water Only	01-General Service-Residential	04-1.5"	253
02-Water Only	01-General Service-Residential	05-2"	6316
02-Water Only	01-General Service-Residential	06-3"	170

Rpt1b v5 2015.02			FY15
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
02-Water Only	01-General Service-Residential	07-4"	599
02-Water Only	01-General Service-Residential	08-6"	1027
02-Water Only	01-General Service-Residential	09-8"	363
02-Water Only	01-General Service-Residential	10-10"	36
02-Water Only	01-General Service-Residential	11-12"	12
02-Water Only	01-General Service-Residential	Y-Unknown	12
02-Water Only	02-General Service-Commercial	01-5/8"	70
02-Water Only	02-General Service-Commercial	03-1"	60
02-Water Only	02-General Service-Commercial	04-1.5"	1
02-Water Only	02-General Service-Commercial	05-2"	1064
02-Water Only	02-General Service-Commercial	06-3"	154
02-Water Only	02-General Service-Commercial	07-4"	1573
02-Water Only	02-General Service-Commercial	08-6"	2326
02-Water Only	02-General Service-Commercial	09-8"	1065
02-Water Only	02-General Service-Commercial	10-10"	95
02-Water Only	02-General Service-Commercial	11-12"	49
02-Water Only	03-General Service-Industrial	05-2"	24
02-Water Only	03-General Service-Industrial	07-4"	60
02-Water Only	03-General Service-Industrial	08-6"	130
02-Water Only	03-General Service-Industrial	09-8"	103
02-Water Only	03-General Service-Industrial	10-10"	12
02-Water Only	04-General Service-Public Utilities	05-2"	12
02-Water Only	04-General Service-Public Utilities	11-12"	10
02-Water Only	05-P.H.A	01-5/8"	60
02-Water Only	05-P.H.A	03-1"	752
02-Water Only	05-P.H.A	05-2"	668
02-Water Only	05-P.H.A	07-4"	86
02-Water Only	05-P.H.A	08-6"	148
02-Water Only	05-P.H.A	09-8"	25
02-Water Only	06-Charity/Non-Public Schools	01-5/8"	7

Rpt1b v5 2015.02		FY15	
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
02-Water Only	06-Charity/Non-Public Schools	03-1"	0
02-Water Only	06-Charity/Non-Public Schools	05-2"	12
02-Water Only	06-Charity/Non-Public Schools	06-3"	0
02-Water Only	06-Charity/Non-Public Schools	07-4"	58
02-Water Only	06-Charity/Non-Public Schools	08-6"	37
02-Water Only	06-Charity/Non-Public Schools	09-8"	0
02-Water Only	07-Public Schools	06-3"	35
02-Water Only	07-Public Schools	07-4"	147
02-Water Only	07-Public Schools	08-6"	590
02-Water Only	07-Public Schools	09-8"	183
02-Water Only	07-Public Schools	10-10"	25
02-Water Only	08-Senior Citizens Discount	05-2"	12
02-Water Only	09-Hand Bill	06-3"	12
02-Water Only	09-Hand Bill	07-4"	12
02-Water Only	09-Hand Bill	08-6"	133
02-Water Only	09-Hand Bill	09-8"	72
02-Water Only	10-City Leased	04-1.5"	0
02-Water Only	10-City Leased	05-2"	12
02-Water Only	10-City Leased	07-4"	48
02-Water Only	10-City Leased	08-6"	25
02-Water Only	10-City Leased	09-8"	12
02-Water Only	10-City Leased	10-10"	12
02-Water Only	11-Hospital/University	01-5/8"	12
02-Water Only	11-Hospital/University	03-1"	12
02-Water Only	11-Hospital/University	06-3"	14
02-Water Only	11-Hospital/University	07-4"	207
02-Water Only	11-Hospital/University	08-6"	548
02-Water Only	11-Hospital/University	09-8"	73
02-Water Only	11-Hospital/University	10-10"	24
02-Water Only	13-Fire Service	01-5/8"	372

Rpt1b v5 2015.02			FY15
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
02-Water Only	13-Fire Service	03-1"	407
02-Water Only	13-Fire Service	04-1.5"	449
02-Water Only	13-Fire Service	05-2"	9196
02-Water Only	13-Fire Service	06-3"	2290
02-Water Only	13-Fire Service	07-4"	12241
02-Water Only	13-Fire Service	08-6"	19289
02-Water Only	13-Fire Service	09-8"	6011
02-Water Only	13-Fire Service	10-10"	878
02-Water Only	13-Fire Service	11-12"	132
02-Water Only	14-City Government	03-1"	6
02-Water Only	14-City Government	05-2"	12
02-Water Only	14-City Government	06-3"	35
02-Water Only	14-City Government	07-4"	243
02-Water Only	14-City Government	08-6"	511
02-Water Only	14-City Government	09-8"	192
02-Water Only	14-City Government	10-10"	32
03-Stormwater Only	01-General Service-Residential	01-5/8"	281128
03-Stormwater Only	01-General Service-Residential	02-3/4"	120
03-Stormwater Only	01-General Service-Residential	03-1"	1310
03-Stormwater Only	01-General Service-Residential	04-1.5"	63
03-Stormwater Only	01-General Service-Residential	05-2"	175
03-Stormwater Only	01-General Service-Residential	06-3"	13
03-Stormwater Only	01-General Service-Residential	07-4"	84
03-Stormwater Only	01-General Service-Residential	08-6"	105
03-Stormwater Only	01-General Service-Residential	09-8"	60
03-Stormwater Only	01-General Service-Residential	10-10"	0
03-Stormwater Only	01-General Service-Residential	12-Unknown	0
03-Stormwater Only	01-General Service-Residential	A-Unknown	143855
03-Stormwater Only	02-General Service-Commercial	01-5/8"	3399
03-Stormwater Only	02-General Service-Commercial	02-3/4"	41

Rpt1b v5 2015.02			FY15
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
03-Stormwater Only	02-General Service-Commercial	03-1"	649
03-Stormwater Only	02-General Service-Commercial	04-1.5"	118
03-Stormwater Only	02-General Service-Commercial	05-2"	165
03-Stormwater Only	02-General Service-Commercial	06-3"	13
03-Stormwater Only	02-General Service-Commercial	07-4"	21
03-Stormwater Only	02-General Service-Commercial	08-6"	30
03-Stormwater Only	02-General Service-Commercial	09-8"	19
03-Stormwater Only	02-General Service-Commercial	12-Unknown	0
03-Stormwater Only	02-General Service-Commercial	A-Unknown	410301
03-Stormwater Only	02-General Service-Commercial	Y-Unknown	0
03-Stormwater Only	03-General Service-Industrial	01-5/8"	10
03-Stormwater Only	03-General Service-Industrial	03-1"	24
03-Stormwater Only	03-General Service-Industrial	04-1.5"	0
03-Stormwater Only	03-General Service-Industrial	05-2"	0
03-Stormwater Only	03-General Service-Industrial	06-3"	0
03-Stormwater Only	03-General Service-Industrial	07-4"	12
03-Stormwater Only	03-General Service-Industrial	08-6"	0
03-Stormwater Only	03-General Service-Industrial	12-Unknown	1
03-Stormwater Only	03-General Service-Industrial	A-Unknown	111
03-Stormwater Only	03-General Service-Industrial	Y-Unknown	0
03-Stormwater Only	04-General Service-Public Utilities	01-5/8"	5
03-Stormwater Only	04-General Service-Public Utilities	03-1"	13
03-Stormwater Only	04-General Service-Public Utilities	05-2"	3
03-Stormwater Only	04-General Service-Public Utilities	A-Unknown	15098
03-Stormwater Only	05-P.H.A	01-5/8"	697
03-Stormwater Only	05-P.H.A	03-1"	21
03-Stormwater Only	05-P.H.A	05-2"	6
03-Stormwater Only	05-P.H.A	A-Unknown	13902
03-Stormwater Only	06-Charity/Non-Public Schools	01-5/8"	220
03-Stormwater Only	06-Charity/Non-Public Schools	03-1"	7

Rpt1b v5 2015.02			FY15
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
03-Stormwater Only	06-Charity/Non-Public Schools	04-1.5"	7
03-Stormwater Only	06-Charity/Non-Public Schools	05-2"	7
03-Stormwater Only	06-Charity/Non-Public Schools	07-4"	0
03-Stormwater Only	06-Charity/Non-Public Schools	09-8"	0
03-Stormwater Only	06-Charity/Non-Public Schools	A-Unknown	867
03-Stormwater Only	07-Public Schools	01-5/8"	12
03-Stormwater Only	07-Public Schools	08-6"	0
03-Stormwater Only	07-Public Schools	09-8"	0
03-Stormwater Only	07-Public Schools	12-Unknown	0
03-Stormwater Only	07-Public Schools	A-Unknown	989
03-Stormwater Only	08-Senior Citizens Discount	01-5/8"	4545
03-Stormwater Only	08-Senior Citizens Discount	A-Unknown	12
03-Stormwater Only	09-Hand Bill	01-5/8"	6
03-Stormwater Only	09-Hand Bill	05-2"	48
03-Stormwater Only	09-Hand Bill	06-3"	12
03-Stormwater Only	09-Hand Bill	08-6"	0
03-Stormwater Only	09-Hand Bill	09-8"	0
03-Stormwater Only	09-Hand Bill	10-10"	6
03-Stormwater Only	09-Hand Bill	A-Unknown	48
03-Stormwater Only	10-City Leased	01-5/8"	0
03-Stormwater Only	10-City Leased	03-1"	0
03-Stormwater Only	10-City Leased	05-2"	0
03-Stormwater Only	10-City Leased	06-3"	0
03-Stormwater Only	10-City Leased	07-4"	0
03-Stormwater Only	10-City Leased	08-6"	0
03-Stormwater Only	10-City Leased	09-8"	0
03-Stormwater Only	11-Hospital/University	01-5/8"	12
03-Stormwater Only	11-Hospital/University	03-1"	0
03-Stormwater Only	11-Hospital/University	05-2"	0
03-Stormwater Only	11-Hospital/University	08-6"	0

Rpt1b v5 2015.02			FY15
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
03-Stormwater Only	11-Hospital/University	A-Unknown	2153
03-Stormwater Only	12-Scheduled	01-5/8"	13
03-Stormwater Only	12-Scheduled	A-Unknown	8
03-Stormwater Only	13-Fire Service	01-5/8"	0
03-Stormwater Only	13-Fire Service	03-1"	84
03-Stormwater Only	13-Fire Service	04-1.5"	48
03-Stormwater Only	13-Fire Service	05-2"	691
03-Stormwater Only	13-Fire Service	06-3"	0
03-Stormwater Only	13-Fire Service	07-4"	226
03-Stormwater Only	13-Fire Service	08-6"	188
03-Stormwater Only	13-Fire Service	09-8"	48
03-Stormwater Only	13-Fire Service	10-10"	0
03-Stormwater Only	13-Fire Service	11-12"	12
03-Stormwater Only	13-Fire Service	12-Unknown	0
03-Stormwater Only	13-Fire Service	A-Unknown	1402
03-Stormwater Only	14-City Government	01-5/8"	1405
03-Stormwater Only	14-City Government	02-3/4"	12
03-Stormwater Only	14-City Government	03-1"	40
03-Stormwater Only	14-City Government	04-1.5"	4
03-Stormwater Only	14-City Government	05-2"	12
03-Stormwater Only	14-City Government	06-3"	0
03-Stormwater Only	14-City Government	07-4"	28
03-Stormwater Only	14-City Government	08-6"	16
03-Stormwater Only	14-City Government	09-8"	12
03-Stormwater Only	14-City Government	12-Unknown	0
03-Stormwater Only	14-City Government	A-Unknown	8095
04-Sewer and Stormwater	01-General Service-Residential	01-5/8"	433
04-Sewer and Stormwater	01-General Service-Residential	02-3/4"	12
04-Sewer and Stormwater	01-General Service-Residential	07-4"	0
04-Sewer and Stormwater	01-General Service-Residential	08-6"	0

Rpt1b v5 2015.02			FY15
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
04-Sewer and Stormwater	01-General Service-Residential	A-Unknown	0
04-Sewer and Stormwater	02-General Service-Commercial	01-5/8"	0
04-Sewer and Stormwater	02-General Service-Commercial	05-2"	0
04-Sewer and Stormwater	03-General Service-Industrial	04-1.5"	0
04-Sewer and Stormwater	03-General Service-Industrial	05-2"	12
04-Sewer and Stormwater	03-General Service-Industrial	06-3"	0
04-Sewer and Stormwater	03-General Service-Industrial	11-12"	0
04-Sewer and Stormwater	04-General Service-Public Utilities	03-1"	12
04-Sewer and Stormwater	06-Charity/Non-Public Schools	03-1"	11
04-Sewer and Stormwater	09-Hand Bill	01-5/8"	140
04-Sewer and Stormwater	09-Hand Bill	04-1.5"	0
04-Sewer and Stormwater	09-Hand Bill	05-2"	36
04-Sewer and Stormwater	09-Hand Bill	06-3"	18
04-Sewer and Stormwater	09-Hand Bill	08-6"	13
04-Sewer and Stormwater	09-Hand Bill	09-8"	23
04-Sewer and Stormwater	09-Hand Bill	10-10"	6
04-Sewer and Stormwater	11-Hospital/University	01-5/8"	12
05-Water and Stormwater	01-General Service-Residential	01-5/8"	14972
05-Water and Stormwater	01-General Service-Residential	02-3/4"	12
05-Water and Stormwater	01-General Service-Residential	03-1"	2016
05-Water and Stormwater	01-General Service-Residential	04-1.5"	164
05-Water and Stormwater	01-General Service-Residential	05-2"	246
05-Water and Stormwater	01-General Service-Residential	06-3"	0
05-Water and Stormwater	01-General Service-Residential	07-4"	24
05-Water and Stormwater	01-General Service-Residential	08-6"	0
05-Water and Stormwater	01-General Service-Residential	09-8"	0
05-Water and Stormwater	01-General Service-Residential	10-10"	0
05-Water and Stormwater	01-General Service-Residential	11-12"	0
05-Water and Stormwater	01-General Service-Residential	Y-Unknown	0
05-Water and Stormwater	02-General Service-Commercial	01-5/8"	973

Rpt1b v5 2015.02		FY15	
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
05-Water and Stormwater	02-General Service-Commercial	03-1"	260
05-Water and Stormwater	02-General Service-Commercial	04-1.5"	200
05-Water and Stormwater	02-General Service-Commercial	05-2"	212
05-Water and Stormwater	02-General Service-Commercial	06-3"	24
05-Water and Stormwater	02-General Service-Commercial	07-4"	104
05-Water and Stormwater	02-General Service-Commercial	08-6"	111
05-Water and Stormwater	02-General Service-Commercial	09-8"	24
05-Water and Stormwater	02-General Service-Commercial	10-10"	0
05-Water and Stormwater	02-General Service-Commercial	11-12"	0
05-Water and Stormwater	03-General Service-Industrial	01-5/8"	36
05-Water and Stormwater	03-General Service-Industrial	03-1"	24
05-Water and Stormwater	03-General Service-Industrial	04-1.5"	12
05-Water and Stormwater	03-General Service-Industrial	05-2"	32
05-Water and Stormwater	03-General Service-Industrial	06-3"	25
05-Water and Stormwater	03-General Service-Industrial	07-4"	19
05-Water and Stormwater	03-General Service-Industrial	08-6"	31
05-Water and Stormwater	03-General Service-Industrial	09-8"	0
05-Water and Stormwater	03-General Service-Industrial	10-10"	11
05-Water and Stormwater	04-General Service-Public Utilities	03-1"	12
05-Water and Stormwater	04-General Service-Public Utilities	11-12"	0
05-Water and Stormwater	05-P.H.A	01-5/8"	0
05-Water and Stormwater	05-P.H.A	03-1"	12
05-Water and Stormwater	05-P.H.A	05-2"	24
05-Water and Stormwater	05-P.H.A	07-4"	0
05-Water and Stormwater	05-P.H.A	08-6"	0
05-Water and Stormwater	05-P.H.A	09-8"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	01-5/8"	173
05-Water and Stormwater	06-Charity/Non-Public Schools	03-1"	37
05-Water and Stormwater	06-Charity/Non-Public Schools	04-1.5"	33
05-Water and Stormwater	06-Charity/Non-Public Schools	05-2"	48

Rpt1b v5 2015.02			FY15
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
05-Water and Stormwater	06-Charity/Non-Public Schools	06-3"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	07-4"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	08-6"	0
05-Water and Stormwater	06-Charity/Non-Public Schools	09-8"	0
05-Water and Stormwater	07-Public Schools	06-3"	0
05-Water and Stormwater	07-Public Schools	07-4"	0
05-Water and Stormwater	07-Public Schools	08-6"	4
05-Water and Stormwater	07-Public Schools	09-8"	0
05-Water and Stormwater	07-Public Schools	10-10"	0
05-Water and Stormwater	08-Senior Citizens Discount	01-5/8"	198
05-Water and Stormwater	08-Senior Citizens Discount	05-2"	0
05-Water and Stormwater	09-Hand Bill	01-5/8"	12
05-Water and Stormwater	09-Hand Bill	06-3"	0
05-Water and Stormwater	09-Hand Bill	08-6"	22
05-Water and Stormwater	09-Hand Bill	09-8"	12
05-Water and Stormwater	09-Hand Bill	10-10"	6
05-Water and Stormwater	10-City Leased	01-5/8"	80
05-Water and Stormwater	10-City Leased	03-1"	36
05-Water and Stormwater	10-City Leased	04-1.5"	12
05-Water and Stormwater	10-City Leased	05-2"	16
05-Water and Stormwater	10-City Leased	06-3"	24
05-Water and Stormwater	10-City Leased	07-4"	34
05-Water and Stormwater	10-City Leased	08-6"	48
05-Water and Stormwater	10-City Leased	09-8"	12
05-Water and Stormwater	10-City Leased	10-10"	0
05-Water and Stormwater	11-Hospital/University	01-5/8"	36
05-Water and Stormwater	11-Hospital/University	06-3"	0
05-Water and Stormwater	11-Hospital/University	07-4"	0
05-Water and Stormwater	11-Hospital/University	08-6"	0
05-Water and Stormwater	11-Hospital/University	09-8"	0

Rpt1b v5 2015.02			FY15
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
05-Water and Stormwater	11-Hospital/University	10-10"	0
05-Water and Stormwater	13-Fire Service	01-5/8"	0
05-Water and Stormwater	13-Fire Service	03-1"	57
05-Water and Stormwater	13-Fire Service	04-1.5"	23
05-Water and Stormwater	13-Fire Service	05-2"	1049
05-Water and Stormwater	13-Fire Service	06-3"	0
05-Water and Stormwater	13-Fire Service	07-4"	187
05-Water and Stormwater	13-Fire Service	08-6"	90
05-Water and Stormwater	13-Fire Service	09-8"	33
05-Water and Stormwater	13-Fire Service	10-10"	12
05-Water and Stormwater	13-Fire Service	11-12"	0
05-Water and Stormwater	14-City Government	01-5/8"	168
05-Water and Stormwater	14-City Government	02-3/4"	60
05-Water and Stormwater	14-City Government	03-1"	71
05-Water and Stormwater	14-City Government	04-1.5"	36
05-Water and Stormwater	14-City Government	05-2"	44
05-Water and Stormwater	14-City Government	06-3"	0
05-Water and Stormwater	14-City Government	07-4"	7
05-Water and Stormwater	14-City Government	08-6"	12
05-Water and Stormwater	14-City Government	09-8"	0
05-Water and Stormwater	14-City Government	10-10"	0
06-Sewer Only	01-General Service-Residential	01-5/8"	18
06-Sewer Only	02-General Service-Commercial	01-5/8"	0
06-Sewer Only	02-General Service-Commercial	05-2"	12
06-Sewer Only	03-General Service-Industrial	02-3/4"	0
06-Sewer Only	03-General Service-Industrial	10-10"	0
06-Sewer Only	04-General Service-Public Utilities	07-4"	3
06-Sewer Only	06-Charity/Non-Public Schools	03-1"	0
06-Sewer Only	09-Hand Bill	01-5/8"	4
06-Sewer Only	09-Hand Bill	05-2"	11

Rpt1b v5 2015.02			FY15
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
06-Sewer Only	13-Fire Service	01-5/8"	12
06-Sewer Only	14-City Government	07-4"	5
07-Water and Sewer	01-General Service-Residential	01-5/8"	212
07-Water and Sewer	01-General Service-Residential	02-3/4"	0
07-Water and Sewer	01-General Service-Residential	03-1"	14
07-Water and Sewer	01-General Service-Residential	05-2"	0
07-Water and Sewer	01-General Service-Residential	06-3"	0
07-Water and Sewer	02-General Service-Commercial	01-5/8"	120
07-Water and Sewer	02-General Service-Commercial	02-3/4"	0
07-Water and Sewer	02-General Service-Commercial	03-1"	54
07-Water and Sewer	02-General Service-Commercial	04-1.5"	12
07-Water and Sewer	02-General Service-Commercial	05-2"	45
07-Water and Sewer	02-General Service-Commercial	06-3"	21
07-Water and Sewer	02-General Service-Commercial	07-4"	0
07-Water and Sewer	02-General Service-Commercial	09-8"	0
07-Water and Sewer	03-General Service-Industrial	01-5/8"	0
07-Water and Sewer	05-P.H.A	01-5/8"	14
07-Water and Sewer	05-P.H.A	03-1"	0
07-Water and Sewer	05-P.H.A	06-3"	12
07-Water and Sewer	06-Charity/Non-Public Schools	01-5/8"	0
07-Water and Sewer	06-Charity/Non-Public Schools	03-1"	12
07-Water and Sewer	06-Charity/Non-Public Schools	04-1.5"	10
07-Water and Sewer	06-Charity/Non-Public Schools	05-2"	12
07-Water and Sewer	07-Public Schools	07-4"	8
07-Water and Sewer	07-Public Schools	08-6"	0
07-Water and Sewer	08-Senior Citizens Discount	01-5/8"	11
07-Water and Sewer	09-Hand Bill	04-1.5"	0
07-Water and Sewer	09-Hand Bill	05-2"	0
07-Water and Sewer	11-Hospital/University	05-2"	0
07-Water and Sewer	13-Fire Service	01-5/8"	0

Rpt1b v5 2015.02			FY15
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
07-Water and Sewer	13-Fire Service	03-1"	0
07-Water and Sewer	13-Fire Service	05-2"	0
07-Water and Sewer	13-Fire Service	12-Unknown	12
07-Water and Sewer	14-City Government	01-5/8"	0
07-Water and Sewer	14-City Government	03-1"	0
07-Water and Sewer	14-City Government	06-3"	0
07-Water and Sewer	14-City Government	08-6"	12
08-RFSS, All Services	01-General Service-Residential	01-5/8"	84
08-RFSS, All Services	01-General Service-Residential	02-3/4"	344
08-RFSS, All Services	01-General Service-Residential	03-1"	8780
08-RFSS, All Services	01-General Service-Residential	04-1.5"	977
08-RFSS, All Services	01-General Service-Residential	05-2"	1059
08-RFSS, All Services	02-General Service-Commercial	01-5/8"	12
08-RFSS, All Services	02-General Service-Commercial	02-3/4"	27
08-RFSS, All Services	02-General Service-Commercial	03-1"	405
08-RFSS, All Services	02-General Service-Commercial	04-1.5"	58
08-RFSS, All Services	02-General Service-Commercial	05-2"	12
08-RFSS, All Services	03-General Service-Industrial	03-1"	1
08-RFSS, All Services	04-General Service-Public Utilities	03-1"	0
08-RFSS, All Services	05-P.H.A	03-1"	0
08-RFSS, All Services	05-P.H.A	04-1.5"	99
08-RFSS, All Services	05-P.H.A	05-2"	1
08-RFSS, All Services	08-Senior Citizens Discount	03-1"	8
08-RFSS, All Services	13-Fire Service	03-1"	0
08-RFSS, All Services	13-Fire Service	04-1.5"	0
08-RFSS, All Services	14-City Government	03-1"	12
09-RFSS, No Sewer	01-General Service-Residential	03-1"	10
09-RFSS, No Sewer	01-General Service-Residential	05-2"	4
09-RFSS, No Sewer	02-General Service-Commercial	03-1"	6
10-Unknown	01-General Service-Residential	01-5/8"	91

Rpt1b v5 2015.02			FY15
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
10-Unknown	01-General Service-Residential	03-1"	142
10-Unknown	01-General Service-Residential	04-1.5"	0
10-Unknown	01-General Service-Residential	05-2"	416
10-Unknown	01-General Service-Residential	06-3"	1
10-Unknown	01-General Service-Residential	07-4"	25
10-Unknown	01-General Service-Residential	08-6"	8
10-Unknown	01-General Service-Residential	09-8"	1
10-Unknown	01-General Service-Residential	12-Unknown	1052
10-Unknown	01-General Service-Residential	A-Unknown	2
10-Unknown	02-General Service-Commercial	01-5/8"	2
10-Unknown	02-General Service-Commercial	02-3/4"	0
10-Unknown	02-General Service-Commercial	03-1"	20
10-Unknown	02-General Service-Commercial	04-1.5"	10
10-Unknown	02-General Service-Commercial	05-2"	240
10-Unknown	02-General Service-Commercial	06-3"	0
10-Unknown	02-General Service-Commercial	07-4"	102
10-Unknown	02-General Service-Commercial	08-6"	62
10-Unknown	02-General Service-Commercial	09-8"	54
10-Unknown	02-General Service-Commercial	10-10"	4
10-Unknown	02-General Service-Commercial	12-Unknown	6212
10-Unknown	02-General Service-Commercial	A-Unknown	12
10-Unknown	03-General Service-Industrial	01-5/8"	1
10-Unknown	03-General Service-Industrial	12-Unknown	234
10-Unknown	04-General Service-Public Utilities	12-Unknown	198
10-Unknown	05-P.H.A	07-4"	1
10-Unknown	05-P.H.A	12-Unknown	212
10-Unknown	06-Charity/Non-Public Schools	01-5/8"	0
10-Unknown	06-Charity/Non-Public Schools	09-8"	0
10-Unknown	06-Charity/Non-Public Schools	12-Unknown	13
10-Unknown	07-Public Schools	12-Unknown	4

Rpt1b v5 2015.02			FY15
Service Type	Customer Type	Meter Size	fy15 # of Original Bills Issued
10-Unknown	08-Senior Citizens Discount	01-5/8"	2
10-Unknown	08-Senior Citizens Discount	12-Unknown	0
10-Unknown	09-Hand Bill	08-6"	0
10-Unknown	09-Hand Bill	10-10"	12
10-Unknown	09-Hand Bill	12-Unknown	457
10-Unknown	10-City Leased	12-Unknown	0
10-Unknown	11-Hospital/University	06-3"	1
10-Unknown	11-Hospital/University	07-4"	1
10-Unknown	11-Hospital/University	08-6"	2
10-Unknown	11-Hospital/University	09-8"	24
10-Unknown	11-Hospital/University	12-Unknown	24
10-Unknown	13-Fire Service	03-1"	119
10-Unknown	13-Fire Service	04-1.5"	143
10-Unknown	13-Fire Service	05-2"	2575
10-Unknown	13-Fire Service	06-3"	20
10-Unknown	13-Fire Service	07-4"	206
10-Unknown	13-Fire Service	08-6"	358
10-Unknown	13-Fire Service	09-8"	49
10-Unknown	13-Fire Service	10-10"	15
10-Unknown	13-Fire Service	12-Unknown	18
10-Unknown	14-City Government	01-5/8"	0
10-Unknown	14-City Government	05-2"	0
10-Unknown	14-City Government	08-6"	15
10-Unknown	14-City Government	12-Unknown	65

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	01-5/8"	31166874.29	31587256.03
01-Water,Sewer,Stormwater	01-General Service-Residential	02-3/4"	1748.24	1862.79
01-Water,Sewer,Stormwater	01-General Service-Residential	03-1"	229698.5	274896.12
01-Water,Sewer,Stormwater	01-General Service-Residential	04-1.5"	101779.16	125665.92
01-Water,Sewer,Stormwater	01-General Service-Residential	05-2"	111463.11	141452.8
01-Water,Sewer,Stormwater	01-General Service-Residential	06-3"	69504.99	91208.22
01-Water,Sewer,Stormwater	01-General Service-Residential	07-4"	36826.94	47471.77
01-Water,Sewer,Stormwater	01-General Service-Residential	08-6"	20686.58	27024.52
01-Water,Sewer,Stormwater	01-General Service-Residential	09-8"	7505.29	9900.13
01-Water,Sewer,Stormwater	01-General Service-Residential	11-12"	0	0
01-Water,Sewer,Stormwater	02-General Service-Commercial	01-5/8"	2207460.04	2247259.55
01-Water,Sewer,Stormwater	02-General Service-Commercial	02-3/4"	1051.82	1133.74
01-Water,Sewer,Stormwater	02-General Service-Commercial	03-1"	311322.12	357838.39
01-Water,Sewer,Stormwater	02-General Service-Commercial	04-1.5"	203409.3	256819.17
01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	415258.57	563946.77
01-Water,Sewer,Stormwater	02-General Service-Commercial	06-3"	257101.06	360781.45
01-Water,Sewer,Stormwater	02-General Service-Commercial	07-4"	241908.29	326719.61
01-Water,Sewer,Stormwater	02-General Service-Commercial	08-6"	166954.22	225592.77
01-Water,Sewer,Stormwater	02-General Service-Commercial	09-8"	53996.97	71203.57
01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	15414.94	20259.4
01-Water,Sewer,Stormwater	03-General Service-Industrial	01-5/8"	41856.55	42350.37
01-Water,Sewer,Stormwater	03-General Service-Industrial	03-1"	31006.33	39583.58
01-Water,Sewer,Stormwater	03-General Service-Industrial	04-1.5"	15704.08	19393.4
01-Water,Sewer,Stormwater	03-General Service-Industrial	05-2"	31051.36	39422.17
01-Water,Sewer,Stormwater	03-General Service-Industrial	06-3"	25130.91	33102.01
01-Water,Sewer,Stormwater	03-General Service-Industrial	07-4"	10764.33	13888.38
01-Water,Sewer,Stormwater	03-General Service-Industrial	08-6"	12806.46	16734.99
01-Water,Sewer,Stormwater	03-General Service-Industrial	10-10"	0	0
01-Water,Sewer,Stormwater	03-General Service-Industrial	11-12"	0	0
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	01-5/8"	3656.9	3744.51

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	03-1"	3422.35	3900.85
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	04-1.5"	2024.47	2499.7
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	05-2"	5520.6	7010.1
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	06-3"	6332.47	8307.39
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	07-4"	5111.67	6562.2
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	08-6"	28714.18	206179.82
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	09-8"	2710.22	3575.94
01-Water,Sewer,Stormwater	05-P.H.A	01-5/8"	417239.4	422235.59
01-Water,Sewer,Stormwater	05-P.H.A	02-3/4"	0	0
01-Water,Sewer,Stormwater	05-P.H.A	03-1"	1670.25	1908.31
01-Water,Sewer,Stormwater	05-P.H.A	04-1.5"	8329.94	13945.6
01-Water,Sewer,Stormwater	05-P.H.A	05-2"	4260.33	5410.26
01-Water,Sewer,Stormwater	05-P.H.A	06-3"	16759.68	21982.8
01-Water,Sewer,Stormwater	05-P.H.A	07-4"	15077.07	19447.47
01-Water,Sewer,Stormwater	05-P.H.A	08-6"	21069.91	27506.79
01-Water,Sewer,Stormwater	05-P.H.A	09-8"	16636.99	21944.79
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	01-5/8"	72141.7	73160.44
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	02-3/4"	0	0
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	03-1"	28635.09	32650.49
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	04-1.5"	21100.49	26055.18
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	05-2"	42919.16	54477.83
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	06-3"	45966.03	60285.53
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	07-4"	62774.83	80982.48
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	08-6"	18770.36	24520.15
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	09-8"	2970.71	3922.24
01-Water,Sewer,Stormwater	07-Public Schools	01-5/8"	580.77	588.53
01-Water,Sewer,Stormwater	07-Public Schools	03-1"	897.62	1023.38
01-Water,Sewer,Stormwater	07-Public Schools	04-1.5"	980.28	1210.52
01-Water,Sewer,Stormwater	07-Public Schools	05-2"	8780.9	11146.84
01-Water,Sewer,Stormwater	07-Public Schools	06-3"	36956.71	48460.25

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
01-Water,Sewer,Stormwater	07-Public Schools	07-4"	127921.81	194801.25
01-Water,Sewer,Stormwater	07-Public Schools	08-6"	21944.71	28665.79
01-Water,Sewer,Stormwater	07-Public Schools	09-8"	5628.82	7427.47
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	01-5/8"	1185401.52	1201437.67
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	02-3/4"	0	0
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	03-1"	89.76	102.35
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	04-1.5"	140.04	173.03
01-Water,Sewer,Stormwater	09-Hand Bill	01-5/8"	852.6	863.56
01-Water,Sewer,Stormwater	09-Hand Bill	03-1"	1863.87	2120.82
01-Water,Sewer,Stormwater	09-Hand Bill	04-1.5"	1945	2401.72
01-Water,Sewer,Stormwater	09-Hand Bill	05-2"	10511.01	13347.55
01-Water,Sewer,Stormwater	09-Hand Bill	06-3"	34487.75	45221.67
01-Water,Sewer,Stormwater	09-Hand Bill	07-4"	61416.49	79234.01
01-Water,Sewer,Stormwater	09-Hand Bill	08-6"	40349.96	52656.97
01-Water,Sewer,Stormwater	09-Hand Bill	09-8"	15010.69	19795.93
01-Water,Sewer,Stormwater	09-Hand Bill	10-10"	12400.69	16280.47
01-Water,Sewer,Stormwater	10-City Leased	01-5/8"	833.24	843.94
01-Water,Sewer,Stormwater	10-City Leased	03-1"	558.86	637.02
01-Water,Sewer,Stormwater	10-City Leased	04-1.5"	1120.32	1383.48
01-Water,Sewer,Stormwater	10-City Leased	05-2"	3595.81	4568.22
01-Water,Sewer,Stormwater	10-City Leased	06-3"	2854.25	3743.23
01-Water,Sewer,Stormwater	10-City Leased	07-4"	6900.27	8899.12
01-Water,Sewer,Stormwater	10-City Leased	08-6"	0	0
01-Water,Sewer,Stormwater	10-City Leased	09-8"	0	0
01-Water,Sewer,Stormwater	11-Hospital/University	01-5/8"	2756.2	2798.68
01-Water,Sewer,Stormwater	11-Hospital/University	02-3/4"	0	0
01-Water,Sewer,Stormwater	11-Hospital/University	03-1"	3022.03	3445.48
01-Water,Sewer,Stormwater	11-Hospital/University	04-1.5"	2359	2908.4
01-Water,Sewer,Stormwater	11-Hospital/University	05-2"	13277.45	16838.83
01-Water,Sewer,Stormwater	11-Hospital/University	06-3"	39083.18	51248.11

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
01-Water,Sewer,Stormwater	11-Hospital/University	07-4"	70480.83	90917.15
01-Water,Sewer,Stormwater	11-Hospital/University	08-6"	66091.11	86318.62
01-Water,Sewer,Stormwater	11-Hospital/University	09-8"	16064.59	21299.98
01-Water,Sewer,Stormwater	11-Hospital/University	10-10"	5549.95	7288.9
01-Water,Sewer,Stormwater	12-Scheduled	01-5/8"	169.2	171.41
01-Water,Sewer,Stormwater	13-Fire Service	01-5/8"	3656.64	3703.05
01-Water,Sewer,Stormwater	13-Fire Service	03-1"	888.5	1012.9
01-Water,Sewer,Stormwater	13-Fire Service	04-1.5"	560.16	691.73
01-Water,Sewer,Stormwater	13-Fire Service	05-2"	2397.26	3043.39
01-Water,Sewer,Stormwater	13-Fire Service	06-3"	753.17	988.87
01-Water,Sewer,Stormwater	13-Fire Service	07-4"	2484.05	3207.05
01-Water,Sewer,Stormwater	13-Fire Service	08-6"	2404.86	3143.14
01-Water,Sewer,Stormwater	13-Fire Service	09-8"	0	0
01-Water,Sewer,Stormwater	13-Fire Service	10-10"	0	0
01-Water,Sewer,Stormwater	14-City Government	01-5/8"	18398.26	18598.48
01-Water,Sewer,Stormwater	14-City Government	02-3/4"	89.87	96.42
01-Water,Sewer,Stormwater	14-City Government	03-1"	14958.42	17043.01
01-Water,Sewer,Stormwater	14-City Government	04-1.5"	13950.06	17214.13
01-Water,Sewer,Stormwater	14-City Government	05-2"	68805.96	87338.68
01-Water,Sewer,Stormwater	14-City Government	06-3"	67710.03	88766.86
01-Water,Sewer,Stormwater	14-City Government	07-4"	53043.86	68404.17
01-Water,Sewer,Stormwater	14-City Government	08-6"	68188.12	222663.21
01-Water,Sewer,Stormwater	14-City Government	09-8"	34019.27	44872.55
01-Water,Sewer,Stormwater	14-City Government	10-10"	65955.08	86669.77
01-Water,Sewer,Stormwater	14-City Government	11-12"	6360.78	8567.29
02-Water Only	01-General Service-Residential	01-5/8"	697.53	0
02-Water Only	01-General Service-Residential	03-1"	359.26	136.54
02-Water Only	01-General Service-Residential	04-1.5"	0	0
02-Water Only	01-General Service-Residential	05-2"	553.2	0
02-Water Only	01-General Service-Residential	06-3"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
02-Water Only	01-General Service-Residential	07-4"	0	0
02-Water Only	01-General Service-Residential	08-6"	0	0
02-Water Only	01-General Service-Residential	09-8"	0	0
02-Water Only	01-General Service-Residential	10-10"	0	0
02-Water Only	01-General Service-Residential	11-12"	0	0
02-Water Only	01-General Service-Residential	Y-Unknown	0	0
02-Water Only	02-General Service-Commercial	01-5/8"	77.5	0
02-Water Only	02-General Service-Commercial	03-1"	0	0
02-Water Only	02-General Service-Commercial	04-1.5"	0	0
02-Water Only	02-General Service-Commercial	05-2"	0	0
02-Water Only	02-General Service-Commercial	06-3"	0	0
02-Water Only	02-General Service-Commercial	07-4"	0	0
02-Water Only	02-General Service-Commercial	08-6"	0	0
02-Water Only	02-General Service-Commercial	09-8"	882.52	1165.77
02-Water Only	02-General Service-Commercial	10-10"	0	0
02-Water Only	02-General Service-Commercial	11-12"	0	0
02-Water Only	03-General Service-Industrial	05-2"	0	0
02-Water Only	03-General Service-Industrial	07-4"	0	0
02-Water Only	03-General Service-Industrial	08-6"	0	0
02-Water Only	03-General Service-Industrial	09-8"	0	0
02-Water Only	03-General Service-Industrial	10-10"	0	0
02-Water Only	04-General Service-Public Utilities	05-2"	0	0
02-Water Only	04-General Service-Public Utilities	11-12"	0	0
02-Water Only	05-P.H.A	01-5/8"	0	0
02-Water Only	05-P.H.A	03-1"	0	0
02-Water Only	05-P.H.A	05-2"	0	0
02-Water Only	05-P.H.A	07-4"	0	0
02-Water Only	05-P.H.A	08-6"	0	0
02-Water Only	05-P.H.A	09-8"	0	0
02-Water Only	06-Charity/Non-Public Schools	01-5/8"	68.58	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
02-Water Only	06-Charity/Non-Public Schools	03-1"	0	0
02-Water Only	06-Charity/Non-Public Schools	05-2"	0	0
02-Water Only	06-Charity/Non-Public Schools	06-3"	0	0
02-Water Only	06-Charity/Non-Public Schools	07-4"	621	0
02-Water Only	06-Charity/Non-Public Schools	08-6"	0	0
02-Water Only	06-Charity/Non-Public Schools	09-8"	0	0
02-Water Only	07-Public Schools	06-3"	0	0
02-Water Only	07-Public Schools	07-4"	0	0
02-Water Only	07-Public Schools	08-6"	0	0
02-Water Only	07-Public Schools	09-8"	0	0
02-Water Only	07-Public Schools	10-10"	0	0
02-Water Only	08-Senior Citizens Discount	05-2"	0	0
02-Water Only	09-Hand Bill	06-3"	0	0
02-Water Only	09-Hand Bill	07-4"	0	0
02-Water Only	09-Hand Bill	08-6"	0	0
02-Water Only	09-Hand Bill	09-8"	0	0
02-Water Only	10-City Leased	04-1.5"	0	0
02-Water Only	10-City Leased	05-2"	0	0
02-Water Only	10-City Leased	07-4"	0	0
02-Water Only	10-City Leased	08-6"	0	0
02-Water Only	10-City Leased	09-8"	0	0
02-Water Only	10-City Leased	10-10"	0	0
02-Water Only	11-Hospital/University	01-5/8"	0	0
02-Water Only	11-Hospital/University	03-1"	0	0
02-Water Only	11-Hospital/University	06-3"	0	0
02-Water Only	11-Hospital/University	07-4"	0	0
02-Water Only	11-Hospital/University	08-6"	0	0
02-Water Only	11-Hospital/University	09-8"	0	0
02-Water Only	11-Hospital/University	10-10"	0	0
02-Water Only	13-Fire Service	01-5/8"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
02-Water Only	13-Fire Service	03-1"	0	0
02-Water Only	13-Fire Service	04-1.5"	0	0
02-Water Only	13-Fire Service	05-2"	276.6	0
02-Water Only	13-Fire Service	06-3"	0	0
02-Water Only	13-Fire Service	07-4"	828	0
02-Water Only	13-Fire Service	08-6"	0	0
02-Water Only	13-Fire Service	09-8"	0	0
02-Water Only	13-Fire Service	10-10"	0	0
02-Water Only	13-Fire Service	11-12"	0	0
02-Water Only	14-City Government	03-1"	0	0
02-Water Only	14-City Government	05-2"	0	0
02-Water Only	14-City Government	06-3"	0	0
02-Water Only	14-City Government	07-4"	0	0
02-Water Only	14-City Government	08-6"	0	0
02-Water Only	14-City Government	09-8"	0	0
02-Water Only	14-City Government	10-10"	0	0
03-Stormwater Only	01-General Service-Residential	01-5/8"	28195.54	28970.86
03-Stormwater Only	01-General Service-Residential	02-3/4"	0	0
03-Stormwater Only	01-General Service-Residential	03-1"	74.32	83.3
03-Stormwater Only	01-General Service-Residential	04-1.5"	0	0
03-Stormwater Only	01-General Service-Residential	05-2"	0	0
03-Stormwater Only	01-General Service-Residential	06-3"	0	0
03-Stormwater Only	01-General Service-Residential	07-4"	0	0
03-Stormwater Only	01-General Service-Residential	08-6"	0	0
03-Stormwater Only	01-General Service-Residential	09-8"	0	0
03-Stormwater Only	01-General Service-Residential	10-10"	0	0
03-Stormwater Only	01-General Service-Residential	12-Unknown	0	0
03-Stormwater Only	01-General Service-Residential	A-Unknown	0	0
03-Stormwater Only	02-General Service-Commercial	01-5/8"	193.26	-158.21
03-Stormwater Only	02-General Service-Commercial	02-3/4"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
03-Stormwater Only	02-General Service-Commercial	03-1"	0.36	0.51
03-Stormwater Only	02-General Service-Commercial	04-1.5"	7.11	7.21
03-Stormwater Only	02-General Service-Commercial	05-2"	308.88	392.04
03-Stormwater Only	02-General Service-Commercial	06-3"	1.28	1.68
03-Stormwater Only	02-General Service-Commercial	07-4"	0	0
03-Stormwater Only	02-General Service-Commercial	08-6"	0	0
03-Stormwater Only	02-General Service-Commercial	09-8"	0	0
03-Stormwater Only	02-General Service-Commercial	12-Unknown	0	0
03-Stormwater Only	02-General Service-Commercial	A-Unknown	9.17	100.97
03-Stormwater Only	02-General Service-Commercial	Y-Unknown	0	0
03-Stormwater Only	03-General Service-Industrial	01-5/8"	48.23	48.91
03-Stormwater Only	03-General Service-Industrial	03-1"	0	0
03-Stormwater Only	03-General Service-Industrial	04-1.5"	0	0
03-Stormwater Only	03-General Service-Industrial	05-2"	0	0
03-Stormwater Only	03-General Service-Industrial	06-3"	0	0
03-Stormwater Only	03-General Service-Industrial	07-4"	0	0
03-Stormwater Only	03-General Service-Industrial	08-6"	0	0
03-Stormwater Only	03-General Service-Industrial	12-Unknown	1.87	1.85
03-Stormwater Only	03-General Service-Industrial	A-Unknown	0	0
03-Stormwater Only	03-General Service-Industrial	Y-Unknown	0	0
03-Stormwater Only	04-General Service-Public Utilities	01-5/8"	0	0
03-Stormwater Only	04-General Service-Public Utilities	03-1"	0	0
03-Stormwater Only	04-General Service-Public Utilities	05-2"	0	0
03-Stormwater Only	04-General Service-Public Utilities	A-Unknown	0	0
03-Stormwater Only	05-P.H.A	01-5/8"	0	0
03-Stormwater Only	05-P.H.A	03-1"	0	0
03-Stormwater Only	05-P.H.A	05-2"	0	0
03-Stormwater Only	05-P.H.A	A-Unknown	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	01-5/8"	-0.81	0
03-Stormwater Only	06-Charity/Non-Public Schools	03-1"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
03-Stormwater Only	06-Charity/Non-Public Schools	04-1.5"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	05-2"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	07-4"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	09-8"	0	0
03-Stormwater Only	06-Charity/Non-Public Schools	A-Unknown	0	0
03-Stormwater Only	07-Public Schools	01-5/8"	0	0
03-Stormwater Only	07-Public Schools	08-6"	0	0
03-Stormwater Only	07-Public Schools	09-8"	0	0
03-Stormwater Only	07-Public Schools	12-Unknown	0	0
03-Stormwater Only	07-Public Schools	A-Unknown	0	0
03-Stormwater Only	08-Senior Citizens Discount	01-5/8"	387.55	391.23
03-Stormwater Only	08-Senior Citizens Discount	A-Unknown	0	0
03-Stormwater Only	09-Hand Bill	01-5/8"	0	0
03-Stormwater Only	09-Hand Bill	05-2"	0	0
03-Stormwater Only	09-Hand Bill	06-3"	0	0
03-Stormwater Only	09-Hand Bill	08-6"	0	0
03-Stormwater Only	09-Hand Bill	09-8"	0	0
03-Stormwater Only	09-Hand Bill	10-10"	0	0
03-Stormwater Only	09-Hand Bill	A-Unknown	0	0
03-Stormwater Only	10-City Leased	01-5/8"	0	0
03-Stormwater Only	10-City Leased	03-1"	0	0
03-Stormwater Only	10-City Leased	05-2"	0	0
03-Stormwater Only	10-City Leased	06-3"	0	0
03-Stormwater Only	10-City Leased	07-4"	0	0
03-Stormwater Only	10-City Leased	08-6"	0	0
03-Stormwater Only	10-City Leased	09-8"	0	0
03-Stormwater Only	11-Hospital/University	01-5/8"	0	0
03-Stormwater Only	11-Hospital/University	03-1"	0	0
03-Stormwater Only	11-Hospital/University	05-2"	0	0
03-Stormwater Only	11-Hospital/University	08-6"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
03-Stormwater Only	11-Hospital/University	A-Unknown	0	0
03-Stormwater Only	12-Scheduled	01-5/8"	0	0
03-Stormwater Only	12-Scheduled	A-Unknown	0	0
03-Stormwater Only	13-Fire Service	01-5/8"	0	0
03-Stormwater Only	13-Fire Service	03-1"	0	0
03-Stormwater Only	13-Fire Service	04-1.5"	0	0
03-Stormwater Only	13-Fire Service	05-2"	0	0
03-Stormwater Only	13-Fire Service	06-3"	0	0
03-Stormwater Only	13-Fire Service	07-4"	0	0
03-Stormwater Only	13-Fire Service	08-6"	0	0
03-Stormwater Only	13-Fire Service	09-8"	0	0
03-Stormwater Only	13-Fire Service	10-10"	0	0
03-Stormwater Only	13-Fire Service	11-12"	0	0
03-Stormwater Only	13-Fire Service	12-Unknown	0	0
03-Stormwater Only	13-Fire Service	A-Unknown	0	0
03-Stormwater Only	14-City Government	01-5/8"	0	0
03-Stormwater Only	14-City Government	02-3/4"	0	0
03-Stormwater Only	14-City Government	03-1"	0	0
03-Stormwater Only	14-City Government	04-1.5"	0	0
03-Stormwater Only	14-City Government	05-2"	0	0
03-Stormwater Only	14-City Government	06-3"	0	0
03-Stormwater Only	14-City Government	07-4"	0	0
03-Stormwater Only	14-City Government	08-6"	0	0
03-Stormwater Only	14-City Government	09-8"	0	0
03-Stormwater Only	14-City Government	12-Unknown	0	0
03-Stormwater Only	14-City Government	A-Unknown	0	0
04-Sewer and Stormwater	01-General Service-Residential	01-5/8"	311.95	3035.81
04-Sewer and Stormwater	01-General Service-Residential	02-3/4"	0	96.25
04-Sewer and Stormwater	01-General Service-Residential	07-4"	0	0
04-Sewer and Stormwater	01-General Service-Residential	08-6"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
04-Sewer and Stormwater	01-General Service-Residential	A-Unknown	0	0
04-Sewer and Stormwater	02-General Service-Commercial	01-5/8"	0	0
04-Sewer and Stormwater	02-General Service-Commercial	05-2"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	04-1.5"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	05-2"	0	351.46
04-Sewer and Stormwater	03-General Service-Industrial	06-3"	0	0
04-Sewer and Stormwater	03-General Service-Industrial	11-12"	0	0
04-Sewer and Stormwater	04-General Service-Public Utilities	03-1"	0	136.41
04-Sewer and Stormwater	06-Charity/Non-Public Schools	03-1"	0	103.75
04-Sewer and Stormwater	09-Hand Bill	01-5/8"	0	944.87
04-Sewer and Stormwater	09-Hand Bill	04-1.5"	0	0
04-Sewer and Stormwater	09-Hand Bill	05-2"	0	1053.34
04-Sewer and Stormwater	09-Hand Bill	06-3"	0	935.58
04-Sewer and Stormwater	09-Hand Bill	08-6"	0	2260.95
04-Sewer and Stormwater	09-Hand Bill	09-8"	0	6589.41
04-Sewer and Stormwater	09-Hand Bill	10-10"	0	2401.28
04-Sewer and Stormwater	11-Hospital/University	01-5/8"	0	58.8
05-Water and Stormwater	01-General Service-Residential	01-5/8"	96854.9	289.95
05-Water and Stormwater	01-General Service-Residential	02-3/4"	89.87	0
05-Water and Stormwater	01-General Service-Residential	03-1"	19911.19	0
05-Water and Stormwater	01-General Service-Residential	04-1.5"	1867.2	0
05-Water and Stormwater	01-General Service-Residential	05-2"	1383.04	0
05-Water and Stormwater	01-General Service-Residential	06-3"	0	0
05-Water and Stormwater	01-General Service-Residential	07-4"	0	0
05-Water and Stormwater	01-General Service-Residential	08-6"	0	0
05-Water and Stormwater	01-General Service-Residential	09-8"	0	0
05-Water and Stormwater	01-General Service-Residential	10-10"	0	0
05-Water and Stormwater	01-General Service-Residential	11-12"	0	0
05-Water and Stormwater	01-General Service-Residential	Y-Unknown	0	0
05-Water and Stormwater	02-General Service-Commercial	01-5/8"	6303.75	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
05-Water and Stormwater	02-General Service-Commercial	03-1"	3341.59	0
05-Water and Stormwater	02-General Service-Commercial	04-1.5"	3158.68	0
05-Water and Stormwater	02-General Service-Commercial	05-2"	5136.98	0
05-Water and Stormwater	02-General Service-Commercial	06-3"	951.42	0
05-Water and Stormwater	02-General Service-Commercial	07-4"	3312.12	0
05-Water and Stormwater	02-General Service-Commercial	08-6"	11223.16	0
05-Water and Stormwater	02-General Service-Commercial	09-8"	0	0
05-Water and Stormwater	02-General Service-Commercial	10-10"	0	0
05-Water and Stormwater	02-General Service-Commercial	11-12"	0	0
05-Water and Stormwater	03-General Service-Industrial	01-5/8"	232.55	0
05-Water and Stormwater	03-General Service-Industrial	03-1"	239.52	0
05-Water and Stormwater	03-General Service-Industrial	04-1.5"	186.72	0
05-Water and Stormwater	03-General Service-Industrial	05-2"	1175.59	0
05-Water and Stormwater	03-General Service-Industrial	06-3"	1030.74	0
05-Water and Stormwater	03-General Service-Industrial	07-4"	1656.08	0
05-Water and Stormwater	03-General Service-Industrial	08-6"	3206.55	0
05-Water and Stormwater	03-General Service-Industrial	09-8"	0	0
05-Water and Stormwater	03-General Service-Industrial	10-10"	3629.22	0
05-Water and Stormwater	04-General Service-Public Utilities	03-1"	119.75	0
05-Water and Stormwater	04-General Service-Public Utilities	11-12"	0	0
05-Water and Stormwater	05-P.H.A	01-5/8"	0	0
05-Water and Stormwater	05-P.H.A	03-1"	0	0
05-Water and Stormwater	05-P.H.A	05-2"	262.81	0
05-Water and Stormwater	05-P.H.A	07-4"	0	0
05-Water and Stormwater	05-P.H.A	08-6"	0	0
05-Water and Stormwater	05-P.H.A	09-8"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	01-5/8"	1230.71	0
05-Water and Stormwater	06-Charity/Non-Public Schools	03-1"	316.1	0
05-Water and Stormwater	06-Charity/Non-Public Schools	04-1.5"	511.97	0
05-Water and Stormwater	06-Charity/Non-Public Schools	05-2"	1178.56	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
05-Water and Stormwater	06-Charity/Non-Public Schools	06-3"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	07-4"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	08-6"	0	0
05-Water and Stormwater	06-Charity/Non-Public Schools	09-8"	0	0
05-Water and Stormwater	07-Public Schools	06-3"	0	0
05-Water and Stormwater	07-Public Schools	07-4"	0	0
05-Water and Stormwater	07-Public Schools	08-6"	0	0
05-Water and Stormwater	07-Public Schools	09-8"	0	0
05-Water and Stormwater	07-Public Schools	10-10"	0	0
05-Water and Stormwater	08-Senior Citizens Discount	01-5/8"	961.45	0
05-Water and Stormwater	08-Senior Citizens Discount	05-2"	0	0
05-Water and Stormwater	09-Hand Bill	01-5/8"	77.51	0
05-Water and Stormwater	09-Hand Bill	06-3"	0	0
05-Water and Stormwater	09-Hand Bill	08-6"	3206.46	0
05-Water and Stormwater	09-Hand Bill	09-8"	2501.89	0
05-Water and Stormwater	09-Hand Bill	10-10"	1814.58	0
05-Water and Stormwater	10-City Leased	01-5/8"	523.2	0
05-Water and Stormwater	10-City Leased	03-1"	359.27	0
05-Water and Stormwater	10-City Leased	04-1.5"	186.72	0
05-Water and Stormwater	10-City Leased	05-2"	368.81	0
05-Water and Stormwater	10-City Leased	06-3"	951.43	0
05-Water and Stormwater	10-City Leased	07-4"	2484.04	0
05-Water and Stormwater	10-City Leased	08-6"	6412.99	0
05-Water and Stormwater	10-City Leased	09-8"	2501.75	0
05-Water and Stormwater	10-City Leased	10-10"	0	0
05-Water and Stormwater	11-Hospital/University	01-5/8"	174.25	0
05-Water and Stormwater	11-Hospital/University	06-3"	0	0
05-Water and Stormwater	11-Hospital/University	07-4"	0	0
05-Water and Stormwater	11-Hospital/University	08-6"	0	0
05-Water and Stormwater	11-Hospital/University	09-8"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
05-Water and Stormwater	11-Hospital/University	10-10"	0	0
05-Water and Stormwater	13-Fire Service	01-5/8"	0	0
05-Water and Stormwater	13-Fire Service	03-1"	0	0
05-Water and Stormwater	13-Fire Service	04-1.5"	0	0
05-Water and Stormwater	13-Fire Service	05-2"	0	0
05-Water and Stormwater	13-Fire Service	06-3"	0	0
05-Water and Stormwater	13-Fire Service	07-4"	0	0
05-Water and Stormwater	13-Fire Service	08-6"	0	0
05-Water and Stormwater	13-Fire Service	09-8"	0	0
05-Water and Stormwater	13-Fire Service	10-10"	0	0
05-Water and Stormwater	13-Fire Service	11-12"	0	0
05-Water and Stormwater	14-City Government	01-5/8"	1143.07	0
05-Water and Stormwater	14-City Government	02-3/4"	449.3	0
05-Water and Stormwater	14-City Government	03-1"	738.44	0
05-Water and Stormwater	14-City Government	04-1.5"	560.16	0
05-Water and Stormwater	14-City Government	05-2"	1014.24	0
05-Water and Stormwater	14-City Government	06-3"	0	0
05-Water and Stormwater	14-City Government	07-4"	0	0
05-Water and Stormwater	14-City Government	08-6"	1603.32	0
05-Water and Stormwater	14-City Government	09-8"	0	0
05-Water and Stormwater	14-City Government	10-10"	0	0
06-Sewer Only	01-General Service-Residential	01-5/8"	172.64	174.97
06-Sewer Only	02-General Service-Commercial	01-5/8"	0	0
06-Sewer Only	02-General Service-Commercial	05-2"	398.1	506.21
06-Sewer Only	03-General Service-Industrial	02-3/4"	0	0
06-Sewer Only	03-General Service-Industrial	10-10"	0	0
06-Sewer Only	04-General Service-Public Utilities	07-4"	432.4	558.68
06-Sewer Only	06-Charity/Non-Public Schools	03-1"	0	0
06-Sewer Only	09-Hand Bill	01-5/8"	0	84.47
06-Sewer Only	09-Hand Bill	05-2"	0	350.76

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
06-Sewer Only	13-Fire Service	01-5/8"	77.52	78.6
06-Sewer Only	14-City Government	07-4"	409.55	529.15
07-Water and Sewer	01-General Service-Residential	01-5/8"	1646.21	1654.54
07-Water and Sewer	01-General Service-Residential	02-3/4"	0	0
07-Water and Sewer	01-General Service-Residential	03-1"	474.45	694.71
07-Water and Sewer	01-General Service-Residential	05-2"	0	0
07-Water and Sewer	01-General Service-Residential	06-3"	0	0
07-Water and Sewer	02-General Service-Commercial	01-5/8"	811.12	822.88
07-Water and Sewer	02-General Service-Commercial	02-3/4"	0	0
07-Water and Sewer	02-General Service-Commercial	03-1"	778.75	976.74
07-Water and Sewer	02-General Service-Commercial	04-1.5"	186.72	230.6
07-Water and Sewer	02-General Service-Commercial	05-2"	1407.59	1780.15
07-Water and Sewer	02-General Service-Commercial	06-3"	832.45	1093.3
07-Water and Sewer	02-General Service-Commercial	07-4"	0	0
07-Water and Sewer	02-General Service-Commercial	09-8"	0	0
07-Water and Sewer	03-General Service-Industrial	01-5/8"	0	0
07-Water and Sewer	05-P.H.A	01-5/8"	85.93	86.85
07-Water and Sewer	05-P.H.A	03-1"	0	0
07-Water and Sewer	05-P.H.A	06-3"	451.94	592.92
07-Water and Sewer	06-Charity/Non-Public Schools	01-5/8"	0	0
07-Water and Sewer	06-Charity/Non-Public Schools	03-1"	89.76	102.27
07-Water and Sewer	06-Charity/Non-Public Schools	04-1.5"	116.7	143.92
07-Water and Sewer	06-Charity/Non-Public Schools	05-2"	207.49	263.16
07-Water and Sewer	07-Public Schools	07-4"	621.01	801.38
07-Water and Sewer	07-Public Schools	08-6"	0	0
07-Water and Sewer	08-Senior Citizens Discount	01-5/8"	4.83	4.8
07-Water and Sewer	09-Hand Bill	04-1.5"	0	0
07-Water and Sewer	09-Hand Bill	05-2"	0	0
07-Water and Sewer	11-Hospital/University	05-2"	0	0
07-Water and Sewer	13-Fire Service	01-5/8"	0	0

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
07-Water and Sewer	13-Fire Service	03-1"	0	0
07-Water and Sewer	13-Fire Service	05-2"	0	0
07-Water and Sewer	13-Fire Service	12-Unknown	77.52	78.6
07-Water and Sewer	14-City Government	01-5/8"	0	0
07-Water and Sewer	14-City Government	03-1"	0	0
07-Water and Sewer	14-City Government	06-3"	0	0
07-Water and Sewer	14-City Government	08-6"	1603.24	2095.3
08-RFSS, All Services	01-General Service-Residential	01-5/8"	0	0
08-RFSS, All Services	01-General Service-Residential	02-3/4"	0	0
08-RFSS, All Services	01-General Service-Residential	03-1"	22.68	30.16
08-RFSS, All Services	01-General Service-Residential	04-1.5"	0	0
08-RFSS, All Services	01-General Service-Residential	05-2"	0	0
08-RFSS, All Services	02-General Service-Commercial	01-5/8"	0	0
08-RFSS, All Services	02-General Service-Commercial	02-3/4"	0	0
08-RFSS, All Services	02-General Service-Commercial	03-1"	0	0
08-RFSS, All Services	02-General Service-Commercial	04-1.5"	0	0
08-RFSS, All Services	02-General Service-Commercial	05-2"	0	0
08-RFSS, All Services	03-General Service-Industrial	03-1"	0	0
08-RFSS, All Services	04-General Service-Public Utilities	03-1"	0	0
08-RFSS, All Services	05-P.H.A	03-1"	0	0
08-RFSS, All Services	05-P.H.A	04-1.5"	0	0
08-RFSS, All Services	05-P.H.A	05-2"	0	0
08-RFSS, All Services	08-Senior Citizens Discount	03-1"	0	0
08-RFSS, All Services	13-Fire Service	03-1"	0	0
08-RFSS, All Services	13-Fire Service	04-1.5"	0	0
08-RFSS, All Services	14-City Government	03-1"	0	0
09-RFSS, No Sewer	01-General Service-Residential	03-1"	0	0
09-RFSS, No Sewer	01-General Service-Residential	05-2"	0	0
09-RFSS, No Sewer	02-General Service-Commercial	03-1"	0	0
10-Unknown	01-General Service-Residential	01-5/8"	226.11	204.68

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
10-Unknown	01-General Service-Residential	03-1"	77.78	87.76
10-Unknown	01-General Service-Residential	04-1.5"	0	0
10-Unknown	01-General Service-Residential	05-2"	0	0
10-Unknown	01-General Service-Residential	06-3"	0	0
10-Unknown	01-General Service-Residential	07-4"	0	0
10-Unknown	01-General Service-Residential	08-6"	0	0
10-Unknown	01-General Service-Residential	09-8"	0	0
10-Unknown	01-General Service-Residential	12-Unknown	1694.35	1483.03
10-Unknown	01-General Service-Residential	A-Unknown	0	0
10-Unknown	02-General Service-Commercial	01-5/8"	5.64	5.7
10-Unknown	02-General Service-Commercial	02-3/4"	0	0
10-Unknown	02-General Service-Commercial	03-1"	0	0
10-Unknown	02-General Service-Commercial	04-1.5"	0	0
10-Unknown	02-General Service-Commercial	05-2"	0	0
10-Unknown	02-General Service-Commercial	06-3"	0	0
10-Unknown	02-General Service-Commercial	07-4"	0	0
10-Unknown	02-General Service-Commercial	08-6"	0	0
10-Unknown	02-General Service-Commercial	09-8"	0	0
10-Unknown	02-General Service-Commercial	10-10"	0	0
10-Unknown	02-General Service-Commercial	12-Unknown	3966.5	33264.58
10-Unknown	02-General Service-Commercial	A-Unknown	0	0
10-Unknown	03-General Service-Industrial	01-5/8"	0	0
10-Unknown	03-General Service-Industrial	12-Unknown	157.33	132.58
10-Unknown	04-General Service-Public Utilities	12-Unknown	219.91	282.68
10-Unknown	05-P.H.A	07-4"	0	0
10-Unknown	05-P.H.A	12-Unknown	889.4	1256.69
10-Unknown	06-Charity/Non-Public Schools	01-5/8"	0	0
10-Unknown	06-Charity/Non-Public Schools	09-8"	0	0
10-Unknown	06-Charity/Non-Public Schools	12-Unknown	35.94	38.69
10-Unknown	07-Public Schools	12-Unknown	7.25	9.22

Rpt1b v5 2015.02				
Service Type	Customer Type	Meter Size	fy15 Water Usage Charges	fy15 Sewer Usage Charges
10-Unknown	08-Senior Citizens Discount	01-5/8"	0.49	0.5
10-Unknown	08-Senior Citizens Discount	12-Unknown	0	0
10-Unknown	09-Hand Bill	08-6"	0	0
10-Unknown	09-Hand Bill	10-10"	0	0
10-Unknown	09-Hand Bill	12-Unknown	0	0
10-Unknown	10-City Leased	12-Unknown	0	0
10-Unknown	11-Hospital/University	06-3"	0	0
10-Unknown	11-Hospital/University	07-4"	0	0
10-Unknown	11-Hospital/University	08-6"	0	0
10-Unknown	11-Hospital/University	09-8"	0	0
10-Unknown	11-Hospital/University	12-Unknown	288.38	367.24
10-Unknown	13-Fire Service	03-1"	0	0
10-Unknown	13-Fire Service	04-1.5"	0	0
10-Unknown	13-Fire Service	05-2"	276.6	0
10-Unknown	13-Fire Service	06-3"	0	0
10-Unknown	13-Fire Service	07-4"	0	0
10-Unknown	13-Fire Service	08-6"	0	0
10-Unknown	13-Fire Service	09-8"	0	0
10-Unknown	13-Fire Service	10-10"	0	0
10-Unknown	13-Fire Service	12-Unknown	0	0
10-Unknown	14-City Government	01-5/8"	0	0
10-Unknown	14-City Government	05-2"	0	0
10-Unknown	14-City Government	08-6"	0	0
10-Unknown	14-City Government	12-Unknown	1362.92	1786.81
			39120164.64	40883334.93

Rpt1c v5 2015.02		FY12		
Service Type	Customer Type	fy12 # of Accounts Month	fy12 # of Accounts	fy12 Stormwater Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	5119708	426642	76162657.53
01-Water,Sewer,Stormwater	02-General Service-Commercial	397189	33099	31161832.69
01-Water,Sewer,Stormwater	03-General Service-Industrial	12835	1070	4523312.06
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	1148	96	388445.9
01-Water,Sewer,Stormwater	05-P.H.A	72748	6062	1915880.9
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	26907	2242	3819095.43
01-Water,Sewer,Stormwater	07-Public Schools	4700	392	3176471.49
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	229766	19147	2394813.59
01-Water,Sewer,Stormwater	09-Hand Bill	3249	271	3252909.32
01-Water,Sewer,Stormwater	10-City Leased	589	49	497651.63
01-Water,Sewer,Stormwater	11-Hospital/University	4213	351	2450974.25
01-Water,Sewer,Stormwater	12-Scheduled	24	2	329.99
01-Water,Sewer,Stormwater	13-Fire Service	1072	89	468223.35
01-Water,Sewer,Stormwater	14-City Government	11681	973	7490282.85
02-Water Only	01-General Service-Residential	4312	359	334.54
02-Water Only	02-General Service-Commercial	2811	234	249.32
02-Water Only	03-General Service-Industrial	190	16	0
02-Water Only	04-General Service-Public Utilities	11	1	0
02-Water Only	05-P.H.A	680	57	0
02-Water Only	06-Charity/Non-Public Schools	187	16	0
02-Water Only	07-Public Schools	555	46	0
02-Water Only	08-Senior Citizens Discount	7	1	0
02-Water Only	09-Hand Bill	98	8	0
02-Water Only	10-City Leased	55	5	0
02-Water Only	11-Hospital/University	337	28	0
02-Water Only	13-Fire Service	25793	2149	0
02-Water Only	14-City Government	528	44	0
03-Stormwater Only	01-General Service-Residential	163217	13601	2142648.89
03-Stormwater Only	02-General Service-Commercial	368598	30717	5535721.61
03-Stormwater Only	03-General Service-Industrial	176	15	27330.38

Rpt1c v5 2015.02		FY12		
Service Type	Customer Type	fy12 # of Accounts Month	fy12 # of Accounts	fy12 Stormwater Charges
03-Stormwater Only	04-General Service-Public Utilities	14085	1174	1270636.45
03-Stormwater Only	05-P.H.A	11145	929	152938.24
03-Stormwater Only	06-Charity/Non-Public Schools	537	45	27127.58
03-Stormwater Only	07-Public Schools	925	77	65446.89
03-Stormwater Only	08-Senior Citizens Discount	146	12	1343.4
03-Stormwater Only	09-Hand Bill	124	10	68947.23
03-Stormwater Only	10-City Leased	45	4	13565.01
03-Stormwater Only	11-Hospital/University	1497	125	89217.93
03-Stormwater Only	12-Scheduled	8	1	108.84
03-Stormwater Only	13-Fire Service	1732	144	2884.81
03-Stormwater Only	14-City Government	10723	894	781388.47
04-Sewer and Stormwater	01-General Service-Residential	169	14	3991.33
04-Sewer and Stormwater	02-General Service-Commercial	19	2	0
04-Sewer and Stormwater	03-General Service-Industrial	27	2	38557.47
04-Sewer and Stormwater	04-General Service-Public Utilities	2	0	2559.25
04-Sewer and Stormwater	06-Charity/Non-Public Schools	6	1	0
04-Sewer and Stormwater	09-Hand Bill	167	14	73322.3
04-Sewer and Stormwater	11-Hospital/University	0	0	0
05-Water and Stormwater	01-General Service-Residential	12410	1034	86822.76
05-Water and Stormwater	02-General Service-Commercial	2688	224	137665.25
05-Water and Stormwater	03-General Service-Industrial	188	16	24254.92
05-Water and Stormwater	04-General Service-Public Utilities	16	1	5135.4
05-Water and Stormwater	05-P.H.A	498	42	70.64
05-Water and Stormwater	06-Charity/Non-Public Schools	225	19	11018.82
05-Water and Stormwater	07-Public Schools	319	27	5724.64
05-Water and Stormwater	08-Senior Citizens Discount	107	9	596.67
05-Water and Stormwater	09-Hand Bill	87	7	27635.31
05-Water and Stormwater	10-City Leased	197	16	52812.05
05-Water and Stormwater	11-Hospital/University	204	17	15381.31
05-Water and Stormwater	13-Fire Service	14978	1248	2212.64

Rpt1c v5 2015.02		FY12		
Service Type	Customer Type	fy12 # of Accounts Month	fy12 # of Accounts	fy12 Stormwater Charges
05-Water and Stormwater	14-City Government	714	60	17428.21
06-Sewer Only	01-General Service-Residential	5	0	0
06-Sewer Only	02-General Service-Commercial	0	0	0
06-Sewer Only	03-General Service-Industrial	2	0	0
06-Sewer Only	04-General Service-Public Utilities	0	0	0
06-Sewer Only	06-Charity/Non-Public Schools	5	0	0
06-Sewer Only	09-Hand Bill	21	2	0
06-Sewer Only	13-Fire Service	0	0	0
06-Sewer Only	14-City Government	0	0	0
07-Water and Sewer	01-General Service-Residential	279	23	1460.06
07-Water and Sewer	02-General Service-Commercial	92	8	6230.13
07-Water and Sewer	03-General Service-Industrial	1	0	324.18
07-Water and Sewer	05-P.H.A	20	2	610.38
07-Water and Sewer	06-Charity/Non-Public Schools	32	3	0
07-Water and Sewer	07-Public Schools	0	0	0
07-Water and Sewer	08-Senior Citizens Discount	4	0	0
07-Water and Sewer	09-Hand Bill	1	0	0
07-Water and Sewer	11-Hospital/University	4	0	0
07-Water and Sewer	13-Fire Service	11	1	0
07-Water and Sewer	14-City Government	26	2	9.45
08-RFSS, All Services	01-General Service-Residential	0	0	0
08-RFSS, All Services	02-General Service-Commercial	0	0	0
08-RFSS, All Services	03-General Service-Industrial	0	0	0
08-RFSS, All Services	04-General Service-Public Utilities	0	0	0
08-RFSS, All Services	05-P.H.A	0	0	0
08-RFSS, All Services	08-Senior Citizens Discount	0	0	0
08-RFSS, All Services	13-Fire Service	0	0	0
08-RFSS, All Services	14-City Government	0	0	0
09-RFSS, No Sewer	01-General Service-Residential	0	0	0
09-RFSS, No Sewer	02-General Service-Commercial	0	0	0

Rpt1c v5 2015.02		FY12		
Service Type	Customer Type	fy12 # of Accounts Month	fy12 # of Accounts	fy12 Stormwater Charges
10-Unknown	01-General Service-Residential	1757	146	12196.31
10-Unknown	02-General Service-Commercial	4053	338	35071.1
10-Unknown	03-General Service-Industrial	165	14	1452.22
10-Unknown	04-General Service-Public Utilities	81	7	7987.31
10-Unknown	05-P.H.A	29	2	122.15
10-Unknown	06-Charity/Non-Public Schools	19	2	2371.44
10-Unknown	07-Public Schools	2	0	39.63
10-Unknown	08-Senior Citizens Discount	1	0	2.98
10-Unknown	09-Hand Bill	459	38	3721.54
10-Unknown	10-City Leased	1	0	248.89
10-Unknown	11-Hospital/University	24	2	56.1
10-Unknown	13-Fire Service	2	0	31.09
10-Unknown	14-City Government	147	12	7917.99
				148467812.5

Rpt1c v5 2015.02		FY13		
Service Type	Customer Type	fy13 # of Accounts Month	fy13 # of Accounts	fy13 Stormwater Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	4948557	412380	70603537.52
01-Water,Sewer,Stormwater	02-General Service-Commercial	393215	32768	33710631.67
01-Water,Sewer,Stormwater	03-General Service-Industrial	12063	1005	5448898.73
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	1258	105	586019.69
01-Water,Sewer,Stormwater	05-P.H.A	70811	5901	1628043.34
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	26446	2204	3497093.65
01-Water,Sewer,Stormwater	07-Public Schools	4617	385	3019803.35
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	230636	19220	2290325.91
01-Water,Sewer,Stormwater	09-Hand Bill	2969	247	3046024.5
01-Water,Sewer,Stormwater	10-City Leased	544	45	484199.34
01-Water,Sewer,Stormwater	11-Hospital/University	4356	363	1969569.53
01-Water,Sewer,Stormwater	12-Scheduled	27	2	382.14
01-Water,Sewer,Stormwater	13-Fire Service	1015	85	304037.73
01-Water,Sewer,Stormwater	14-City Government	10466	872	8104665.14
02-Water Only	01-General Service-Residential	6731	561	6.18
02-Water Only	02-General Service-Commercial	4587	382	255.03
02-Water Only	03-General Service-Industrial	259	22	0
02-Water Only	04-General Service-Public Utilities	19	2	0
02-Water Only	05-P.H.A	1364	114	0
02-Water Only	06-Charity/Non-Public Schools	284	24	0
02-Water Only	07-Public Schools	781	65	0
02-Water Only	08-Senior Citizens Discount	10	1	0
02-Water Only	09-Hand Bill	150	13	0
02-Water Only	10-City Leased	89	7	0
02-Water Only	11-Hospital/University	502	42	0
02-Water Only	13-Fire Service	37831	3153	71.85
02-Water Only	14-City Government	834	70	0
03-Stormwater Only	01-General Service-Residential	295603	24634	3717750.77
03-Stormwater Only	02-General Service-Commercial	418350	34863	9085273.97
03-Stormwater Only	03-General Service-Industrial	165	14	16568.46

Rpt1c v5 2015.02		FY13		
Service Type	Customer Type	fy13 # of Accounts Month	fy13 # of Accounts	fy13 Stormwater Charges
03-Stormwater Only	04-General Service-Public Utilities	15719	1310	1755662.02
03-Stormwater Only	05-P.H.A	13795	1150	225161.58
03-Stormwater Only	06-Charity/Non-Public Schools	772	64	43237
03-Stormwater Only	07-Public Schools	1005	84	105848.71
03-Stormwater Only	08-Senior Citizens Discount	2395	200	22641.92
03-Stormwater Only	09-Hand Bill	168	14	84952.09
03-Stormwater Only	10-City Leased	0	0	0
03-Stormwater Only	11-Hospital/University	1824	152	141496.99
03-Stormwater Only	12-Scheduled	20	2	241.6
03-Stormwater Only	13-Fire Service	2780	232	2167.22
03-Stormwater Only	14-City Government	10712	893	1134071.15
04-Sewer and Stormwater	01-General Service-Residential	294	25	15498.63
04-Sewer and Stormwater	02-General Service-Commercial	0	0	0
04-Sewer and Stormwater	03-General Service-Industrial	5	0	3297.83
04-Sewer and Stormwater	04-General Service-Public Utilities	0	0	20221.78
04-Sewer and Stormwater	06-Charity/Non-Public Schools	11	1	0
04-Sewer and Stormwater	09-Hand Bill	217	18	149457.26
04-Sewer and Stormwater	11-Hospital/University	0	0	0
05-Water and Stormwater	01-General Service-Residential	14275	1190	163943.99
05-Water and Stormwater	02-General Service-Commercial	1645	137	309630.07
05-Water and Stormwater	03-General Service-Industrial	191	16	101031.4
05-Water and Stormwater	04-General Service-Public Utilities	12	1	7357.89
05-Water and Stormwater	05-P.H.A	65	5	1097.26
05-Water and Stormwater	06-Charity/Non-Public Schools	194	16	22815.03
05-Water and Stormwater	07-Public Schools	16	1	0
05-Water and Stormwater	08-Senior Citizens Discount	160	13	1173.78
05-Water and Stormwater	09-Hand Bill	39	3	45088.01
05-Water and Stormwater	10-City Leased	196	16	84006.97
05-Water and Stormwater	11-Hospital/University	27	2	17399.45
05-Water and Stormwater	13-Fire Service	832	69	13384.15

Rpt1c v5 2015.02		FY13		
Service Type	Customer Type	fy13 # of Accounts Month	fy13 # of Accounts	fy13 Stormwater Charges
05-Water and Stormwater	14-City Government	378	32	82996.84
06-Sewer Only	01-General Service-Residential	1	0	0
06-Sewer Only	02-General Service-Commercial	0	0	0
06-Sewer Only	03-General Service-Industrial	12	1	0
06-Sewer Only	04-General Service-Public Utilities	0	0	0
06-Sewer Only	06-Charity/Non-Public Schools	1	0	0
06-Sewer Only	09-Hand Bill	7	1	0
06-Sewer Only	13-Fire Service	0	0	0
06-Sewer Only	14-City Government	0	0	0
07-Water and Sewer	01-General Service-Residential	998	83	793.85
07-Water and Sewer	02-General Service-Commercial	229	19	78.72
07-Water and Sewer	03-General Service-Industrial	1	0	0
07-Water and Sewer	05-P.H.A	27	2	0
07-Water and Sewer	06-Charity/Non-Public Schools	49	4	0
07-Water and Sewer	07-Public Schools	11	1	17061.45
07-Water and Sewer	08-Senior Citizens Discount	14	1	0
07-Water and Sewer	09-Hand Bill	6	1	0
07-Water and Sewer	11-Hospital/University	1	0	0
07-Water and Sewer	13-Fire Service	12	1	40.98
07-Water and Sewer	14-City Government	30	3	0
08-RFSS, All Services	01-General Service-Residential	1435	120	40374.31
08-RFSS, All Services	02-General Service-Commercial	125	10	5746.62
08-RFSS, All Services	03-General Service-Industrial	0	0	0
08-RFSS, All Services	04-General Service-Public Utilities	0	0	0
08-RFSS, All Services	05-P.H.A	2	0	26.44
08-RFSS, All Services	08-Senior Citizens Discount	0	0	0
08-RFSS, All Services	13-Fire Service	0	0	0
08-RFSS, All Services	14-City Government	9	1	123.75
09-RFSS, No Sewer	01-General Service-Residential	0	0	0
09-RFSS, No Sewer	02-General Service-Commercial	0	0	0

Rpt1c v5 2015.02		FY13		
Service Type	Customer Type	fy13 # of Accounts Month	fy13 # of Accounts	fy13 Stormwater Charges
10-Unknown	01-General Service-Residential	977	81	8456.8
10-Unknown	02-General Service-Commercial	4217	351	38059.55
10-Unknown	03-General Service-Industrial	167	14	1794.18
10-Unknown	04-General Service-Public Utilities	72	6	4647.38
10-Unknown	05-P.H.A	22	2	183.94
10-Unknown	06-Charity/Non-Public Schools	13	1	1960.27
10-Unknown	07-Public Schools	5	0	8446.53
10-Unknown	08-Senior Citizens Discount	0	0	0
10-Unknown	09-Hand Bill	469	39	928.79
10-Unknown	10-City Leased	0	0	0
10-Unknown	11-Hospital/University	14	1	328.27
10-Unknown	13-Fire Service	50	4	8.36
10-Unknown	14-City Government	185	15	9057.9
				152205157.2

Rpt1c v5 2015.02		FY14		
Service Type	Customer Type	fy14 # of Accounts Month	fy14 # of Accounts	fy14 Stormwater Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	4945771	412148	71548197.21
01-Water,Sewer,Stormwater	02-General Service-Commercial	404336	33695	37698091.44
01-Water,Sewer,Stormwater	03-General Service-Industrial	12563	1047	6927018.63
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	1388	116	726198.27
01-Water,Sewer,Stormwater	05-P.H.A	70253	5854	1463590.58
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	26544	2212	3399047.57
01-Water,Sewer,Stormwater	07-Public Schools	4670	389	3091108.47
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	234039	19503	2360256.89
01-Water,Sewer,Stormwater	09-Hand Bill	3033	253	3020954.2
01-Water,Sewer,Stormwater	10-City Leased	527	44	543699.04
01-Water,Sewer,Stormwater	11-Hospital/University	4497	375	1585708.68
01-Water,Sewer,Stormwater	12-Scheduled	24	2	320.64
01-Water,Sewer,Stormwater	13-Fire Service	935	78	200486.97
01-Water,Sewer,Stormwater	14-City Government	10489	874	8718030.02
02-Water Only	01-General Service-Residential	7304	609	0
02-Water Only	02-General Service-Commercial	5111	426	415.95
02-Water Only	03-General Service-Industrial	267	22	567.98
02-Water Only	04-General Service-Public Utilities	19	2	0
02-Water Only	05-P.H.A	1418	118	0
02-Water Only	06-Charity/Non-Public Schools	270	23	0
02-Water Only	07-Public Schools	817	68	0
02-Water Only	08-Senior Citizens Discount	10	1	0
02-Water Only	09-Hand Bill	171	14	0
02-Water Only	10-City Leased	77	6	0
02-Water Only	11-Hospital/University	572	48	0
02-Water Only	13-Fire Service	40206	3351	0
02-Water Only	14-City Government	755	63	0
03-Stormwater Only	01-General Service-Residential	376599	31383	5045861.77
03-Stormwater Only	02-General Service-Commercial	417397	34783	12632975.73
03-Stormwater Only	03-General Service-Industrial	166	14	25419.84

Rpt1c v5 2015.02		FY14		
Service Type	Customer Type	fy14 # of Accounts Month	fy14 # of Accounts	fy14 Stormwater Charges
03-Stormwater Only	04-General Service-Public Utilities	15389	1282	2384564.61
03-Stormwater Only	05-P.H.A	13917	1160	308627.33
03-Stormwater Only	06-Charity/Non-Public Schools	1213	101	65664.55
03-Stormwater Only	07-Public Schools	998	83	149700.88
03-Stormwater Only	08-Senior Citizens Discount	3574	298	34756.46
03-Stormwater Only	09-Hand Bill	139	12	136634.54
03-Stormwater Only	10-City Leased	0	0	0
03-Stormwater Only	11-Hospital/University	1888	157	204691.14
03-Stormwater Only	12-Scheduled	25	2	402.79
03-Stormwater Only	13-Fire Service	2502	209	3307.53
03-Stormwater Only	14-City Government	8989	749	1556130.98
04-Sewer and Stormwater	01-General Service-Residential	427	36	74559.37
04-Sewer and Stormwater	02-General Service-Commercial	0	0	0
04-Sewer and Stormwater	03-General Service-Industrial	12	1	3129.78
04-Sewer and Stormwater	04-General Service-Public Utilities	4	0	28887.51
04-Sewer and Stormwater	06-Charity/Non-Public Schools	11	1	0
04-Sewer and Stormwater	09-Hand Bill	220	18	119014.79
04-Sewer and Stormwater	11-Hospital/University	12	1	3582.76
05-Water and Stormwater	01-General Service-Residential	17434	1453	256528.8
05-Water and Stormwater	02-General Service-Commercial	1861	155	441454.31
05-Water and Stormwater	03-General Service-Industrial	207	17	183065.16
05-Water and Stormwater	04-General Service-Public Utilities	12	1	8697.31
05-Water and Stormwater	05-P.H.A	54	5	3539.34
05-Water and Stormwater	06-Charity/Non-Public Schools	365	30	33058.03
05-Water and Stormwater	07-Public Schools	8	1	0
05-Water and Stormwater	08-Senior Citizens Discount	204	17	2029.5
05-Water and Stormwater	09-Hand Bill	38	3	61645.86
05-Water and Stormwater	10-City Leased	237	20	109671.94
05-Water and Stormwater	11-Hospital/University	43	4	13573.71
05-Water and Stormwater	13-Fire Service	934	78	2053.8

Rpt1c v5 2015.02		FY14		
Service Type	Customer Type	fy14 # of Accounts Month	fy14 # of Accounts	fy14 Stormwater Charges
05-Water and Stormwater	14-City Government	360	30	169241.46
06-Sewer Only	01-General Service-Residential	3	0	0
06-Sewer Only	02-General Service-Commercial	2	0	0
06-Sewer Only	03-General Service-Industrial	3	0	0
06-Sewer Only	04-General Service-Public Utilities	0	0	0
06-Sewer Only	06-Charity/Non-Public Schools	0	0	0
06-Sewer Only	09-Hand Bill	12	1	0
06-Sewer Only	13-Fire Service	5	0	0
06-Sewer Only	14-City Government	0	0	0
07-Water and Sewer	01-General Service-Residential	203	17	181.13
07-Water and Sewer	02-General Service-Commercial	202	17	2303.49
07-Water and Sewer	03-General Service-Industrial	0	0	0
07-Water and Sewer	05-P.H.A	25	2	0
07-Water and Sewer	06-Charity/Non-Public Schools	37	3	0
07-Water and Sewer	07-Public Schools	12	1	0
07-Water and Sewer	08-Senior Citizens Discount	12	1	0
07-Water and Sewer	09-Hand Bill	0	0	0
07-Water and Sewer	11-Hospital/University	0	0	0
07-Water and Sewer	13-Fire Service	10	1	0
07-Water and Sewer	14-City Government	12	1	0
08-RFSS, All Services	01-General Service-Residential	7023	585	103820.02
08-RFSS, All Services	02-General Service-Commercial	476	40	6871.55
08-RFSS, All Services	03-General Service-Industrial	0	0	0
08-RFSS, All Services	04-General Service-Public Utilities	1	0	13.45
08-RFSS, All Services	05-P.H.A	0	0	0
08-RFSS, All Services	08-Senior Citizens Discount	0	0	0
08-RFSS, All Services	13-Fire Service	24	2	311
08-RFSS, All Services	14-City Government	23	2	302.44
09-RFSS, No Sewer	01-General Service-Residential	9	1	114.76
09-RFSS, No Sewer	02-General Service-Commercial	0	0	0

Rpt1c v5 2015.02		FY14		
Service Type	Customer Type	fy14 # of Accounts Month	fy14 # of Accounts	fy14 Stormwater Charges
10-Unknown	01-General Service-Residential	1034	86	7977.17
10-Unknown	02-General Service-Commercial	4919	410	51331.74
10-Unknown	03-General Service-Industrial	194	16	4901.12
10-Unknown	04-General Service-Public Utilities	92	8	6902.17
10-Unknown	05-P.H.A	10	1	190.8
10-Unknown	06-Charity/Non-Public Schools	10	1	2791.42
10-Unknown	07-Public Schools	0	0	0
10-Unknown	08-Senior Citizens Discount	1	0	15.8
10-Unknown	09-Hand Bill	449	37	0
10-Unknown	10-City Leased	0	0	0
10-Unknown	11-Hospital/University	24	2	1395.88
10-Unknown	13-Fire Service	1207	101	12.77
10-Unknown	14-City Government	111	9	460.95
				165536061.8

Rpt1c v5 2015.02		FY15		
Service Type	Customer Type	fy15 # of Accounts Month	fy15 # of Accounts	fy15 Stormwater Charges
01-Water,Sewer,Stormwater	01-General Service-Residential	4868583	405715	74911192.43
01-Water,Sewer,Stormwater	02-General Service-Commercial	404764	33730	40515720.98
01-Water,Sewer,Stormwater	03-General Service-Industrial	12453	1038	7082529.21
01-Water,Sewer,Stormwater	04-General Service-Public Utilities	1496	125	931636.48
01-Water,Sewer,Stormwater	05-P.H.A	69003	5750	1525539.41
01-Water,Sewer,Stormwater	06-Charity/Non-Public Schools	25401	2117	3422136.44
01-Water,Sewer,Stormwater	07-Public Schools	4553	379	3240347.55
01-Water,Sewer,Stormwater	08-Senior Citizens Discount	242069	20172	2600918.77
01-Water,Sewer,Stormwater	09-Hand Bill	2979	248	3075054.92
01-Water,Sewer,Stormwater	10-City Leased	569	47	539593.45
01-Water,Sewer,Stormwater	11-Hospital/University	5154	430	1807161.69
01-Water,Sewer,Stormwater	12-Scheduled	27	2	395.05
01-Water,Sewer,Stormwater	13-Fire Service	862	72	227132.58
01-Water,Sewer,Stormwater	14-City Government	11116	926	9458645.86
02-Water Only	01-General Service-Residential	8474	706	0
02-Water Only	02-General Service-Commercial	5868	489	0
02-Water Only	03-General Service-Industrial	302	25	0
02-Water Only	04-General Service-Public Utilities	21	2	0
02-Water Only	05-P.H.A	1575	131	0
02-Water Only	06-Charity/Non-Public Schools	105	9	0
02-Water Only	07-Public Schools	877	73	0
02-Water Only	08-Senior Citizens Discount	11	1	0
02-Water Only	09-Hand Bill	210	18	0
02-Water Only	10-City Leased	103	9	0
02-Water Only	11-Hospital/University	805	67	0
02-Water Only	13-Fire Service	47044	3920	28.3
02-Water Only	14-City Government	938	78	0
03-Stormwater Only	01-General Service-Residential	421230	35103	6048555.84
03-Stormwater Only	02-General Service-Commercial	404667	33722	13205917.28
03-Stormwater Only	03-General Service-Industrial	153	13	23386.38

Rpt1c v5 2015.02		FY15		
Service Type	Customer Type	fy15 # of Accounts Month	fy15 # of Accounts	fy15 Stormwater Charges
03-Stormwater Only	04-General Service-Public Utilities	14860	1238	2396940.45
03-Stormwater Only	05-P.H.A	13962	1164	339995.07
03-Stormwater Only	06-Charity/Non-Public Schools	1077	90	36069.49
03-Stormwater Only	07-Public Schools	983	82	160552.36
03-Stormwater Only	08-Senior Citizens Discount	4503	375	46475.13
03-Stormwater Only	09-Hand Bill	115	10	77290.29
03-Stormwater Only	10-City Leased	0	0	0
03-Stormwater Only	11-Hospital/University	2132	178	207795.91
03-Stormwater Only	12-Scheduled	21	2	618.24
03-Stormwater Only	13-Fire Service	2483	207	2925.39
03-Stormwater Only	14-City Government	9371	781	1714411.32
04-Sewer and Stormwater	01-General Service-Residential	440	37	87536.66
04-Sewer and Stormwater	02-General Service-Commercial	0	0	0
04-Sewer and Stormwater	03-General Service-Industrial	12	1	3242.9
04-Sewer and Stormwater	04-General Service-Public Utilities	12	1	31685.82
04-Sewer and Stormwater	06-Charity/Non-Public Schools	10	1	0
04-Sewer and Stormwater	09-Hand Bill	229	19	106406.94
04-Sewer and Stormwater	11-Hospital/University	12	1	4205.94
05-Water and Stormwater	01-General Service-Residential	17312	1443	272962.37
05-Water and Stormwater	02-General Service-Commercial	1881	157	544585.78
05-Water and Stormwater	03-General Service-Industrial	187	16	283526.63
05-Water and Stormwater	04-General Service-Public Utilities	12	1	9245.64
05-Water and Stormwater	05-P.H.A	34	3	3780.2
05-Water and Stormwater	06-Charity/Non-Public Schools	287	24	35894.01
05-Water and Stormwater	07-Public Schools	4	0	0
05-Water and Stormwater	08-Senior Citizens Discount	198	17	2120.42
05-Water and Stormwater	09-Hand Bill	52	4	65454.17
05-Water and Stormwater	10-City Leased	254	21	64882.08
05-Water and Stormwater	11-Hospital/University	36	3	16269.63
05-Water and Stormwater	13-Fire Service	1292	108	0

Rpt1c v5 2015.02		FY15		
Service Type	Customer Type	fy15 # of Accounts Month	fy15 # of Accounts	fy15 Stormwater Charges
05-Water and Stormwater	14-City Government	391	33	185996.14
06-Sewer Only	01-General Service-Residential	18	2	9.92
06-Sewer Only	02-General Service-Commercial	12	1	0
06-Sewer Only	03-General Service-Industrial	0	0	0
06-Sewer Only	04-General Service-Public Utilities	3	0	0
06-Sewer Only	06-Charity/Non-Public Schools	0	0	0
06-Sewer Only	09-Hand Bill	15	1	0
06-Sewer Only	13-Fire Service	11	1	0
06-Sewer Only	14-City Government	5	0	0
07-Water and Sewer	01-General Service-Residential	222	19	39.9
07-Water and Sewer	02-General Service-Commercial	246	21	276.15
07-Water and Sewer	03-General Service-Industrial	0	0	0
07-Water and Sewer	05-P.H.A	26	2	0
07-Water and Sewer	06-Charity/Non-Public Schools	34	3	0
07-Water and Sewer	07-Public Schools	8	1	0
07-Water and Sewer	08-Senior Citizens Discount	11	1	0
07-Water and Sewer	09-Hand Bill	0	0	0
07-Water and Sewer	11-Hospital/University	0	0	0
07-Water and Sewer	13-Fire Service	10	1	0
07-Water and Sewer	14-City Government	12	1	0
08-RFSS, All Services	01-General Service-Residential	11212	934	161228.62
08-RFSS, All Services	02-General Service-Commercial	512	43	7349.3
08-RFSS, All Services	03-General Service-Industrial	1	0	17.93
08-RFSS, All Services	04-General Service-Public Utilities	0	0	0
08-RFSS, All Services	05-P.H.A	100	8	3873.5
08-RFSS, All Services	08-Senior Citizens Discount	8	1	88.42
08-RFSS, All Services	13-Fire Service	0	0	0
08-RFSS, All Services	14-City Government	12	1	169.13
09-RFSS, No Sewer	01-General Service-Residential	13	1	200.55
09-RFSS, No Sewer	02-General Service-Commercial	6	1	154.6

Rpt1c v5 2015.02		FY15		
Service Type	Customer Type	fy15 # of Accounts Month	fy15 # of Accounts	fy15 Stormwater Charges
10-Unknown	01-General Service-Residential	1413	118	13647.15
10-Unknown	02-General Service-Commercial	5629	469	52884.01
10-Unknown	03-General Service-Industrial	218	18	3958.88
10-Unknown	04-General Service-Public Utilities	167	14	4207.21
10-Unknown	05-P.H.A	163	14	1779.37
10-Unknown	06-Charity/Non-Public Schools	9	1	613.34
10-Unknown	07-Public Schools	3	0	151.8
10-Unknown	08-Senior Citizens Discount	1	0	11.31
10-Unknown	09-Hand Bill	465	39	1179.75
10-Unknown	10-City Leased	0	0	0
10-Unknown	11-Hospital/University	44	4	4232.63
10-Unknown	13-Fire Service	3168	264	0
10-Unknown	14-City Government	73	6	3761.31
				175576596.4

Rpt1a v5 PWD 2015.02

FY12 (2014 Account List)

Service Type	Customer Type	fy12 # of Accounts Months	fy12 # of Accounts	fy12 # of Original Bills Issued
01-Water,Sewer,Stormwater	02-General Service-Commercial	3	0	3
01-Water,Sewer,Stormwater	14-City Government	527	44	539
02-Water Only	14-City Government	21	2	21
03-Stormwater Only	02-General Service-Commercial	0	0	0
03-Stormwater Only	14-City Government	12	1	12
05-Water and Stormwater	14-City Government	15	1	15

Rpt1a v5 PWD 2015.02

FY12 (2014 Account List)

Service Type	Customer Type	fy12 Billed Water Usage	fy12 Water Usage Charges	fy12 Sewer Usage Charges
01-Water,Sewer,Stormwater	02-General Service-Commercial	2500	79.64	55.35
01-Water,Sewer,Stormwater	14-City Government	193182800	4313245.23	4269002.77
02-Water Only	14-City Government	0	0	0
03-Stormwater Only	02-General Service-Commercial	0	0	0
03-Stormwater Only	14-City Government	0	0	0
05-Water and Stormwater	14-City Government	0	0	0

Rpt1a v5 PWD 2015.02

FY13 (2014 Account List)

Service Type	Customer Type	fy13 # of Accounts Months	fy13 # of Accounts	fy13 # of Original Bills Issued
01-Water,Sewer,Stormwater	02-General Service-Commercial	6	1	6
01-Water,Sewer,Stormwater	14-City Government	481	40	512
02-Water Only	14-City Government	33	3	36
03-Stormwater Only	02-General Service-Commercial	3	0	3
03-Stormwater Only	14-City Government	12	1	12
05-Water and Stormwater	14-City Government	0	0	0

Rpt1a v5 PWD 2015.02

FY13 (2014 Account List)

Service Type	Customer Type	fy13 Billed Water Usage	fy13 Water Usage Charges	fy13 Sewer Usage Charges
01-Water,Sewer,Stormwater	02-General Service-Commercial	110800	3236.16	2469.23
01-Water,Sewer,Stormwater	14-City Government	294942500	6765748.17	6803423.65
02-Water Only	14-City Government	0	0	0
03-Stormwater Only	02-General Service-Commercial	400	13.97	9.63
03-Stormwater Only	14-City Government	0	0	0
05-Water and Stormwater	14-City Government	0	0	0

Rpt1a v5 PWD 2015.02

FY14 (2014 Account List)

Service Type	Customer Type	fy14 # of Accounts Months	fy14 # of Accounts	fy14 # of Original Bills Issued
01-Water,Sewer,Stormwater	02-General Service-Commercial	0	0	0
01-Water,Sewer,Stormwater	14-City Government	537	45	548
02-Water Only	14-City Government	28	2	28
03-Stormwater Only	02-General Service-Commercial	0	0	0
03-Stormwater Only	14-City Government	12	1	12
05-Water and Stormwater	14-City Government	0	0	0

Rpt1a v5 PWD 2015.02

FY14 (2014 Account List)

Service Type	Customer Type	fy14 Billed Water Usage	fy14 Water Usage Charges	fy14 Sewer Usage Charges
01-Water,Sewer,Stormwater	02-General Service-Commercial	0	0	0
01-Water,Sewer,Stormwater	14-City Government	286990600	7090940.24	7482807.36
02-Water Only	14-City Government	0	0	0
03-Stormwater Only	02-General Service-Commercial	0	0	0
03-Stormwater Only	14-City Government	0	0	0
05-Water and Stormwater	14-City Government	0	0	0

Rpt1a v5 PWD 2015.02

FY15 (2015 PWD Account List)

Service Type	Customer Type	fy15 # of Accounts Months	fy15 # of Accounts	fy15 # of Original Bills Issued
01-Water,Sewer,Stormwater	02-General Service-Commercial	2	0	2
01-Water,Sewer,Stormwater	14-City Government	788	66	795
02-Water Only	14-City Government	32	3	35
03-Stormwater Only	02-General Service-Commercial	0	0	0
03-Stormwater Only	14-City Government	42	4	43
05-Water and Stormwater	14-City Government	0	0	0

Rpt1a v5 PWD 2015.02

FY15 (2015 PWD Account List)

Service Type	Customer Type	fy15 Billed Water Usage	fy15 Water Usage Charges	fy15 Sewer Usage Charges
01-Water,Sewer,Stormwater	02-General Service-Commercial	200	7.81	5.61
01-Water,Sewer,Stormwater	14-City Government	324057300	8504034.37	8950288.35
02-Water Only	14-City Government	0	0	0
03-Stormwater Only	02-General Service-Commercial	0	0	0
03-Stormwater Only	14-City Government	0	0	0
05-Water and Stormwater	14-City Government	0	0	0

Rpt1b v5 2015.02	Service Type	Customer Type	Meter Size	FY12 (2014 PWD Account List)				
				fy12 # of Accounts Months	fy12 # of Accounts	fy12 # of Original Bills Issued	fy12 Water Usage Charges	fy12 Sewer Usage Charges
	01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	3	0	3	0	0
	01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	0	0	0	0	0
	01-Water,Sewer,Stormwater	14-City Government	01-5/8"	94	8	95	618.15	426.46
	01-Water,Sewer,Stormwater	14-City Government	03-1"	34	3	36	350.8	850.35
	01-Water,Sewer,Stormwater	14-City Government	04-1.5"	23	2	24	359.94	1058.11
	01-Water,Sewer,Stormwater	14-City Government	05-2"	116	10	118	2604.81	8160.2
	01-Water,Sewer,Stormwater	14-City Government	06-3"	56	5	58	2264.69	7626.89
	01-Water,Sewer,Stormwater	14-City Government	07-4"	23	2	23	1517.25	4922.67
	01-Water,Sewer,Stormwater	14-City Government	08-6"	86	7	89	12083.99	40344.18
	01-Water,Sewer,Stormwater	14-City Government	09-8"	48	4	48	9512.26	32434.86
	01-Water,Sewer,Stormwater	14-City Government	10-10"	36	3	36	10351.07	35035.12
	01-Water,Sewer,Stormwater	14-City Government	11-12"	11	1	12	5943.6	21450.36
	02-Water Only	14-City Government	08-6"	7	1	7	0	0
	02-Water Only	14-City Government	09-8"	14	1	14	0	0
	03-Stormwater Only	02-General Service-Commercial	05-2"	0	0	0	0	0
	03-Stormwater Only	14-City Government	A-Unknown	12	1	12	0	0
	05-Water and Stormwater	14-City Government	08-6"	5	0	5	0	0
	05-Water and Stormwater	14-City Government	09-8"	10	1	10	0	0

Rpt1b v5 2015.02	Service Type	Customer Type	Meter Size	FY13 (2014 PWD Account List)				
				fy13 # of Accounts Months	fy13 # of Accounts	fy13 # of Original Bills Issued	fy13 Water Usage Charges	fy13 Sewer Usage Charges
	01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	5	0	5	0	0
	01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	1	0	1	6367.62	20461.33
	01-Water,Sewer,Stormwater	14-City Government	01-5/8"	91	8	94	601.58	504
	01-Water,Sewer,Stormwater	14-City Government	03-1"	29	2	34	336.41	613.8
	01-Water,Sewer,Stormwater	14-City Government	04-1.5"	21	2	24	356.42	764.21
	01-Water,Sewer,Stormwater	14-City Government	05-2"	108	9	116	3058.4	7024.1
	01-Water,Sewer,Stormwater	14-City Government	06-3"	51	4	54	2259.16	5382.76
	01-Water,Sewer,Stormwater	14-City Government	07-4"	23	2	25	1640.21	3857.99
	01-Water,Sewer,Stormwater	14-City Government	08-6"	74	6	78	12180.39	29528.14
	01-Water,Sewer,Stormwater	14-City Government	09-8"	40	3	40	9500.46	22986.86
	01-Water,Sewer,Stormwater	14-City Government	10-10"	35	3	35	18165.97	47494.4
	01-Water,Sewer,Stormwater	14-City Government	11-12"	9	1	12	6035.46	14686.3
	02-Water Only	14-City Government	08-6"	11	1	12	0	0
	02-Water Only	14-City Government	09-8"	22	2	24	0	0
	03-Stormwater Only	02-General Service-Commercial	05-2"	3	0	3	0	0
	03-Stormwater Only	14-City Government	A-Unknown	12	1	12	0	0
	05-Water and Stormwater	14-City Government	08-6"	0	0	0	0	0
	05-Water and Stormwater	14-City Government	09-8"	0	0	0	0	0

Rpt1b v5 2015.02			FY14 (2014 PWD Account List)				
Service Type	Customer Type	Meter Size	fy14 # of Accounts Months	fy14 # of Accounts	fy14 # of Original Bills Issued	fy14 Water Usage Charges	fy14 Sewer Usage Charges
01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	0	0	0	0	0
01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	0	0	0	0	0
01-Water,Sewer,Stormwater	14-City Government	01-5/8"	91	8	92	597.13	591.15
01-Water,Sewer,Stormwater	14-City Government	03-1"	30	3	31	328.48	364.47
01-Water,Sewer,Stormwater	14-City Government	04-1.5"	21	2	22	357.37	428.25
01-Water,Sewer,Stormwater	14-City Government	05-2"	127	11	130	3017.93	3712.38
01-Water,Sewer,Stormwater	14-City Government	06-3"	57	5	59	2379.52	3019.31
01-Water,Sewer,Stormwater	14-City Government	07-4"	22	2	22	1586.64	1982.01
01-Water,Sewer,Stormwater	14-City Government	08-6"	87	7	89	12945.73	16373.33
01-Water,Sewer,Stormwater	14-City Government	09-8"	48	4	48	10007.65	12768.32
01-Water,Sewer,Stormwater	14-City Government	10-10"	45	4	45	18418.55	23440.18
01-Water,Sewer,Stormwater	14-City Government	11-12"	9	1	10	5839.57	7605.18
02-Water Only	14-City Government	08-6"	10	1	10	0	0
02-Water Only	14-City Government	09-8"	18	2	18	0	0
03-Stormwater Only	02-General Service-Commercial	05-2"	0	0	0	0	0
03-Stormwater Only	14-City Government	A-Unknown	12	1	12	0	0
05-Water and Stormwater	14-City Government	08-6"	0	0	0	0	0
05-Water and Stormwater	14-City Government	09-8"	0	0	0	0	0
					588	55478.57	70284.58

Rpt1b v5 2015.02	Service Type	Customer Type	Meter Size	FY15 (2015 PWD Account List)				
				fy15 # of Accounts Months	fy15 # of Accounts	fy15 # of Original Bills Issued	fy15 Water Usage Charges	fy15 Sewer Usage Charges
	01-Water,Sewer,Stormwater	02-General Service-Commercial	05-2"	0	0	0	0	0
	01-Water,Sewer,Stormwater	02-General Service-Commercial	10-10"	0	0	0	0	0
	01-Water,Sewer,Stormwater	14-City Government	01-5/8"	171	14	171	1105.66	1119.19
	01-Water,Sewer,Stormwater	14-City Government	03-1"	59	5	59	618.71	704.47
	01-Water,Sewer,Stormwater	14-City Government	04-1.5"	58	5	58	902.48	1114.19
	01-Water,Sewer,Stormwater	14-City Government	05-2"	164	14	166	3872.42	4919.57
	01-Water,Sewer,Stormwater	14-City Government	06-3"	87	7	89	3764.65	4940.05
	01-Water,Sewer,Stormwater	14-City Government	07-4"	33	3	34	2484.09	3204.4
	01-Water,Sewer,Stormwater	14-City Government	08-6"	93	8	95	13226.96	17277.01
	01-Water,Sewer,Stormwater	14-City Government	09-8"	48	4	48	10006.89	13206.23
	01-Water,Sewer,Stormwater	14-City Government	10-10"	63	5	63	20890.48	27452.6
	01-Water,Sewer,Stormwater	14-City Government	11-12"	12	1	12	6360.78	8567.29
	02-Water Only	14-City Government	08-6"	11	1	12	0	0
	02-Water Only	14-City Government	09-8"	21	2	23	0	0
	03-Stormwater Only	02-General Service-Commercial	05-2"	0	0	0	0	0
	03-Stormwater Only	14-City Government	A-Unknown	12	1	12	0	0
	05-Water and Stormwater	14-City Government	08-6"	0	0	0	0	0
	05-Water and Stormwater	14-City Government	09-8"	0	0	0	0	0
						842	63233.12	82505

Rpt1c v5 2015.02 w		FY12 (2014 PWD Account List)		
Service Type	Customer Type	fy12 # of Accounts Month	fy12 # of Accounts	fy12 Stormwater Charges
01-Water,Sewer,Stormwater	02-General Service-Commercial	3	0	962.51
01-Water,Sewer,Stormwater	14-City Government	527	44	1041025.33
02-Water Only	14-City Government	21	2	0
03-Stormwater Only	02-General Service-Commercial	0	0	0
03-Stormwater Only	14-City Government	12	1	4882.99
05-Water and Stormwater	14-City Government	15	1	0

Rpt1c v5 2015.02 w		FY13 (2014 PWD Account List)		
Service Type	Customer Type	fy13 # of Accounts Month	fy13 # of Accounts	fy13 Stormwater Charges
01-Water,Sewer,Stormwater	02-General Service-Commercial	6	1	137435.25
01-Water,Sewer,Stormwater	14-City Government	481	40	1298369.48
02-Water Only	14-City Government	33	3	0
03-Stormwater Only	02-General Service-Commercial	3	0	1765.35
03-Stormwater Only	14-City Government	12	1	7286.55
05-Water and Stormwater	14-City Government	0	0	0

Rpt1c v5 2015.02 w		FY14 (2014 PWD Account List)		
Service Type	Customer Type	fy14 # of Accounts Month	fy14 # of Accounts	fy14 Stormwater Charges
01-Water,Sewer,Stormwater	02-General Service-Commercial	0	0	0
01-Water,Sewer,Stormwater	14-City Government	537	45	1315523.63
02-Water Only	14-City Government	28	2	0
03-Stormwater Only	02-General Service-Commercial	0	0	0
03-Stormwater Only	14-City Government	12	1	10538.64
05-Water and Stormwater	14-City Government	0	0	0

Rpt1c v5 2015.02 w		FY15 (2015 PWD Account List)		
Service Type	Customer Type	fy15 # of Accounts Month	fy15 # of Accounts	fy15 Stormwater Charges
01-Water,Sewer,Stormwater	02-General Service-Commercial	2	0	126.71
01-Water,Sewer,Stormwater	14-City Government	788	66	1476175.22
02-Water Only	14-City Government	32	3	0
03-Stormwater Only	02-General Service-Commercial	0	0	0
03-Stormwater Only	14-City Government	42	4	11816.7
05-Water and Stormwater	14-City Government	0	0	0

Description	0 Count	0 Charges	1-2000 Count	1-2000 Usage	1-2000 Charges	2001-100000 Count	2001-100000 Uasge
General Service	735,538	-	4,651,660	2,723,656,600	\$ 100,842,595.07	194,653	1,449,212,900
Residential	658,055	-	4,379,595	2,533,754,300	\$ 93,822,488.74	118,523	656,212,200
Commercial	74,647	-	264,993	185,203,800	\$ 6,846,621.09	71,780	744,864,900
Industrial	2,557	-	6,383	4,300,300	\$ 158,737.07	3,916	42,314,200
Public Utilities	279	-	689	398,200	\$ 14,748.58	434	5,821,600
PHA	7,146	-	56,420	45,050,200	\$ 1,584,798.80	7,771	56,508,300
Charities and Schools	3,011	-	16,871	13,368,800	\$ 371,924.25	11,435	138,963,500
Senior Citizens	18,536	(1)	217,826	98,841,100	\$ 2,782,121.83	3,085	13,920,500
Hand Bill	190	-	312	252,900	\$ 8,846.94	1,691	71,214,400
City Leased	185	-	336	258,300	\$ 9,560.06	270	5,521,300
Hospital/University	680	-	1,058	738,400	\$ 20,621.59	2,761	82,829,100
Scheduled	12	-	24	22,000	\$ 815.90	-	-
Fire Service	1,198	-	528	349,700	\$ 12,954.78	153	1,798,700
City Government	4,942	-	4,201	3,298,000	\$ 122,152.16	4,649	62,678,800
PWD	75	-	152	107,300	\$ 3,976.35	307	4,610,200
City Government Less PWD	4,867	-	4,049	3,190,700	\$ 118,175.81	4,342	58,068,600

Description	2001-100000 Charges	100001-2000000 Count	100001-2000000 Usage	100001-2000000 Charges	2000001+ Count	2000001+ Usage	2000001+ Charges
General Service	\$ 44,860,632.29	2,238	497,921,100	\$ 13,933,441.51	2	6,492,500	\$ 182,877.05
Residential	\$ 21,453,979.17	434	82,196,300	\$ 2,404,669.85	-	-	\$ -
Commercial	\$ 21,958,274.90	1,676	355,976,600	\$ 10,218,645.13	2	6,492,500	\$ 182,877.05
Industrial	\$ 1,266,512.22	109	57,053,500	\$ 1,230,570.76	-	-	\$ -
Public Utilities	\$ 181,866.03	20	2,694,700	\$ 79,555.81	-	-	\$ -
PHA	\$ 1,719,616.27	245	68,539,100	\$ 1,859,408.09	-	-	\$ -
Charities and Schools	\$ 3,263,002.04	313	52,857,600	\$ 1,164,620.06	-	-	\$ -
Senior Citizens	\$ 353,201.94	2	254,400	\$ 6,685.56	-	-	\$ -
Hand Bill	\$ 1,978,103.62	898	316,030,100	\$ 7,386,244.63	37	189,134,500	\$ 4,474,009.69
City Leased	\$ 170,826.09	9	1,111,500	\$ 33,083.13	1	8,071,300	\$ 169,677.66
Hospital/University	\$ 1,906,391.18	682	194,065,400	\$ 4,176,087.58	-	-	\$ -
Scheduled	\$ -	-	-	\$ -	-	-	\$ -
Fire Service	\$ 56,399.64	14	6,460,300	\$ 181,439.47	-	-	\$ -
City Government	\$ 1,956,315.45	408	210,729,700	\$ 5,916,888.23	31	250,036,800	\$ 6,024,135.94
PWD	\$ 143,407.77	134	65,901,500	\$ 1,853,827.65	26	228,823,100	\$ 5,440,496.08
City Government Less PWD	\$ 1,812,907.68	274	144,828,200	\$ 4,063,060.58	5	21,213,700	\$ 583,639.86

==== 2015 Basis2 Data =====

All				
Retail*	2012	2013	2014	2015
Retail Billings	\$ 510,374,617.05	\$ 527,193,082.06	\$ 562,495,690.38	\$ 591,431,023.14
Retail Billings Collected (Ever)	\$ 485,996,726.56	\$ 499,168,368.70	\$ 525,731,651.99	\$ 500,336,761.22
Retail Collections Factor (Ever)	95.2%	94.7%	93.5%	84.6%
Retail Billings Collected (FY)	\$ 422,528,534.46	\$ 435,093,101.28	\$ 471,559,931.09	\$ 496,042,409.32
Retail Collections Factor (FY)	82.8%	82.5%	83.8%	83.9%
Retail Billings Collected (FY+1M)	\$ 452,769,831.80	\$ 467,691,550.64	\$ 499,634,922.32	\$ 496,453,349.34
Retail Collections Factor (FY+1M)	88.7%	88.7%	88.8%	83.9%
City**	2012	2013	2014	2015
City Billings	\$ 31,177,911.66	\$ 36,092,793.48	\$ 40,410,822.00	\$ 44,529,443.53
City Billings Collected (Ever)	\$ 364,474.49	\$ 290,581.75	\$ 187,173.88	\$ 159,508.19
City Collections Factor (Ever)	1.2%	0.8%	0.5%	0.4%
City Billings Collected (FY)	\$ 304,450.18	\$ 258,711.04	\$ 176,832.17	\$ 159,432.99
City Collections Factor (FY)	1.0%	0.7%	0.4%	0.4%
City Billings Collected (FY+1M)	\$ 351,279.60	\$ 279,815.73	\$ 186,807.71	\$ 159,432.99
City Collections Factor (FY+1M)	1.1%	0.8%	0.5%	0.4%
PWD***, ****	2012	2013	2014	2015
PWD Billings	\$ 9,837,937.30	\$ 15,220,531.58	\$ 16,019,052.14	\$ 19,090,748.10
PWD Billings Collected (Ever)				
PWD Collections Factor (Ever)				
Collections Factor (Ever Assuming City less PWD is 100%)	95.4%	94.9%	93.7%	85.2%
Collections Factor FY (Assuming City less PWD is 100%)	83.5%	83.2%	84.5%	84.5%
Storm Water Only				
Retail*	2012	2013	2014	2015
Retail StmWtr Only Billings	\$ 10,475,743.45	\$ 15,401,364.26	\$ 18,369,992.05	\$ 18,570,350.42
Retail StmWtr Only Billings Collected (Ever)	\$ 7,331,080.94	\$ 10,497,838.04	\$ 11,354,273.16	\$ 10,230,146.45
Retail StmWtr Only Collections Factor (Ever)	70.0%	68.2%	61.8%	55.1%
Retail StmWtr Only Billings Collected (FY)	\$ 5,822,206.18	\$ 8,824,369.69	\$ 10,018,326.67	\$ 10,131,180.28
Retail StmWtr Only Collections Factor (FY)	55.6%	57.3%	54.5%	54.6%
Retail StmWtr Only Billings Collected (FY+1M)	\$ 6,334,514.39	\$ 9,368,062.54	\$ 10,497,848.66	\$ 10,136,390.49
Retail StmWtr Only Collections Factor (FY+1M)	60.5%	60.8%	57.1%	54.6%
City**	2012	2013	2014	2015
City StmWtr Only Billings	\$ 750,025.65	\$ 1,087,912.01	\$ 1,516,049.36	\$ 1,658,815.63
City StmWtr Only Billings Collected (Ever)	\$ 87,600.51	\$ 76,134.76	\$ 27,068.16	\$ 22,151.15
City StmWtr Only Collections Factor (Ever)	11.7%	7.0%	1.8%	1.3%
City StmWtr Only Billings Collected (FY)	\$ 82,831.38	\$ 65,773.31	\$ 26,925.95	\$ 22,075.95
City StmWtr Only Collections Factor (FY)	11.0%	6.0%	1.8%	1.3%
City StmWtr Only Billings Collected (FY+1M)	\$ 86,954.66	\$ 72,481.34	\$ 26,939.90	\$ 22,075.95
City StmWtr Only Collections Factor (FY+1M)	11.6%	6.7%	1.8%	1.3%
StmWtr Only Collections Factor (Ever Assuming City 100%)	70.2%	68.3%	61.9%	55.1%
StmWtr Only Collections Factor FY (Assuming City 100%)	55.9%	57.4%	54.6%	54.6%

*This is the total of everything but the City Customer Types.

**These are the City Customer Types

*** 2014 and Prior Agency = W Accounts from spreadsheet provided by PWD

**** 2015 Aqengy = W Accounts from spreadsheet provided by PWD

Fiscal Year	Customer Class	Billings	Payments (All)	Pre-payments	7/1/09 to 6/30/10	7/1/10 to 6/30/11	7/1/11 to 6/30/12	7/1/12 to 6/30/14
FY10	Total	\$447,053,759.43	\$443,019,161.32	\$6,076,607.50	\$385,307,247.23	\$42,674,485.12	\$5,245,750.33	\$3,715,071.19
FY10	Total less City government	\$458,277,978.94	\$442,132,013.57	\$6,076,575.49	\$384,474,315.75	\$42,624,497.31	\$5,245,375.42	\$3,711,249.65
FY10	Percent collected (excludes City)		96.48%	1.33%	83.90%	9.30%	1.14%	0.81%
Fiscal Year	Customer Class	Billings	Payments (All)	Pre-payments	7/1/10 to 6/30/11	7/1/11 to 6/30/12	7/1/12 to 6/30/13	7/1/13 to 6/30/14
FY11	Total	\$519,933,311.87	\$469,886,401.31	\$3,719,854.72	\$412,330,350.46	\$46,545,453.55	\$4,847,407.89	\$2,443,334.69
FY11	Total less City government	\$491,411,043.48	\$468,571,621.21	\$3,691,394.55	\$411,105,567.38	\$46,508,522.87	\$4,822,801.72	\$2,443,334.69
FY11	Percent collected (excludes City)		95.35%	0.75%	83.66%	9.46%	0.98%	0.50%
Fiscal Year	Customer Class	Billings	Payments (All)	Pre-payments	7/1/11 to 6/30/12	7/1/12 to 6/30/13	7/1/13 to 6/30/14	-
FY12	Total	\$541,946,867.32	\$483,092,274.02	\$3,500,536.81	\$423,213,870.51	\$51,328,165.40	\$5,049,701.30	\$0.00
FY12	Total less City government	\$510,768,955.66	\$482,727,859.00	\$3,488,414.72	\$422,909,420.33	\$51,280,849.43	\$5,049,174.52	\$0.00
FY12	Percent collected (excludes City)		94.51%	0.68%	82.80%	10.04%	0.99%	0.00%

Fiscal Year	Customer Class	Billings	Payments (All)	Pre-payments	7/1/09 to 6/30/10	7/1/10 to 6/30/11	7/1/11 to 6/30/12	7/1/12 to 6/30/14
FY10	01-General Service-Residential	\$286,504,249.00	\$273,639,617.29	\$2,426,008.23	\$236,678,299.32	\$27,147,245.20	\$4,249,916.17	\$3,138,148.42
FY10	02-General Service-Commercial	\$84,219,922.05	\$82,111,569.84	\$1,184,684.92	\$72,942,906.82	\$6,761,402.39	\$798,034.75	\$424,540.96
FY10	03-General Service-Industrial	\$6,315,321.38	\$6,035,665.17	\$59,177.41	\$5,390,899.34	\$508,586.67	\$53,686.85	\$23,314.90
FY10	04-General Service-Public Utilities	\$931,355.11	\$898,767.51	\$18,684.40	\$784,420.27	\$95,662.84	\$0.00	\$0.00
FY10	05-P.H.A	\$11,332,056.85	\$11,730,980.06	\$107,775.35	\$9,933,241.11	\$1,677,684.26	\$5,568.44	\$6,710.90
FY10	06-Charity/Non-Public Schools	\$10,027,745.94	\$10,017,552.80	\$189,029.77	\$8,976,991.27	\$849,023.20	\$1,611.71	\$896.85
FY10	07-Public Schools	\$6,519,675.66	\$6,485,312.46	\$66,445.24	\$4,699,238.11	\$1,689,913.48	\$27,399.83	\$2,315.80
FY10	08-Senior Citizens Discount	\$7,518,589.34	\$7,138,663.64	\$64,554.44	\$6,398,045.19	\$531,040.15	\$61,274.19	\$83,749.67
FY10	09-Hand Bill	\$30,479,292.61	\$29,642,848.64	\$1,576,486.41	\$25,789,451.84	\$2,245,670.85	\$19,953.55	\$11,285.99
FY10	10-City Leased	\$1,140,431.99	\$940,381.02	\$3,846.70	\$913,141.16	\$22,293.85	\$1,099.31	\$0.00
FY10	11-Hospital/University	\$10,747,077.17	\$10,961,956.68	\$230,014.67	\$9,927,937.83	\$785,245.78	\$8,455.71	\$10,302.69
FY10	12-Scheduled	\$574.67	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FY10	13-Fire Service	\$2,541,687.17	\$2,528,698.46	\$149,867.95	\$2,039,743.49	\$310,728.64	\$18,374.91	\$9,983.47
FY10	14-City Government	-\$11,224,219.51	\$887,147.75	\$32.01	\$832,931.48	\$49,987.81	\$374.91	\$3,821.54
FY10	Total	\$447,053,759.43	\$443,019,161.32	\$6,076,607.50	\$385,307,247.23	\$42,674,485.12	\$5,245,750.33	\$3,715,071.19
FY10	Total less City government	\$458,277,978.94	\$442,132,013.57	\$6,076,575.49	\$384,474,315.75	\$42,624,497.31	\$5,245,375.42	\$3,711,249.65
FY10	Total Non-SW less City government	\$458,244,686.22	\$442,131,952.79	\$6,076,575.49	\$384,474,315.75	\$42,624,497.31	\$5,245,375.42	\$3,711,188.87
FY10	Total SW less City government	\$33,292.72	\$60.78	\$0.00	\$0.00	\$0.00	\$0.00	\$60.78
FY10	Percent collected (excludes City)		96.48%	1.33%	83.90%	9.30%	1.14%	0.81%
FY10	Non-sw collected (excludes City)		96.48%	1.33%	83.90%	9.30%	1.14%	0.81%
FY10	SW collected (excludes City)		0.18%	0.00%	0.00%	0.00%	0.00%	0.18%

Fiscal Year	Customer Class	Billings	Payments (All)	Pre-payments	7/1/10 to 6/30/11	7/1/11 to 6/30/12	7/1/12 to 6/30/13	7/1/13 to 6/30/14
FY11	01-General Service-Residential	\$304,125,292.78	\$286,040,183.05	\$1,561,914.04	\$247,156,931.58	\$31,293,719.00	\$3,949,457.85	\$2,078,160.58
FY11	02-General Service-Commercial	\$93,806,020.73	\$90,840,327.22	\$1,146,617.08	\$80,955,674.24	\$7,788,660.67	\$708,440.33	\$240,934.90
FY11	03-General Service-Industrial	\$9,789,594.84	\$9,343,741.17	\$204,379.66	\$8,008,353.98	\$1,102,054.08	\$10,417.42	\$18,536.03
FY11	04-General Service-Public Utilities	\$1,558,840.89	\$1,377,336.07	\$24,003.98	\$1,048,162.52	\$273,617.62	\$19,433.75	\$12,118.20
FY11	05-P.H.A	\$11,397,995.86	\$11,398,267.25	\$19,571.91	\$10,387,068.85	\$986,013.89	\$4,074.76	\$1,537.84
FY11	06-Charity/Non-Public Schools	\$10,756,326.87	\$10,719,256.83	\$112,109.80	\$9,865,107.84	\$737,484.40	\$2,816.64	\$1,738.15
FY11	07-Public Schools	\$6,101,035.38	\$6,113,177.59	\$52,919.12	\$5,963,692.30	\$96,566.17	\$0.00	\$0.00
FY11	08-Senior Citizens Discount	\$8,061,766.57	\$7,599,104.04	\$37,377.07	\$6,812,100.14	\$625,410.16	\$64,653.28	\$59,563.39
FY11	09-Hand Bill	\$29,445,702.81	\$29,435,191.23	-\$6,515.30	\$27,187,997.53	\$2,230,895.80	\$22,239.73	\$573.47
FY11	10-City Leased	\$734,296.53	\$718,779.48	\$37,340.18	\$538,141.41	\$93,073.49	\$26,890.39	\$23,334.01
FY11	11-Hospital/University	\$13,247,013.82	\$12,663,856.18	\$472,251.11	\$11,186,547.85	\$1,001,622.51	\$3,434.71	\$0.00
FY11	12-Scheduled	\$2,061.05	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FY11	13-Fire Service	\$2,385,095.35	\$2,322,401.10	\$29,425.90	\$1,995,789.14	\$279,405.08	\$10,942.86	\$6,838.12
FY11	14-City Government	\$28,522,268.39	\$1,314,780.10	\$28,460.17	\$1,224,783.08	\$36,930.68	\$24,606.17	\$0.00
FY11	Total	\$519,933,311.87	\$469,886,401.31	\$3,719,854.72	\$412,330,350.46	\$46,545,453.55	\$4,847,407.89	\$2,443,334.69
FY11	Total less City government	\$491,411,043.48	\$468,571,621.21	\$3,691,394.55	\$411,105,567.38	\$46,508,522.87	\$4,822,801.72	\$2,443,334.69
FY11	Total Non-SW less City government	\$487,049,706.58	\$465,936,322.46	\$3,686,336.73	\$409,338,979.18	\$45,819,406.63	\$4,716,309.43	\$2,375,290.49
FY11	Total SW less City government	\$4,361,336.90	\$2,635,298.75	\$5,057.82	\$1,766,588.20	\$689,116.24	\$106,492.29	\$68,044.20
FY11	Percent collected (excludes City)		95.35%	0.75%	83.66%	9.46%	0.98%	0.50%
FY11	Non-sw collected (excludes City)		95.67%	0.76%	84.04%	9.41%	0.97%	0.49%
FY11	SW collected (excludes City)		60.42%	0.12%	40.51%	15.80%	2.44%	1.56%

Fiscal Year	Customer Class	Billings	Payments (All)	Pre-payments	7/1/11 to 6/30/12	7/1/12 to 6/30/13	7/1/13 to 6/30/14	-
FY12	01-General Service-Residential	\$313,241,632.33	\$292,236,126.79	\$1,943,841.54	\$253,041,645.51	\$33,365,957.65	\$3,884,682.09	\$0.00
FY12	02-General Service-Commercial	\$102,536,666.83	\$97,944,246.03	\$1,026,737.01	\$87,140,471.84	\$8,887,225.39	\$889,811.79	\$0.00
FY12	03-General Service-Industrial	\$9,957,681.70	\$9,118,272.27	\$69,508.34	\$8,254,656.27	\$714,478.51	\$79,629.15	\$0.00
FY12	04-General Service-Public Utilities	\$2,185,373.24	\$1,839,672.68	\$8,668.10	\$1,604,460.95	\$187,231.97	\$39,311.66	\$0.00
FY12	05-P.H.A	\$11,658,473.38	\$11,585,261.73	-\$7,120.40	\$10,052,147.69	\$1,538,030.28	\$2,204.16	\$0.00
FY12	06-Charity/Non-Public Schools	\$10,790,323.37	\$10,732,160.32	\$99,538.45	\$9,971,347.70	\$653,922.93	\$7,351.24	\$0.00
FY12	07-Public Schools	\$6,141,457.23	\$6,132,133.36	\$198,304.30	\$4,463,562.21	\$1,470,266.85	\$0.00	\$0.00
FY12	08-Senior Citizens Discount	\$8,500,075.70	\$7,997,583.34	\$50,218.52	\$7,179,420.85	\$691,222.02	\$76,721.95	\$0.00
FY12	09-Hand Bill	\$29,129,513.77	\$29,002,325.54	\$19,050.89	\$26,815,998.02	\$2,163,769.25	\$3,507.38	\$0.00
FY12	10-City Leased	\$860,385.00	\$695,221.70	\$15,871.26	\$562,342.22	\$73,489.34	\$43,518.88	\$0.00
FY12	11-Hospital/University	\$12,701,758.25	\$12,516,495.03	\$36,312.74	\$11,251,966.75	\$1,221,818.49	\$6,397.05	\$0.00
FY12	12-Scheduled	\$1,216.53	\$68.30	\$0.00	\$68.30	\$0.00	\$0.00	\$0.00
FY12	13-Fire Service	\$3,064,398.33	\$2,928,291.91	\$27,483.97	\$2,571,332.02	\$313,436.75	\$16,039.17	\$0.00
FY12	14-City Government	\$31,177,911.66	\$364,415.02	\$12,122.09	\$304,450.18	\$47,315.97	\$526.78	\$0.00
FY12	Total	\$541,946,867.32	\$483,092,274.02	\$3,500,536.81	\$423,213,870.51	\$51,328,165.40	\$5,049,701.30	\$0.00
FY12	Total less City government	\$510,768,955.66	\$482,727,859.00	\$3,488,414.72	\$422,909,420.33	\$51,280,849.43	\$5,049,174.52	\$0.00
FY12	Total Non-SW less City government	\$500,286,952.56	\$475,545,584.38	\$3,405,300.69	\$417,075,254.76	\$50,245,862.99	\$4,819,165.94	\$0.00
FY12	Total SW less City government	\$10,482,003.10	\$7,182,274.62	\$83,114.03	\$5,834,165.57	\$1,034,986.44	\$230,008.58	\$0.00
FY12	Percent collected (excludes City)		94.51%	0.68%	82.80%	10.04%	0.99%	0.00%
FY12	Non-sw collected (excludes City)		95.05%	0.68%	83.37%	10.04%	0.96%	0.00%
FY12	SW collected (excludes City)		68.52%	0.79%	55.66%	9.87%	2.19%	0.00%

APPENDIX E. UTILITIES BENCHMARKING SUMMARY

PREPARED FOR CITY OF PHILADELPHIA

BENCHMARKING OF BILLING, COLLECTION, RECEIVABLES, DELINQUENCIES, AND SHUTOFFS

Participating Utilities Summary Report / March 2015



INTRODUCTION



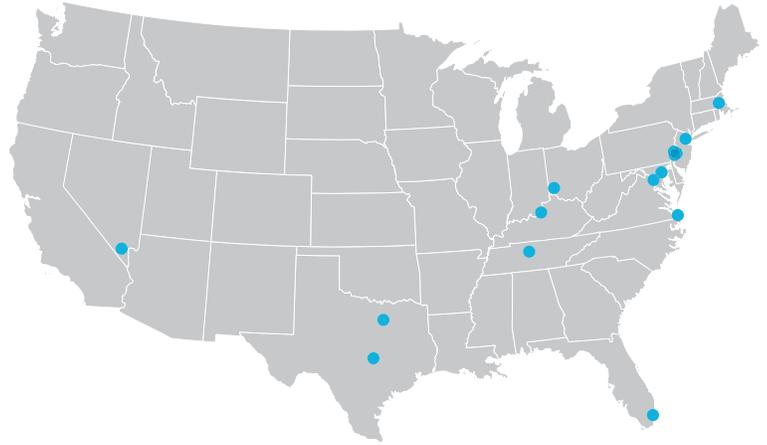
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DURING THE PAST FEW MONTHS, Raftelis Financial Consultants, Inc. (RFC) and Charles E. Day and Associates have worked together to conduct a benchmarking study for the Philadelphia Water Department and the Philadelphia Water Revenue Bureau. As part of our study, we formed a peer utility group and conducted a survey to compare several metrics of interest. This report is a summary prepared for the peer utility group. Anonymity was promised to participating utilities, so you will note that this report presents data without specifying which utility it belongs to.

We appreciate the time and effort of the participating utilities and would be happy to answer any questions you might have regarding this study. Feel free to contact either Myron Olstein at olsteinma@yahoo.com or 703.200.4201 or Jon Davis at jdavis@raftelis.com or 704.936.3346.

This report covers the following information:

1. Participating Utilities
2. Participating Utility Characteristics
3. Moratorium Period
4. Customer Assistance Programs
5. Turnoff Process
6. Number of turnoffs
7. Restoration of Service
8. Medical - Do Not Shutoff Accounts
9. Functions Outsourced
10. Billing and Collection Costs
11. Receivables
12. Delinquency Levels
13. Write-offs
14. Posting Period
15. Summary of Findings



1. PARTICIPATING UTILITIES

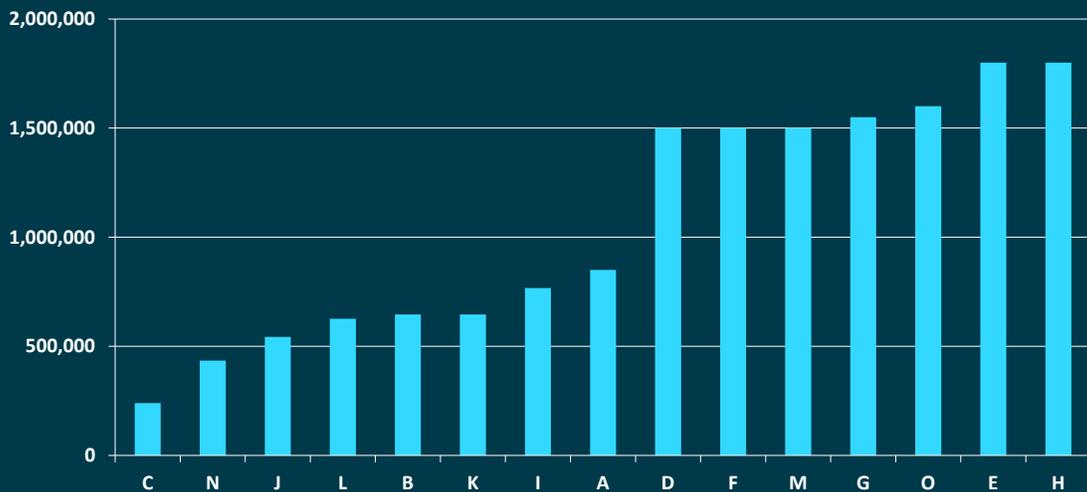
The survey sample consisted of 15 utilities:

- Austin Water Department (TX)
- Baltimore Bureau of Water and Wastewater (MD)
- Boston Water and Sewer Commission (MA)
- DC Water (DC)
- Fort Worth Water Department (TX)
- Greater Cincinnati Water Works (OH)
- Las Vegas Valley Water District (NV)
- Louisville Water Company (KY)
- Miami-Dade Water and Sewer Department (FL)
- Nashville Metro Water Services (TN)
- Passaic Valley Water Commission (NJ)
- PECO (a subsidiary of Exelon Corporation) (PA)
- Philadelphia Gas Works (PA)
- Philadelphia Water Department (PA)
- Virginia Beach Public Utilities (VA)

2. PARTICIPATING UTILITY CHARACTERISTICS

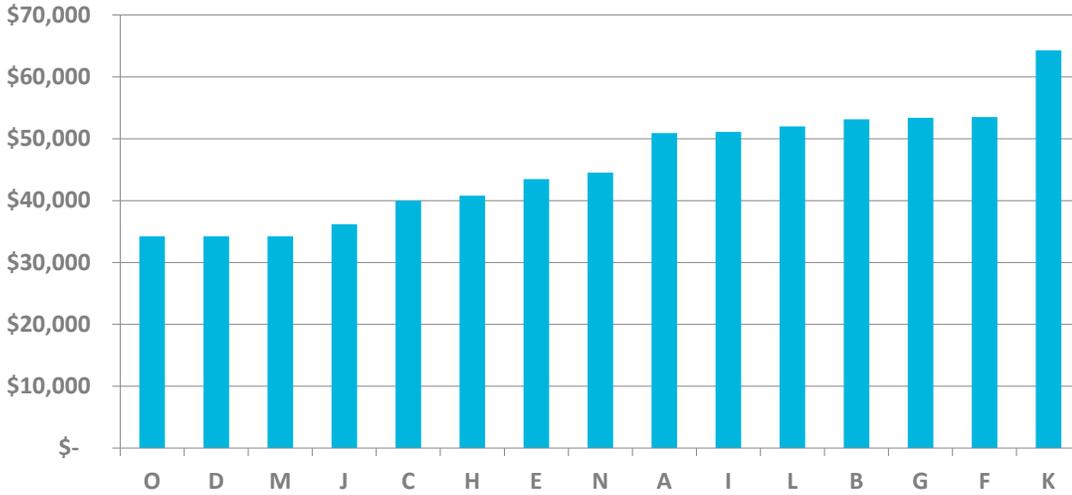
The range of population served (specifically the population receiving bills - the total served population of some utilities was greater due to wholesale arrangements) was 240,000 to 1,800,000.

Population Served



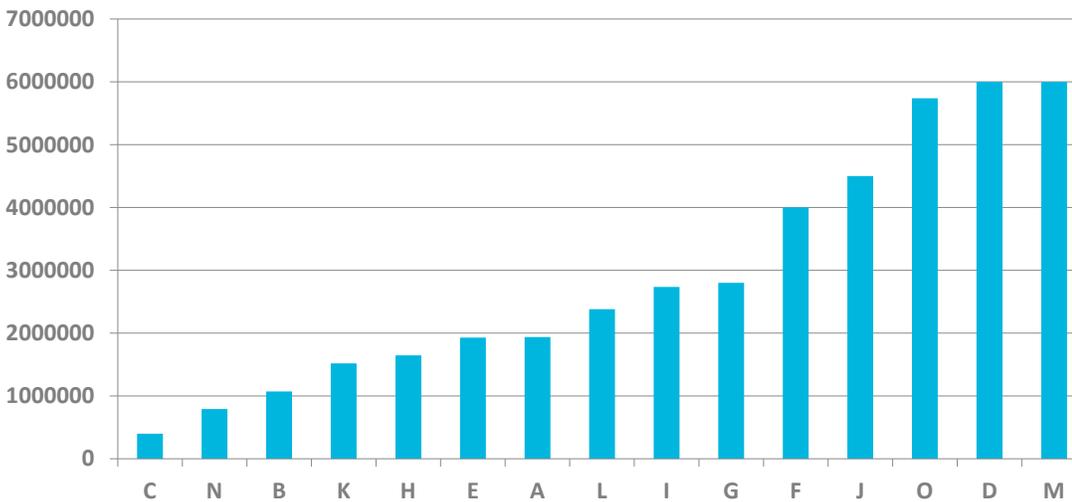
Median household income (MHI) ranged from over \$37,000 to over \$63,000. Some of the data in the graph comes from different years and includes estimates that we made for utilities serving multiple cities. Since MHI is a slowly changing statistic, the temporal differences and estimates should not have much impact on the range of values for the utility sample.

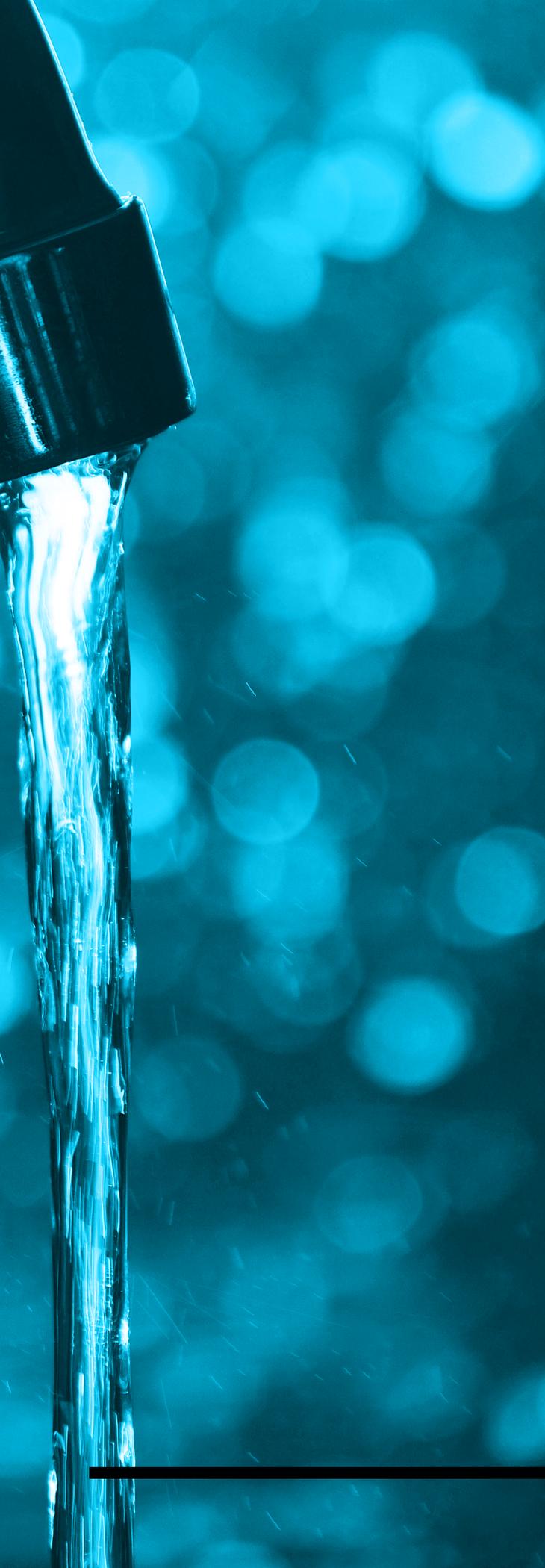
Median Household Income



The number of bills rendered annually ranged from 400,000 to 6,000,000.

Bills Rendered Annually





The following summarizes other key characteristics of the group of utilities:

- Governance
 - City or county departments – 53%
 - Independent (authorities, commissions etc.) – 27%
 - City owned company – 13%
 - Investor Owned Utility – 7%
- Unions – Most utilities had unions. Only 4 of the utilities surveyed had no unions
- Range of Services Billed - 1 to 7 (water, wastewater, stormwater, solid waste, etc.). More than half of the utilities bill for other agencies
- Close to two thirds use some form of automated meter reading (AMR) to read meters
- Three fourths of the utilities collect payments for their own bills. The remaining utilities have other departments, such as a Finance Department, collect payments for their bills.
- Walk in payment centers owned – range 0 to 4
- Population served – 240,000 to 1,800,000 people. The smallest utility serves 800,000 customers, of which more than two-thirds are wholesale.
- Number of accounts billed – 80,000 to more than 500,000 accounts
- Number of bills per year – 400,000 to 6,000,000 bills
- Customer assistance programs (CAP) – The most common were low income, senior citizen, and emergency assistance
- Medical - do not shutoff - Every utility reported some medical accounts. Most will shut off these accounts but will use caution and take additional steps before doing so.
- Functions Outsourced – delinquent collections, bill printing and mailing, cashiering
- Basis for billing – 2/3 AMR, 1/3 meter readers
- Services billed – Most utilities billed for 3 services (water, wastewater, storm water), one was water only, and four conveyed fees for multiple agencies.

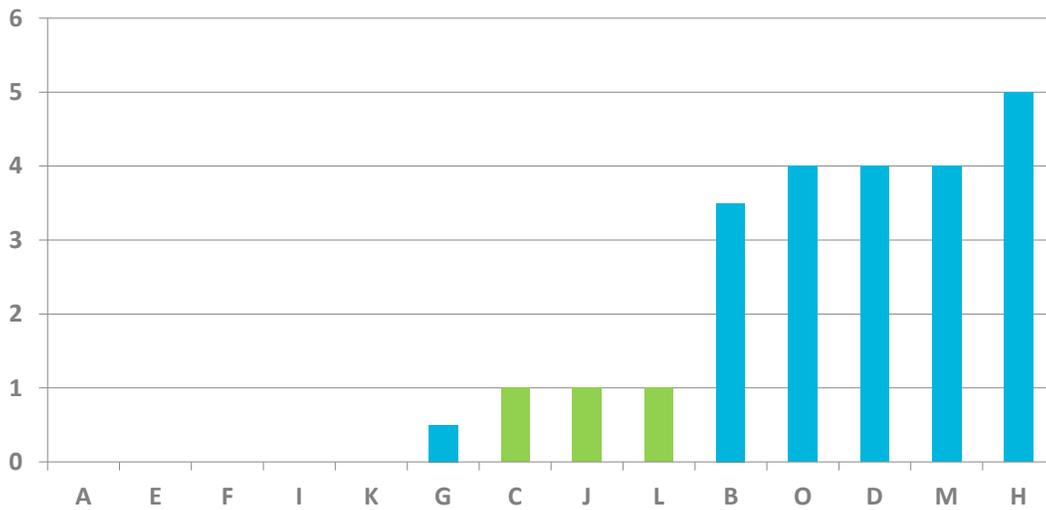
3. MORATORIUM PERIOD

A moratorium period is a period of time during which water service cannot be shutoff. Our sample included utilities with moratoriums during both cold weather and hot weather. Nine of the utilities surveyed have a moratorium period. Fixed moratorium periods ranged from two weeks (the weeks of Christmas and New Year's) to five months. Two of the utilities use a heat index and one uses freezing weather (i.e., temperatures below 32 degrees) to trigger a moratorium period. These three utilities were assigned a one month period (an arbitrary assignment since the actual moratorium period can be longer or shorter in any given year) and are shown in green in the graph below.

The use of temperature or heat index appears to be a recent development. This is how one utility explains this policy to customers:

“Our utility will follow the same policy as the local electric utility in regards to disconnection for non-payment. If the heat index (not the temperature) is 105 degrees or greater, we will not disconnect customers for non-payment. We use the National Weather Service website to check the heat index daily to make this determination.”

Moratorium Period in Months



4. CUSTOMER ASSISTANCE PROGRAMS

Customer assistance programs (CAP) should reduce delinquency levels by making bills affordable for targeted customer groups who can have difficulty in paying their bills. The following is a summary of the survey CAP findings:

- 60% of the utility sample have a customer assistance program (CAP) that reduces the utility bill. (An additional utility said it provided assistance but did not specify the target for the program.)
- The most common CAP was low income (8), then senior/elderly (3), medical/disabled (2), and emergency (2).
- Most utilities have another agency manage their CAP (e.g., social service agencies, LIHEAP administrators, community services)
- CAPs are funded from rates (most common), contributions, or a portion of non-rate utility revenue (1)

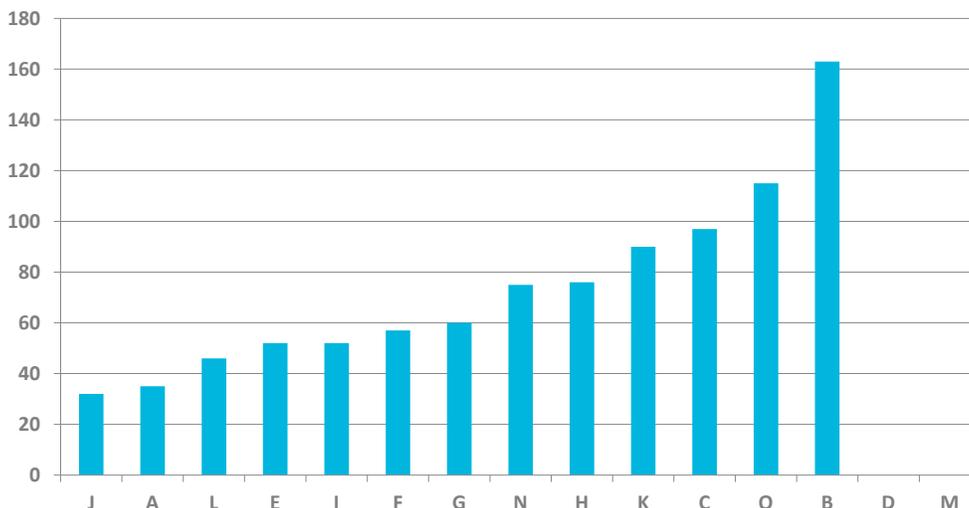
5. TURNOFF PROCESS

After accounts are delinquent they become subject to turnoff. Each utility has a different process and timeline to get to a shutoff. The following are some examples:

- Utility A - Residential customers receive two shutoff notices. The first notice is sent 72 days after the first bill is mailed. The second notice is sent on day 104 and the property is eligible for shutoff on day 115. It is important to note that this is the shortest possible time to shutoff. Moratoriums and medical factors can result in significantly more than 115 days to shutoff.
- Utility B - Customers receive a delinquent or turnoff notice 46 days after a bill is rendered. The bill needs to be \$250 or more for turnoff (if it is under \$250, the customer receives a delinquent notice). A work order is created for turnoff 18 days later. (64 days)
- Utility C - The customer has 21 days to pay. On day 22, the utility calls the customer. On day 26, a late fee (0.833%) is added and the utility issues a past due notice. On day 36 a call is placed to the customer. On day 39, the customers receives a service order door hanger (\$15 charge). On day 47, there is a disconnection order. The account is disconnected in 2 to 21 days depending on the utility workload (49 to 68 days).
- Utility D - 21 days after an account is billed, the bill is due. Customers get one grace day (working day), and a late charge is applied the next working day. Five working days later, a delinquent notice is issued. Five working days later, the IVR calls the customer. Two working days after that, a turn off is generated and a non-payment fee is applied. (34 days)
- Utility E - When the original bill becomes overdue, a second notice is mailed. Thirty days later, a final notice is mailed to the property (and not to the customer mailing address). Seven days later, the account can be turned off. (67 days)
- Utility F - Two days after bill due date, the collection process starts. Twenty five days after the collection process starts, field services performs the shutoff. (57 days)

The range of reported times based on shutoff procedures and timelines was 34 to 163 days. As noted above, moratorium periods and other factors can significantly extend this timeline. Also, some utilities report that staffing shortages are preventing shutoffs from occurring in a timely manner. Generally, a long shutoff timeline appears to result in higher receivables levels and, eventually, higher delinquency levels.

Theoretical Turnoff Timeline (in days)

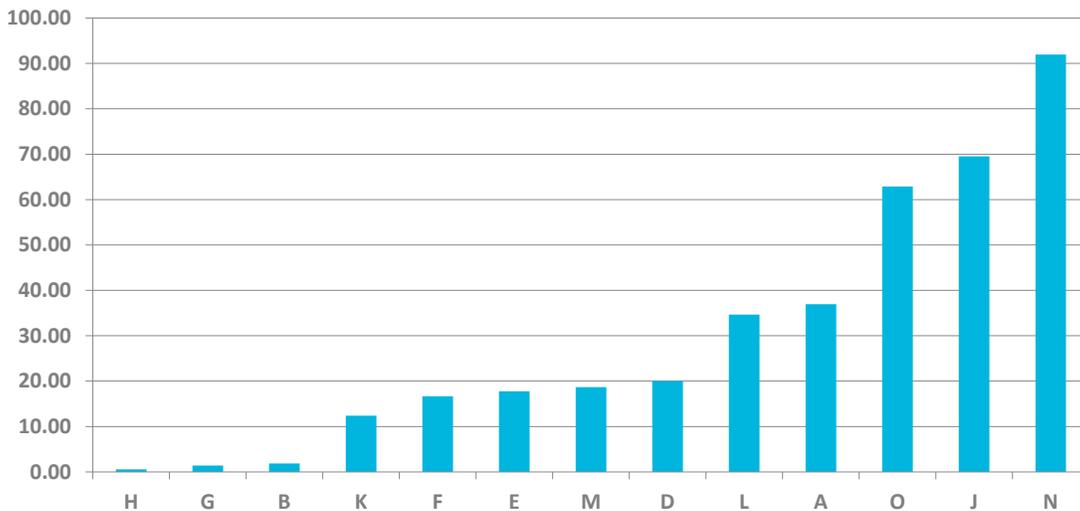


6. NUMBER OF TURNOFFS

The following graph presents the range of turnoffs per 1,000 accounts. Because the number of reported turnoffs varied from year to year, we attempted to obtain three year averages (we were not successful in every case). Some utilities reported that they are understaffed and backlogged, reducing the number of turnoffs that they would have expected to perform absent those shortages.

Turnoff levels are higher in electric and gas utilities (also in combined water and power utilities). We conducted follow-up interviews with utilities with low turnoff levels - they commented that a history of being strict in turnoffs seemed to produce compliance.

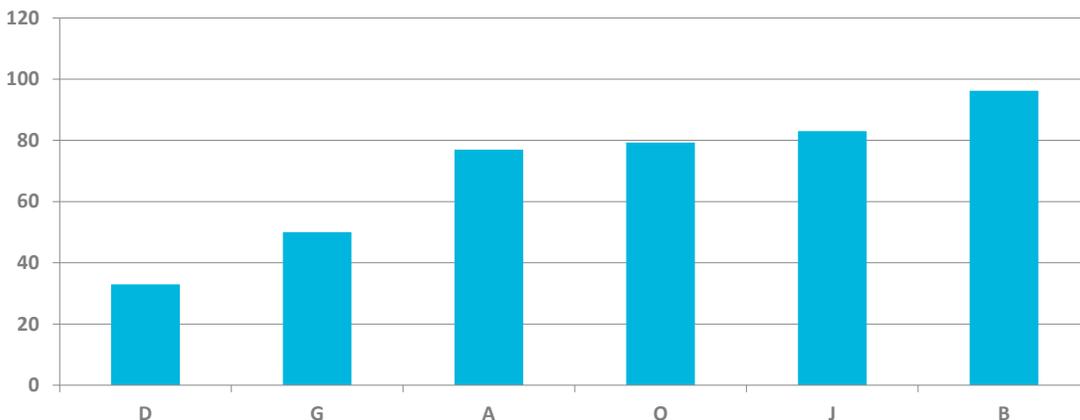
Turnoffs Per 1,000 Accounts



7. RESTORATION OF SERVICE

The chart below shows the percentage of turnoffs restored. For most utilities, we obtained three years' worth of data. Although the year-to-year numbers reported by the utility sample have some variability, we expect that the long run percentages should be between 70% and 80%.

Percent of Shutoffs Restored



8. MEDICAL - DO NOT SHUTOFF

All utilities reported having medical accounts. Medical accounts typically number in the hundreds; three utilities had around 1,000 accounts. Most utilities will shut off medical accounts but will do so “slowly and carefully.”

According to one utility:

“We do have a Medically Vulnerable Shutoff Process, We do this manually, instead of allowing the system to process. We notify EMS and Adult Protective Services before disconnecting. These customers also work closely with our Customer Assistance Program Department to come up with solutions to avoid disconnects for non-payment.”

9. FUNCTIONS OUTSOURCED

A variety of billing and collection functions are outsourced, although outsourcing appears to be highly targeted. Some of the outsourced functions and estimated costs are presented below:

- Bill printing, stuffing and mailing (range of unit costs is \$0.11 to \$0.22 per bill, not including postage); one utility reported \$0.27 per bill including postage
- Cashiering – reported range from 0 (no cost to the utility but a convenience fee charged to customers) to \$2.25 per transaction
- Highest reported convenience fee \$4.67 for a residential bill. One utility reported charging a percentage of the transaction amount resulting in higher convenience fees for larger bills.
- Lockbox – ranges from over 5 cents to over 9 cents per bill
- Delinquent collections – compensated by percentage of collections. The reported range is 18% to 29%
- One utility outsources CIS for \$0.90 per bill

10. BILLING AND COLLECTION COSTS

We used a number of indicators to identify unit billing and collection costs.

Fixed Charge in Rate Structure

Some utilities utilize a rate structure in which the fixed charge recovers billing, collection and (sometimes) meter costs. Values reported by survey utilities that take that approach are listed below (the amounts are for a 5/8 inch or 3/4 inch meter):

- \$9.38 (includes meters)
- \$11.63
- \$10.26
- \$7.16 (does not include meters)

Unit Costs Calculated From Data Provided

Some utilities surveyed provided departmental budgets and organization charts that permitted us to perform unit cost calculations, while some utilities provided us with studies performed by consultants. Here are the values computed either by us or by consultants for the per bill costs (each bullet is for a separate utility):

- Unit billing and collection (no G&A) - \$8.92; \$8.02 (no meter costs or G&A)
- Unit billing costs - \$0.90 (no G&A, no meter costs, outsourced bill printing, stuffing and mailing); unit collection costs \$1.37

- Unit billing costs - \$3.81 (no G&A); Unit collection costs - \$2.12 (no G&A, delinquent collections outsourced)
- Unit billing and collections - \$3.84 (estimated for 2013; detailed study performed with 2010 budget)
- Unit billing costs - \$4.62
- Unit billing and collection - \$7.16 (no meter costs, includes G&A)

The lowest cost reported is from a utility that had done substantial process analysis and also has one of the highest billing volumes of the utilities surveyed. Lower unit cost utilities appear to be in lower wage rate states; however, we did not do any wage rate analysis.

Unit Staffing Levels - Billing and Collections

The following summarizes unit staffing levels computed from organization charts and reviewed with the utilities:

- Utility A unit staffing levels are estimated at 1.26 FTE per 100,000 bills for billing and 3.66 FTE per 100,000 bills for collections
- Utility B billing is at 1.25 FTE per 100,000 bills (outsourced printing, stuffing and mailing) and 1.79 FTE per 100,000 bills for collections (delinquent collections outsourced)
- Utility C is at 1.87 FTE per 100,000 bills for billing and 3.73 FTE per 100,000 bills for collections
- Utility D is at 4.8 FTE per 100,000 bills for billing (includes meters; bill printing and mailing outsourced) and 3.62 FTE per 100,000 bills for collections

Unit Staffing Levels - FTE/100,000 Bills

UTILITY	UNIT STAFFING - BILLING	UNIT STAFFING COLLECTIONS
B	1.25	1.79
C	1.87	3.73
D	4.8	3.62
A	1.26	3.66

Cashiering Costs

For a variety of reasons, we were only able to obtain data from a small number of utilities. Some utilities have no cashiers, essentially outsourcing to merchants who are compensated by charging a convenience fee to the utility's customers. Some utilities participate in service centers with their parent organizations and could not split out the cashier costs. In two cases, we were able to compute cashier costs from the transaction volume, organization charts, and departmental budgets. The results and calculations are summarized below:

- Fifteen cashiers (half attributable to utility transactions) = \$3.00 per transaction
- Computation of a 4 cashier/85,500 transaction utility = \$3.30 per transaction (includes departmental OH but not G&A)
- 2011 study by utility = \$2.25
- Cashiering cost in one utility's current lockbox contract = \$2.25 (essentially an outsourced cost)

11. RECEIVABLES

The survey asked how receivables were reported and for the level of receivables over 90 days. Receivables are most commonly reported in 30 day increments. Some utilities track receivables internally but do not report values externally. According to one utility, they had stopped reporting receivables since “old stuff accumulated over time and overplayed the percentage, and was misleading and inaccurate.”

The range of reported values from the utility sample was 0.6 to 6.6%.

12. DELINQUENCY

There is no accepted definition of delinquency for municipal utilities, so there is wide variation in the reported data. The range of days from when an account is billed to when it is declared delinquent was 45 to 260 days. The most common was 60 days with the second most common being 90 days.

Reported delinquency rates ranged from 0.1% to 22%, and the median was 14.5%. Two utilities did not report a delinquency rate.

13. WRITE-OFFS

Write-offs are another self-defined metric. Most utilities treat write offs as something done for accounting reasons. They expect to receive something through the lien process and will write off only for such things as death or bankruptcy. As one utility noted, they “only write-off after lien proceedings since they can write off delinquency charges at settlement.”

14. POSTING PERIOD

A long posting period may affect the utility’s ability to quickly perform a turn-on or reconnection. We asked the survey sample what their average and maximum posting periods were. Most utilities reported an average posting time of 24 hours and a maximum of 48 hours. Posting time is a function of how payment is tendered, with electronic payments having a very short posting period while mailed “bill pay” arrangements can take longer. One utility reported a maximum posting period of five days.

15. SUMMARY OF FINDINGS

The survey data were analyzed to try to extract lessons learned that might guide utilities in their efforts to reduce receivables, delinquencies and collection costs. It is important to note that the data has some limitations – for instance, the turnoff timelines calculated for the utilities are minimum values, and for many utilities, the timelines are much longer due to moratoria, personnel shortages and other limitations. Also, the delinquency and receivables data reported are based on multiple definitions. Recognizing these limitations, we developed the matrix on the following page.

METRIC	WHAT WE WOULD EXPECT	WHAT THE SURVEY SHOWS	TAKE AWAY
Moratorium	<ul style="list-style-type: none"> - Long moratorium = higher receivables - Higher receivables = more delinquency = more shutoffs 	<ul style="list-style-type: none"> - Longer moratorium utilities report higher delinquency rates - Short moratorium + bad economy also results in high delinquency - Short moratorium = lower delinquency - Longer moratorium= higher receivables 	All else being equal, shorter moratoriums should shorten receivables, and a lower receivables level should lower delinquency rate
Shutoff period	<ul style="list-style-type: none"> - Long shutoff period should increase receivables - Higher receivables should increase delinquency level - Long shutoff period may decrease shutoff level 	<ul style="list-style-type: none"> - Longest shutoff period produced highest receivables and second highest delinquency (beat by bad economy) - Longest shutoff period had low turnoff rate - Short turnoff period has higher turnoff rates but lower delinquency rates 	Shutoff period is a tradeoff between receivables, delinquency level and turnoff level. Shorter shutoff period lowers receivables and delinquencies, but produces high shutoff levels.
Medical - Do Not Shutoff	- Easy to obtain medical extensions should increase receivables and (subsequently) delinquencies	Numbers are low, but utilities with higher level of medical accounts had high receivable and delinquency levels	Dealing with low numbers, but tight medical standards (resulting in fewer medical-do not shutoff) should lower receivables and delinquencies
Customer Assistance Programs	- Availability of CAPs and ease of use should lower receivables and delinquency levels attributable to affordability problems	- CAPs are so widespread that we cannot estimate what would happen with no (or very low) CAPs	Logic suggests that offering CAP first should reduce receivable levels and lower collection costs

In summary, the survey data indicated that:

- Long moratorium periods appear to be related to higher receivable levels and high delinquency levels
- A long turnoff cycle appears to be related to high delinquency rates.
- Most utilities have Customer Assistance Programs (CAP), which subsidize utility bills of targeted groups
- Most utilities' CAPs are managed by another group such as a social service agency.
- Posting periods have a narrow range (1-2 days)

Utilities with high receivable and delinquency levels should consider the following strategies:

- Investigate shortening turnoff timeline
- Investigate alternative moratorium criteria, such as weather-related criteria
- Consider modifying the sequence of offering payment agreements first, then followed by Customer Assistance Programs
- Consider transitioning to Customer Assistance Program consolidation with other utilities to reduce in-house effort and ease the burden on low-income customers
- Tighten medical-do not shutoff criteria

Some cost reduction strategies include:

- Analyze remittance distribution by type to incentivize lower cost remittance methods and shorten posting period
- Consider selective outsourcing
- If unit costs appear high, perform process analysis studies

APPENDIX F. STORMWATER DATA REVIEW

MEMO

To: Joseph Clare, Melissa LaBuda

From: Henrietta Locklear

Date: August 14, 2014

Re: Investigation of Stormwater Charges Billed in basis2

Summary of Investigation and Results

Raftelis Financial Consultants, Inc. (RFC) was tasked with a review of the basis2 Customer Information System (CIS) by the Philadelphia Water Department (PWD). One aspect of this review was to reconcile the stormwater fees expected to be billed against billing data within basis2. The stormwater fee for each property is maintained by PWD and is updated when necessary to reflect changes in underlying source data. At any given time, this set of fees represents the most current data. Annually, these updates are passed in bulk to basis2. RFC was provided the most recent available copy of these data, dated late June 2013, by PWD in the form of a database table containing water1 account numbers, installation numbers and the final stormwater charges. This table will be referred to herein as the "PWD table." RFC compared the charges in the PWD table against stormwater fees in basis2 by accessing a copy of basis2, dated as of the end of April 2014, via VPN. Because the bulk basis2 update for stormwater fees occurs on an annual basis, the PWD table, though 11 months old, was current according to the bulk update process.

RFC performed two different reconciliation analyses. The first compared expected stormwater fees against the debit lines table in basis2, which represents actual service charges. The second, which was performed for further clarification, compared expected stormwater fees against a table summarizing stormwater installation agreement amounts, which represents the 'consumption' for stormwater service, and is stored as the correct monthly bill amount in cents.

We find that the vast majority of charges agree between the PWD table and basis2. The first analysis resulted in matches representing 94% of the accounts in the PWD table and 86% of the expected monthly charges. In total, basis2 was found to have debited 99% of the expected total fees in the month analyzed, although there were a number of cases where the fees did not agree between the two tables.

The second analysis showed a greater number of matches when relying on the more stable installation agreement amount rather than looking at one individual month. This analysis revealed matches representing 99% of the accounts in the PWD table and 90% of the expected monthly charges. Of the cases where fees did not agree, we are able to explain almost all of the differences, which are detailed below. Remaining unreconciled records from the first analysis were provided to PWD and WRB staff, who reconciled these accounts and justified the vast majority of differences between the data sources. In the end, the analyses demonstrated nearly complete agreement between the data generated by the stormwater billing system and basis2.

Investigative Process: Analysis 1

The PWD fees are calculated using GIS processes and assigned to or aligned with water1 account numbers and installation numbers from basis2. The installation numbers in basis2 represent properties or locations where a PWD service is provided. Thus, RFC was able to reconcile fees between the PWD table and the most recently available monthly stormwater charges in basis2, using installation number as the unique link between tables.

The PWD table contained 639,349 records with 639,325 unique installations. Of the 639,349 records, 90,507 (including 3 duplicate installation numbers with 7 records each) are classified by PWD as exempt from stormwater billing or otherwise non-billable for stormwater service. These records were excluded from further analysis. An additional 1,559 are classified by PWD as billable but had a final charge of \$0 (because they did not meet the minimum billable threshold) in the PWD table and were therefore also excluded from the analysis by RFC. This left 547,283 records (including 1 duplicate installation number with 7 records) to compare against billing data from basis2. The fees for these records total \$14,194,945.44 in billings for June 2013, the month analyzed.

Billing data were derived from basis2 by extracting the debit line transactions generated in April 2014, the most recent month available, for use in comparing against the expected charges developed in June 2013. These debit transactions are identifiable by referencing values in two fields in basis2: a **USEC_CODE** of 'STM_USG' and a **SCND_TYPE** of 'AGR'. RFC used the same combination of field values to represent stormwater billing as are regularly used by WRB in the monthly billing extract queries. The fees in basis2 were calculated as the product of the debit table **LINE_TOT_AMNT** multiplied by the **ACCT_SIGN**, also as indicated by the code used in the in the monthly extract files. These debits were grouped by installation (to sum all charges on an individual installation, because occasionally basis2 registers multiple debit lines for a single service that add up to the total billed amount for an installation) and reported for the month of April 2014. The PWD table charges were compared to these debits, which totaled \$14,059,546.99, or 99% of the total expected fees.

Results

RFC compared the resulting debits in basis2 to the PWD table stormwater charges. The vast majority of installations, 470,672 of 547,283 records in the PWD table, matched exactly between basis2 and the charge from the PWD table. The fees that did not match fall into the following categories and are explained further below:

- Explainable differences:
 - Debits off by less than one cent from the expected amounts, owing to rounding in the PWD table
 - Debits that differed by 25% or 5% from the expected amounts owing to special customer status
 - Debits that are multiples of monthly charges (double or triple the expected charges)
- Remaining (unexplained) differences:
 - No debits for the month
 - Debits netting \$0 for the month
 - Other debits that overcharge the expected amount
 - Other debits that undercharge the expected amount including
 - A large number of debits that are 97% of expected charges

Explainable Differences

RFC found that 41,917 of those that did not reconcile perfectly were off by less than one cent, owing to the fact that the charges were not rounded to hundredths of a cent in the PWD table of fees from which we worked.

However, the stormwater billing team confirmed that rounding is performed on the PWD side before charges are sent to basis2. For this analysis, then, debits differing from the PWD table by less than one cent for an installation is not considered a concern.

Many installations were found to have customers eligible for discounts, with 23,277 receiving a 25% discount, and 6,640 receiving a 5% discount. The customers receiving discounts were classified with **CUST_TYPE_CODE** values as shown in Table 2 and Table 3. Only the small number of *Regular* customers receiving discounts are out of policy, but these are likely the result of the different timestamps of the data sets (i.e. customer type may have changed after June 2013 and be reflected in the April 2014 copy of basis2). RFC does not find these results concerning.

Table 1. Customer Types for installations with 25% discount (75% of expected stormwater charges)

Customer Type (CUST_TYPE_CODE)	Description	Percent of Installations
D	Senior Discount	84%
C	Charity	10%
N	Hospitals and Universities	2%
E	Board of Education	2%
4	Regular	1%

Table 2. Customer Types for installations with 5% discount (95% of expected stormwater charges)

Customer Type (CUST_TYPE_CODE)	Description	Percent of Installations
A	PHA	99%
4	Regular	1%

Additionally, 658 installations were found to have been debited for an amount equal to a multiple of the expected stormwater charge. These charges were checked and determined to be due to pro-ration of bills for prior months' charges.

Remaining (Unexplained) Differences

We found that 1,369 installations that we expected to be billed did not have debit transactions. These installations represented \$70,382.77 in anticipated stormwater fees that were not debited in the month of April 2014. An additional 24 installations representing \$1,558.24 in expected billings had debit line transactions that totaled \$0. These 24 installations were examined in detail and most were found to be billed \$0 for many months prior to April 2014. Only 6 of these 24 were found to have prior charges greater than \$0. In summary, \$71,941.01 in anticipated billings were not charged in the month of April. However, these were explained through further analysis as described below.

Removing these records that could be explained, RFC staff arrived at only 2,726 records where fees could not be reconciled against the April 2014 debit table data. These installations were either underbilled or overbilled in the April 2014 debit transactions. These accounts were checked to see if active payment plans could affect the debits, but only a handful (less than 20) were found to have payment plans in place. The unreconciled installations were provided to PWD and WRB, who conducted further research to determine possible causes of fee differences. A numerical summary of the initial stormwater reconciliation effort is provided below.

Table 3 Summary of Stormwater Reconciliation Investigation Initial Results

Description	Number of Records	Expected Charges	basis2 Charges
PWD Table records compared	547,283	\$14,194,945.44	\$14,059,546.99
Charges align	470,672	\$6,782,628.23	\$6,782,628.23
Charges do not align	76,611	\$7,412,317.21	\$7,276,918.76
Charges do not align but are explained	72,492	\$6,986,380.97	\$6,859,167.45
Charges within \$0.01	41,917	\$5,489,033.57	\$5,489,045.71
25% discount	23,277	\$1,163,566.53	\$872,744.65
5% discount	6,640	\$161,662.62	\$153,588.97
Multiples of single month	658	\$172,118.25	\$343,788.12
Charges do not align and are not explained	4,119	\$425,936.24	\$417,751.31
Not debited in April 2014	1,369	\$70,832.77	\$0.00
PWD Table charge, no charge in basis2	24	\$1,558.24	\$0.00
Underbilled	1,747	\$209,710.20	\$186,304.53
Overbilled	979	\$143,835.03	\$231,446.78

Investigative Process: Analysis 2

Given the findings above, combined with comments provided by PWD staff, RFC pursued the stormwater fee reconciliation from another perspective. For the second analysis, RFC staff compared data from the same PWD table (described above) against the active stormwater installation agreement value stored in basis2. This table shows the monthly basis for the stormwater fee (as stated, the fee in cents) before any discounts, proration, or other operations are applied.

Results

RFC staff compared data from the PWD table against the active stormwater installation agreement value. This analysis found a much closer alignment between the data in basis2 and those fees in the PWD table. The overwhelming majority of installations and fees aligned exactly (540,418 installations) or within one cent due to rounding (5,840 installations).

Some examples from the initial findings were found to be correctly established within basis2 (with exact or within \$0.01 fees), but had anomalous debits for April 2014 and were initially categorized as non-matching, due to following cases:

- Discounts applied to accounts resulting in reduced charges
- Back billing for charges that were not collected on some accounts since the start of the stormwater fee
- Pro-ration of charges following account stops and starts
- Pro-ration of a 31-day charge to 30 days

With those exact and within \$0.01 fees considered correct, only 1,025 installations remained as requiring further investigation. 190 of these installations had no active installation agreement in basis2. The fact that these were not being billed is correct under the basis2 policy of requiring an active installation agreement. PWD and WRB should work to confirm whether charges are appropriate for these installations and, if so, establish active installation agreements for them. A further 117 installations had active installation agreements but no stormwater

charge where one was expected. These two, possibly erroneous situations represent \$14,177.92 in unbilled stormwater fees for the month of April 2014. They are highlighted in grey in the table below.

A list of the remaining 718 overbilled and underbilled installations was provided to PWD staff, and all records were accounted for through an exhaustive review. In 566 cases, the differences were explained by basis2 having been updated after June 2013 to align with individual updates driven by PWD (external to the annual bulk update process). The remaining unreconciled records were non-bill records in the PWD stormwater database that showed charges associated with the installation agreement in basis2. These records were found to not be generating stormwater billing amounts despite debit line records being created. The accounts were checked individually by WRB and PWD staff and all were found to be in accordance with the charges in the stormwater billing system.

The following table summarizes the findings from the second analysis.

Table 4 Summary of Stormwater Reconciliation against Installation Agreements Investigation Results

<i>Description</i>	<i>Number of Records</i>	<i>Expected Charges</i>	<i>basis2 Charges</i>
<i>PWD Table records compared</i>	547,283	\$14,194,945.44	\$14,199,276.23
<i>Charges align</i>	540,418	\$12,809,508.84	\$12,809,508.84
<i>Charges do not align</i>	6,865	\$1,385,441.84	\$1,389,767.39
<i>Charges do not align but are explained</i>	6,030	\$1,094,309.66	\$1,083,220.97
<i>Charges within \$0.01</i>	5,840	\$1,083,211.94	\$1,083,220.97
<i>No active installation agreement</i>	190	\$11,097.72	\$0.00
<i>Charges do not align and are not explained</i>	835	\$291,132.18	\$306,546.42
<i>PWD Table charge, no charge in basis2</i>	117	\$3,080.20	\$0.00
<i>Underbilled</i>	224	\$69,070.67	\$56,914.07
<i>Overbilled</i>	494	\$218,981.31	\$249,632.35

This exhaustive reconciliation process should give great confidence to City staff in basis2 billing data where stormwater billing is concerned. Through these analyses basis2 is shown, in the great majority of cases (99.94%), to correctly bill stormwater fees in accordance with the City's billing policy and source data updates. In all cases, basis2 remains consistent with internal system requirements.

Appendix G. Peer Utility Billing System Survey

Utility 1 (~1.5 million water and waste water customers – CC&B CIS)

Much of this utility's information technology support is outsourced so an exact number of resources allocated to core support roles is not available. Currently the utility has one outsourced DBA full time employee (FTE) and one internal DBA who is supporting several other applications. The general consensus was that the utility actually needs two internal DBAs so that between the two they would have a full time equivalent in addition to the DBA provided by their outsourcing provider.

The utility currently subdivides its BA role into two different titles, both of which are solely dedicated to supporting the billing application. The first is the role of Business Analyst of which it currently has one FTE. The utility is seeking to add two more BAs. The BA gathers the requirements, documents the functional solution and where the solution can be met via system rule and configuration, and performs these updates to the system. If programming is not required the BA hands the solution over to the second role which the utility calls the Business Process Analysts. The Business Process Analysts further test the solution against additional business scenarios to ensure the solution will be accepted by the end users. When programming is required, the Business Process Analysts conduct this testing after the code has been delivered.

All other IT support roles are outsourced.

Utility 2 (investor owned utility, ~1.2 million water and waste water customers – Banner CIS)

This utility has one dedicated DBA for the CIS support function. In addition, staff positions there include:

- 1 Chief Information Officer (CIO) that oversees all IT departments (Customer, Finance, and Geographic Information Systems, Network, etc.)
- 1 dedicated project manager to oversee the BANNER CIS support department. The individual in this position just over a year ago had little business or technical experience with the CIS. His job was managing the support and maintenance of the CIS application.
- 1 dedicated DBA supporting around 8 active CIS databases (Production, Development, QA1, QA2, Test1, Test2, Training, etc.). This DBA works solely on the water CIS. There are other DBA's to support the other systems like Finance and GIS.
- 1 lead system administrator with several resources reporting to him for operating system and Network support
- There is a separate department for handling security and PC support
- 1 Project Lead for Customizations, Reports and other CIS support tasks
- Approximately 4 full-time resources available for programming
- 2 CIS Dedicated Business Analysts / QA persons
- Anywhere from 4 to 6 external contractors at any given time to assist with Project Management, Programming, Data Support (Clean-up).

Utility 3 (investor-owned utility, ~80,000 water customers – CC&B CIS)

This utility has the following resources:

- 1 CIO responsible for overseeing all IT support
- 1 DBA supporting about 5 CC&B databases as well as the financial database.
- 1 System Admin shared among CIS and other systems
- 2 Leads supporting CIS operation issues with 2 or 3 support "technicians"
- ~3 Programmer/Analysts supporting the Water CIS
- 2 Business Analysts / QA personnel dealing with requirements and testing
- Some outside contract assistance.

Utility 4 (government-owned utility, ~125,000 accounts, around 500,000 water and wastewater customers – Banner CIS)

This utility does not have a dedicated DBA for the CIS support, but the City has 3 full-time DBAs at the central IT department that the utility can draw on when they need support. The utility is invoiced monthly for central IT support. DBA resource constraints are an issue for the utility, with projects being delayed owing to waiting on those resources.

Within the utility, there are 5 FTE who work on production support and software development. These 5 FTE comprise three business analysts who rotate responsibility for on-call-production support functions in addition to programming, business analysis, and QC and two systems operations analysts who work on user support and programming. One of the systems operations analysts is responsible for the tracking and maintenance of hardware and software, and is in charge of automation coordination (ensuring telephone and cell phone coordination for the entire utilities department) as well. The analyst also serves as the main coordinator between the City IT department and utility IT team.

The utility currently has 2 outside consultants working to oversee server upgrades and to fill in for FTEs working on special projects. The utility budgets \$250,000 per year for contractor support for the CIS. This utility is in the unique position of owning the CIS source code, and supports the software themselves. There are no full-time employees who work solely on project management or managing CIS support – the business analysis manager oversees all IT operations at the utility in addition to projects and CIS support.

Utility 5 (government-owned utility, ~250,000 retail inside City and ~250,000 retail outside City water customers, ~1.8 retail and wholesale customers, mainframe CIS and under transition to modern CIS)

This utility has an internal IT division and resources from the city's IT department that support its legacy billing system. The city's IT department maintains the system and provides hardware and network support, while the internal IT division assists the utility divisions with procurement and upgrades. The utility's IT division has 10 full time staff and consultants working on all application areas. Two of the staff members have combined duties as database administrators, developers, and analysts for the Legacy system.

The city is currently upgrading to a new CIS application from its current mainframe system, and the utility is planning to add 3 to 4 full time staff internally who will support the system in conjunction with the central IT department. In addition to allocating resources to central IT for application area

support, the utility IT division is also allocating resources to city staff and contractors implementing the new CIS.

Utility 6 (government-owned utility, ~220,000 retail water customers, 27 wholesale customers – SAP CIS)

This utility has multiple staff from the city's IT department that supports SAP internally, and has its own business consulting group that coordinates with the central IT department. The business consulting group has 14 full time staff members and two on-site consultants who help manage the SAP. The utility can also access off-site support from the consulting firm, and contracts resources for long-term system changes and projects from the firm.

The city IT department staff also provide security and PC support, and allocates resources based on utility requests. The city prints and processes its own bills, and has many full time staff working in house. There is also a full time project manager who oversees the IT department and consultants.

APPENDIX H. BASIS2 EVALUATION LIST

The following list provides a starting point for topics to be considered iteratively during the basis2 replacement evaluation. Each topic should be rated and ranked at an appropriate interval to identify trends in the system's ability to support the City's business processes and ultimately to determine when replacement may be necessary.

BUSINESS END USERS

Does your current system support strategic technologies?

- IVR
- Web Self Service
- Real Time Field Order Dispatching
- Remote/Radio Meter Reading
- Customer Contacts
- Credit Validation
- All forms of Electronic Payments
- Workflow Management

Is it easy to use?

- Provide easy access to data/information for users
- Allow new employee to learn within a reasonable timeframe
- Allow CSR's to resolve customer requests quickly and accurately
- Automate or streamline routine tasks
- Incorporate safeguards that minimize risk of human error
- Allow for rate changes and other configuration changes without involving programming staff
- Provide data analytics for reporting and improved decision making

Does it allow you to design collections, marketing, and reporting to target certain groups of customers?

- Large users
- Chronic late payers
- Small geographic groups like gated communities

Does it provide effective monitoring and auditing?

- Monitoring of erroneous bills and financial transactions
- Monitoring of the nightly batch programs, batch errors and aborts
- Auditing of end user updates

COMPANY FINANCIALS

Does it support desired rate structure(s)?

- Allow you to make proactive rather than reactive strategic rate changes
- Provide adequate data for rate case analysis
- Allow for customer or customer class categorization sufficient to accommodate all required rates and rate structures

Does it support a quick A/R lifecycle?

- Timely, accurate bill generation
- Effective skip/trace procedures
- Effective dunning actions

Does it allow for incorporating green services?

- Reclaimed Water

TECHNOLOGY

Effectiveness

- Scalable for adding data over time
- Archive and retrieve old data
- Allow for real time updates
- Allow interfaces to all critical external systems
- Require minimal resources to maintain
- Contain minimal number of modifications
- Implemented using current technical architecture

Reliability

- Have a low incidence of reported defects
- Provide predictable results
- Have low backlog of defects and enhancements

Vendor Support

- Expect uninterrupted vendor support for the foreseeable future
- Receiving adequate response from vendor for critical defects and regular product releases

Security

- Designed with adequate firewalls to prevent unauthorized access
- Provides adequate encryption of sensitive customer data
- Allows segregation of permissions and access that corresponds to duties performed