

# **Pittsburgh Water and Sewer Authority**

Financial Statements  
and Required Supplementary  
and Supplementary Information

Year Ended December 31, 2016 with  
Independent Auditor's Report

**MaherDuessel**  
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Pittsburgh | Harrisburg | Butler

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# PITTSBURGH WATER AND SEWER AUTHORITY

YEARS ENDED DECEMBER 31, 2016 AND 2015

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## Independent Auditor's Report

Board of Directors  
Pittsburgh Water and Sewer Authority

We have audited the accompanying financial statements of the Pittsburgh Water and Sewer Authority (Authority), a component unit of the City of Pittsburgh (City), Pennsylvania, as of and for the years ended December 31, 2016 and 2015, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

### **Management's Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditor's Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Authority as of December 31, 2016 and 2015, and the changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

## **Other Matters**

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages i through xi be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### *Supplementary Information*

Our audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise the Authority's basic financial statements. The combining statements of net position and revenue, expenses, and changes in net position (combining statements) are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The combining statements are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the combining statements are fairly stated in all material respects, in relation to the basic financial statements as a whole.

***Maher Duessel***

Pittsburgh, Pennsylvania  
April 18, 2017

# PITTSBURGH WATER AND SEWER AUTHORITY

## 2016 Financial Statements Management's Discussion and Analysis

The Pittsburgh Water and Sewer Authority (Authority) comparative 2016 and 2015 fiscal year financial statements enclosed have been conformed to meet the requirements of Governmental Accounting Standards Board (GASB) Statement No. 34, "*Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments.*" The financial statements incorporate three basic statements: the Statements of Net Position, the Statements of Revenues, Expenses, and Changes in Net Position, and the Statements of Cash Flows.

This Management's Discussion and Analysis (MD&A) is based upon facts, decisions, and conditions known as of the date of the audit report. Please note that the historical information provided in the financial statements and MD&A reflects the results of past operations and is not necessarily indicative of results of future operations. Future operations will be affected by various factors, including, but not limited to, regulatory mandates, rate changes, weather, labor contracts, population changes, business environment and other matters, the nature and effect of which cannot now be determined.

### Using This Financial Report – Overview of Reporting Changes

The Statements of Net Position present information about the resources which are available to the Authority and claims against these resources. Both assets and liabilities are classified in a format which segregates current from noncurrent. In addition, assets available for special purposes – labeled "restricted assets" - are segregated from those assets available for operations. The Authority's restricted assets represent money on deposit with the bond trustee to meet indenture, debt service, and construction program requirements. Liabilities have a similar classification segregating claims on restricted assets from claims on assets available for operations. The net position section of the Statements of Net Position classifies the total net position as net investment in capital assets, restricted, and unrestricted.

The Statements of Revenues, Expenses, and Changes in Net Position summarize operating and non-operating activity for the fiscal year and the resulting impact on the Authority's net position.

The Statements of Revenues, Expenses, and Changes in Net Position include wastewater treatment revenues and expenses for services provided by the Allegheny County Sanitary Authority (ALCOSAN). There are no outstanding bond issues associated directly or indirectly with wastewater revenue streams.

The Statements of Cash Flows have been prepared using the direct method. The statements provide an analysis of the Authority's cash by operating, investing, and capital and related financing activities over the respective fiscal year.

### Financial Highlights 2016 and 2015

In 2016, operating income decreased by 24.3% or \$10.3 million to \$32.1 million. The Authority experienced an overall net loss of \$1.8 million due to increases in operating expenses and decreases in non-operating revenues, down from a \$23.4 million net gain in 2015.

Below are the 2016 financial highlights:

Total operating revenues in 2016 were up \$6.6 million or 3.7% to \$180.7 million when compared to 2015. Wastewater treatment revenues increased \$2.2 million. Water and sewer conveyance revenues increased \$3.3 million from 2015. Both of these increases are attributable to rate increases by the Authority and ALCOSAN. Other operating income increased by \$1.1 million from 2015, as overall development in the City of Pittsburgh resulted in more tap fees and other permitting related items.

Total non-operating revenues (expenses) increased by \$14.8 million from 2015, mostly driven by the drop in donated property revenue from the previous year, which decreased by \$17.1 million from \$18.1 million in 2015 to \$1 million in 2016. Interest and amortization cost in 2016 stayed consistent with 2015, at \$36.9 million.

Total operating expenses increased in 2016 to \$148.6 million compared to \$131.7 million in 2015. Significant operating expenses included the following factors:

- Salary and employee benefit expenses were up \$0.3 million or 1.3%. The increase is attributed to an average salary rate increase of 3%, offset by a lower overall employee headcount in 2016.

The majority of Authority employees are represented by one of three labor unions. The Pittsburgh Joint Collective Bargaining Committee (PJCBC) represents blue-collar employees. The American Federation of State, County and Municipal Employees (AFSCME) represents Local 2719 employees and Local 2037. The AFSCME and PJCBC agreements expired on December 31, 2016. The Authority continues to operate under the terms of those agreements. Negotiations are ongoing and no agreement has been reached as of March 16, 2017.

- Overall direct operating expenses, excluding salaries and benefits, increased by \$9.2 million or 12.6% to \$82.0 million in 2016 from \$72.8 million in 2015. Operating contracts increased by \$8.6 million, this difference was driven by three items. Firstly, because of the wastewater treatment expense, which increased by \$2.2 million or 3.6% to \$62.1 million when compared to \$60.0 million in 2015, due to a combination of ALCOSAN's rate increase and the timing of credit meter adjustments. Secondly, temporary help increased by \$2.2 million, to \$2.5 million in 2016 compared to \$0.3 million in 2015. Increased temporary employees were required to support billing issues that arose in 2015. Lastly, water and sewer repairs increased by \$3.9 million in total, due to a more conservative approach to capitalization. Chemicals expense increased by \$0.7 million from 2016. Equipment expenses remained consistent with 2015, at just under \$0.5 million each year. Repairs and maintenance decreased by \$0.5 million from 2015. Overall Inventory increased by \$0.2 million from 2015.
- Overall general and administrative expenses increased 41.2% or \$6.1 million, to \$20.9 million in 2016 from \$14.8 million in 2015. Professional services increased overall by \$3.3 million; this is due to a \$5.6 million increase in non-capital engineering services, offset by a \$2.7 million decrease in consultant costs. The non-capital engineering services increase is attributable to a more conservative approach to capitalization. The decrease in consulting costs is attributable to Veolia no longer managing the Authority in 2016. Utility expense decreased by \$0.3 million from 2015. Miscellaneous administrative costs increased by \$2.8 million from the previous year, the biggest factor being a \$1.1 million increase to bad debt reserve after a full review of customer accounts.
- Overall other expenses increased 3.6% or \$2.2 million to \$62.8 million in 2016 from \$60.6 million in 2015. Non-city water subsidy to Pennsylvania American Water Company (PAWC) increased by 10.5% or \$0.2 million to \$2.0 million in 2016 compared to \$1.8 million in 2015. Interest expense increased 0.3% or \$0.1 million to \$37.0 million in 2016 compared to \$36.9 million in 2015. Interest on long-term debt decreased by \$0.5 million from 2015, which was mostly offset by smaller increases in counter-party payments, liquidity, and remarketing fees, Pennvest interest and revolver interest.
- In 2016, cash collections increased by \$9.4 million, with \$174.3 million collected from billings compared to \$164.9 million in 2015 due to rate increases by both the Authority and ALCOSAN, in addition to the collection percentage increasing from 2015, when billing issues were impacting collections.

Other 2016 highlights include:

- The Authority continued its relationship with Jordan Tax Service, Inc. (JTS) as its Collector and the law firm of Goehring, Rutter & Boehm, P.C. as Special Legal Counsel for the collection of delinquent water, sewer, and sewage treatment charges. The agreement calls for a collection commission, plus other administrative and legal

proceeding costs, to be added to all Authority delinquent claims not paid within 90 days of the initial billing date. If fully collected, the Authority stands to collect 100% of delinquent balances without incurring a collection agency fee. JTS collected for the Authority \$1.1 million during 2016.

- In January of 2010, the Authority began assessing a 5% Distribution Infrastructure System Charge (DISC) on all bills, increasing to 7% in 2011. This charge is applied to the water and sewer conveyance components of the invoice and is dedicated to system improvements and capital needs. 2016 DISC revenues were \$7.1 million. The \$5.6 million in DISC expenditures for 2016 included water and sewer relays, catch basin replacement, and manhole, catch basin, and sewer line point repair.
- Debt service coverage was 1.21 in 2016 and 1.43 in 2015. These coverage factors exceed the 1.2 coverage ratio required under the bond indenture.
- The Authority expended \$32.3 million on capital projects in 2016, a decrease of \$11.8 million over the \$44.1 million expended in 2015. Of \$50.4 million budgeted in Pennvest loans, \$38.1 million was spent in prior years, \$1.6 million was spent in 2016, and \$10.7 million of approved funding remained available. The Authority increased its capital project proceeds with the \$75 million 2013 bond issue, spending \$41.5 million in 2015 and \$21.4 million in 2016, depleting the fund. In anticipation of this depletion, the Authority reviewed the projects funded by bond proceeds to ensure that capital funds were used appropriately. The balance of capital expenditures in 2016 was funded by the revolving line of credit, which was put in place in July 2016.
- In July, the Authority entered into a drawdown, revolving line of credit financing with JPMorgan Chase Bank N.A. The maximum amount that can be drawn and outstanding at any one time is \$80,000,000 and has an initial term of four years. The Authority will use funds borrowed under this vehicle to finance capital projects. As of December 31, 2016, the Authority has drawn \$11.8 million on this facility.
- The series 2008B2 bonds were remarketed in October to terminate the expiring letter of credit provided by Royal Bank of Canada, replacing it with a letter of credit provided by PNC Bank N.A. There were not any changes to the swaps at that time.
- It has been reported that the City of Pittsburgh has issued a request for proposals to identify an advisory team to manage evaluations of a possible restructuring of the Authority. It is unknown what the outcome of these evaluations will be.
- The City of Pittsburgh is the largest of the 83 municipalities that convey raw sewage to ALCOSAN for treatment. In January 2004, the Authority and the City of Pittsburgh executed a Consent Order and Agreement (Order) regarding sanitary and combined sewer overflows within the City of Pittsburgh. The other signatories to the Order are the Pennsylvania Department of Environmental Protection (DEP) and Allegheny County Health Department, which executed the Order on April 21, 2004. The Long-Term Control Plan to address combined and sanitary sewer overflows required under the order was submitted on schedule on July 31, 2013. Due to the complexities of regional governance, the Authority's regulatory body was switched from the DEP to the US Environmental Protection Agency (EPA). On January 21, 2016, the EPA issued a Clean Water Act Section 308 Information Request to the Authority. We understand the nature of the request is to provide a jurisdictional basis for EPA to engage the Authority and the City of Pittsburgh in an enforcement action by consent. We intend that through such an action, we can more fully participate in the implementation of interim regional wet weather activities, controls, and improvements. We further understand that such an action will also permit the Authority and the City of Pittsburgh to participate more fully in the identification and implementation of any final wet weather control measures for the region. We have fulfilled the first portion of the 308 request, which was due on March 31, 2016. The second phase of the request supplied a source reduction study, which was

submitted December 1, 2016 and GI Demonstration projects must be constructed and performance evaluations completed by December 1, 2017.

The 308 Requirement does not contain fines or penalties for past non-compliance, but does propose binding obligations for work on a going forward basis. The Authority continues to meet the requirements of the request. The Final Consent Order will be adjudicated between the City, the Authority, and the USEPA to establish the extent of improvements that will be required to be complete within a specified time frame. Based upon initial discussions with the regulators, the Authority anticipates that the final recommendations implementation plan will be modified to assure its affordability to the Authority's rate payers. See Note 13 – Consent Agreement for additional details.

### **Financial Highlights 2015 and 2014**

In 2015, operating income increased by 10.3% or \$4.0 million to \$42.5 million. The Authority experienced an overall net gain of \$23.4 million due to increases in operating income and decreases in non-operating expenses, up from a \$4.0 million net loss in 2014.

Below are the 2015 financial highlights:

Total operating revenues in 2015 were up \$9.9 million or 6.0% to \$174.2 million when compared to 2014. Wastewater treatment revenues increased \$5.6 million. Water and sewer conveyance revenues increased \$5.3 million from 2014. Both of these increases are attributable to rate increases by the Authority and ALCOSAN. Other operating income decreased by \$1.0 million from 2014, as overall development in the City of Pittsburgh resulted in less tap fees and other permitting related items.

Total non-operating revenues (expenses) decreased by \$23.4 million from 2014, mostly driven by the expense recognized in 2014 for the change in the fair market value of the 2008C2 investment swap from a \$10.3 million loss in 2014 to a \$0.1 million loss in 2015 and a one-time recognized \$9.5 million charge due to restructuring the 2008C swaps in November 2014. Both of these debt items were non-cash. Donated property revenue increased by \$3.4 million from \$14.7 million in 2014 to \$18.1 million in 2015, driven by increased development. Interest and amortization cost decreased by \$0.8 million from \$37.6 million in 2014 down to \$36.9 million in 2015 due mainly to a decrease in credit facility and liquidity costs.

Total operating expenses increased in 2015 to \$131.7 million compared to \$125.8 million in 2014. Significant operating expenses included the following factors:

- Salary and employee benefit expenses were up \$1.3 million or 7%. The increase is attributed to an average salary rate increase of 3%, severance payouts, and a 7% increase in benefit costs.

The majority of Authority employees are represented by one of three labor unions. The Pittsburgh Joint Collective Bargaining Committee (PJCBC) represents blue-collar employees. The American Federation of State, County and Municipal Employees (AFSCME) represents Local 2719 employees and Local 2037. A new three-year agreement with AFSCME became effective January 1, 2014 and will expire December 31, 2016. A four-year agreement with the PJCBC became effective January 1, 2013, and expires December 31, 2016.

- Overall direct operating expenses, excluding salaries and benefits, increased by \$7.9 million or 12.2% to \$72.8 million in 2015 from \$64.9 million in 2014. Operating contracts increased by \$7.9 million, mostly because of the wastewater treatment expense, which increased by \$7.2 million or 13.6% to \$60.0 million when compared to \$52.8 million in 2014, due to ALCOSAN's rate increase. Chemicals expense decreased by \$0.4 million from 2014. Equipment expenses remained consistent with 2014, at just under \$0.5 million each year. Repairs and maintenance decreased by \$0.3 million from 2014. Overall Inventory increased by \$0.7 million from 2014, due to resolution of long-term system issues.



- Overall general and administrative expenses decreased 15.3% or \$2.7 million, to \$14.8 million in 2015 from \$17.5 million in 2014. Admin fees increased by \$0.2 million, Professional services decreased overall by \$1.0 million, the biggest contributor to this being a decrease in payments to consultants in 2015 compared to 2014. Utility expense increased by \$0.1 million from 2014. Miscellaneous administrative costs decreased by \$1.9 million from the previous year, the biggest factor being a \$1.1 million reduction of legal reserves resulting from claims settled and paid during 2015. Decreases in postage and supply costs make up the remaining \$0.1 million decrease from 2014.
- Overall other expenses decreased 2.2% or \$1.4 million to \$60.6 million in 2015 from \$62.0 million in 2014. Non-city water subsidy to Pennsylvania American Water Company (PAWC) decreased by 37.9% or \$1.1 million to \$1.8 million in 2015 compared to \$2.9 million in 2014. Interest expense decreased 2.1% or \$0.8 million to \$36.9 million in 2015 compared to \$37.6 million in 2014. Debt credit facility and liquidity fees decreased \$1.0, which was slightly offset by monthly interest payment increases, up about \$0.2 million from 2014.
- In 2015, cash collections increased by \$6.7 million, with \$164.9 million collected from billings compared to \$158.2 million in 2014 due to rate increases by both the Authority and ALCOSAN. The Authority collection percentage also dropped slightly compared to 2014 due to timing issues caused by billing delays. The Authority looks to return to historical collection levels in 2016.

Other 2015 highlights include:

- In early 2012, the Authority decided to engage an outside management company to direct its operations. After an extensive search, the Authority selected and engaged Veolia Water North America (Veolia), a subsidiary of Veolia Environnement S.A., the world's largest supplier of water services. Veolia was engaged for a one-year period beginning in July 2012, with an optional six-month renewal available at the Authority's discretion. Said extension was granted in mid-2013. The agreement was extended further through December of 2014 and again through 2015 with two optional six-month renewals for 2016.
- As part of the engagement of Veolia to manage the Authority, diagnostic studies were performed by Veolia of operations and expenditures. As a result of these evaluations, a number of operational improvement initiatives (known as Key Performance Indicators) and monetary efficiency initiatives (known as Opex Initiatives) were developed and presented to the Authority. It was felt that with implementation of these initiatives, as approved by the Authority, significant operational efficiencies and cost savings would be reached. In 2015, Veolia was paid approximately \$1.8 million in shared savings and operational improvement performance payments from these initiatives.
- The Authority continued its relationship with Jordan Tax Service, Inc. (JTS) as its Collector and the law firm of Goehring, Rutter & Boehm, P.C. as Special Legal Counsel for the collection of delinquent water, sewer, and sewage treatment charges. The agreement calls for a collection commission, plus other administrative and legal proceeding costs, to be added to all Authority delinquent claims not paid within 90 days of the initial billing date. If fully collected, the Authority stands to collect 100% of delinquent balances without incurring a collection agency fee. JTS collected for the Authority \$1.7 million during 2015.
- In January of 2010, the Authority began assessing a 5% Distribution Infrastructure System Charge (DISC) on all bills, increasing to 7% in 2011. This charge is applied to the water and sewer conveyance components of the invoice and is dedicated to system improvements and capital needs. 2015 DISC revenues were \$7.0 million. The \$5.3 million in DISC expenditures for 2015 included water and sewer relays, catch basin replacement, and manhole, catch basin, and sewer line point repair.

- The Authority has become increasingly focused on the environmental impact that excess storm water and sewage from combined sewer overflows during heavy rainfall events has on Pittsburgh's rivers and streams. The City of Pittsburgh and the Authority are working together in the spirit of intergovernmental cooperation to achieve full compliance with the requirements of the Federal Clean Water Act and the Pennsylvania Clean Streams Act by incorporating green infrastructure (GI) into water quality solutions where feasible while striving to engage the community, encourage economic development, and provide environmental leadership. The Authority created new positions in its engineering department to address the full range of technical, institutional, and public outreach issues associated with this process.
- The Authority started a Green Infrastructure Grant Program in 2015. The Authority awarded \$250,000 in grants to 17 GI projects across the City of Pittsburgh this year. This inaugural grant program encouraged property owners and community organizations to manage storm water. Of the total 38 applications received, the Authority awarded ten small grants and seven matching grants. The grant projects incorporated structural and educational projects that have a combined total project value of over \$1.0 million. The Authority estimates that, when completed, these projects will manage between 3.5 and 4.0 million gallons of storm water every year.
- The Engineering Department has completed its implementation of e-Builder, a Project Management Information System (PMIS). Authority Project Managers now have a centralized location for document storage and tools that allow for internal and external members of a project to communicate seamlessly. Project management within e-Builder will improve the capital program execution by streamlining the processes and reducing project costs. As we continue to design automation of processes while incorporating best industry practices, we have lowered the overall number of days to pay invoices/pay applications. These processes have greatly improved efficiency of the contract life cycle, thus allowing a significant increase to be spent on capital projects, helping the Authority to improve its water and sewer system reliability and helping PWSA to ensure we meet the needs and expectations of our customers.
- In 2014, the Authority recognized that its existing Advanced Meter Infrastructure was over 15 years old and was in need of upgrade and/or replacement. It was decided to replace the existing technology with a new system provided by Sensus USA, Inc. The cost of \$7.5 million for the new system will be paid over a 15-year period from operations. As of the end of 2015, roughly 77,100 Meter Interface Units have been replaced.
- Debt service coverage was 1.43 in 2015 and 1.52 in 2014. These coverage factors exceed the 1.2 coverage ratio required under the bond indenture.
- The Authority expended \$44.1 million on Bond and Pennvest capital projects in 2015, an increase of \$24.1 million over the \$20.0 million expended in 2014. Of \$50.4 million budgeted in Pennvest loans, \$35.5 million was spent in prior years, \$2.6 million was spent in 2015, and \$12.3 million of approved funding remained available. The Authority increased its capital project proceeds with the issuance of the \$75 million 2013 bond issue, spending \$13.9 million in 2014 and \$41.5 million in 2015, with the remaining \$19.6 million encumbered at year-end. The above 2013 bond expenditures include \$4.6 million in 2014 and \$3.3 million in 2015 for reimbursement to the DISC program for funding of projects that would have historically been paid for with capital dollars.
- The Term Rate mode on the series 2008C1-D bonds ended on September 1, 2015. And on that date the series 2008C1-D converted to the "LIBOR-Based Interest Rate Mod - BA." There were not any changes to the swaps at that time.
- The City of Pittsburgh is the largest of the 83 municipalities that convey raw sewage to ALCOSAN for treatment. In January 2004, the Authority and the City of Pittsburgh executed a Consent Order and Agreement (Order) regarding sanitary and combined

sewer overflows within the City of Pittsburgh. The other signatories to the Order are the Pennsylvania Department of Environmental Protection (DEP) and Allegheny County Health Department, which executed the Order on April 21, 2004. The Long-Term Control Plan to address combined and sanitary sewer overflows required under the order was submitted on schedule on July 31, 2013. Due to the complexities of regional governance, the Authority's regulatory body was switched from the DEP to the US Environmental Protection Agency (EPA). On January 21, 2016, the EPA issued a Clean Water Act Section 308 Information Request to the Authority. We understand the nature of the request is to provide a jurisdictional basis for EPA to engage the Authority and the City of Pittsburgh in an enforcement action by consent. We intend that through such an action, we can more fully participate in the implementation of interim regional wet weather activities, controls, and improvements. We further understand that such an action will also permit the Authority and the City of Pittsburgh to participate more fully in the identification and implementation of any final wet weather control measures for the region. We have fulfilled the first portion of the 308 request, which was due on March 31, 2016. The second phase of the request requires a source reduction study be completed by December 1, 2016 and demonstration projects constructed by December 1, 2017.

The 308 Requirement does not contain fines or penalties for past non-compliance, but does propose binding obligations for work on a going forward basis. The Authority continues to meet the requirements of the request. See Note 13 – Consent Agreement for additional details.

**CONDENSED FINANCIAL STATEMENTS**

**CONDENSED STATEMENTS OF NET POSITION**

(Dollars expressed in thousands)

	December 31,		Variance	
	2016	2015	Dollars	%
Capital assets:				
Producing assets	\$ 587,937	\$ 583,344	\$ 4,593	0.79%
Construction in progress	88,861	70,204	18,657	26.58%
Restricted assets	26,337	44,734	(18,397)	-41.13%
Current assets	51,537	61,866	(10,329)	-16.70%
<b>Total Assets</b>	<b>754,672</b>	<b>760,148</b>	<b>(5,476)</b>	<b>-0.72%</b>
<b>Deferred Outflows of Resources</b>	<b>95,905</b>	<b>106,228</b>	<b>(10,323)</b>	<b>-9.72%</b>
Liabilities:				
Current liabilities	67,285	63,912	3,373	5.28%
Long-term liabilities	820,815	838,209	(17,394)	-2.08%
<b>Total Liabilities</b>	<b>888,100</b>	<b>902,121</b>	<b>(14,021)</b>	<b>3.20%</b>
Net Position:				
Net investment in capital assets	(5,395)	(25,097)	19,702	-78.50%
Restricted	9,999	9,134	865	9.47%
Unrestricted	(42,127)	(19,782)	(22,345)	112.96%
<b>Total Net Position</b>	<b>\$ (37,523)</b>	<b>\$ (35,745)</b>	<b>\$ (1,778)</b>	<b>43.92%</b>

**CONDENSED STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION**  
(Dollars expressed in thousands)

	Year Ended December 31,		Variance	
	2016	2015	Dollars	%
			Increase (Decrease)	
Operating revenues	\$ 180,727	\$ 174,164	\$ 6,563	3.77%
Operating expenses:				
Direct operating	60,687	48,009	12,678	26.41%
Wastewater treatment	62,125	59,963	2,162	3.61%
Cooperation agreement	7,150	7,150	-	0.00%
Subsidy of non-customer City residents	1,974	1,786	188	10.53%
Depreciation	16,657	14,786	1,871	12.65%
<b>Total Operating Expenses</b>	<b>148,593</b>	<b>131,694</b>	<b>16,899</b>	<b>53.19%</b>
Operating income	32,134	42,470	(10,336)	-49.42%
Non-operating revenues (expenses):				
Donated property	981	18,129	(17,148)	-94.59%
Interest revenue	383	199	184	92.46%
Interest expense and other	(35,276)	(37,413)	2,137	-5.71%
<b>Total Non-operating Revenues (Expenses)</b>	<b>(33,912)</b>	<b>(19,085)</b>	<b>(14,827)</b>	<b>-7.84%</b>
<b>Net Income/(Loss)</b>	<b>\$ (1,778)</b>	<b>\$ 23,385</b>	<b>\$ (25,163)</b>	<b>-107.60%</b>

**Financial Condition 2016 and 2015**

The Authority's financial condition in 2016 remained stable for a fourteenth consecutive year. Water utility revenues increased to \$113.8 million from \$110.5 million. The rate increase effective January 2017 as implemented in 2016 should have a positive impact on utility revenue and unrestricted cash. Total cash and cash equivalents stood at \$21.6 million at year-end 2016. Investment interest rates remain historically low, impacting return on reserves invested.

**CONDENSED FINANCIAL STATEMENTS**

**CONDENSED STATEMENTS OF NET POSITION**

(Dollars expressed in thousands)

	December 31,		Variance	
	2015	2014	Dollars	%
Capital assets:				
Producing assets	\$ 583,344	\$ 563,949	\$ 19,395	3.44%
Construction in progress	70,204	31,233	38,971	124.78%
Restricted assets	44,734	85,868	(41,134)	-47.90%
Current assets	61,866	58,930	2,936	4.98%
<b>Total Assets</b>	<b>760,148</b>	<b>739,980</b>	<b>20,168</b>	<b>2.73%</b>
<b>Deferred Outflows of Resources</b>	<b>106,228</b>	<b>100,681</b>	<b>5,547</b>	<b>5.51%</b>
Liabilities:				
Current liabilities	63,912	60,488	3,424	5.66%
Long-term liabilities	838,209	839,303	(1,094)	-0.13%
<b>Total Liabilities</b>	<b>902,121</b>	<b>899,791</b>	<b>2,330</b>	<b>5.53%</b>
Net Position:				
Net investment in capital assets	(25,097)	(51,220)	26,123	-51.00%
Restricted	9,134	9,130	4	0.04%
Unrestricted	(19,782)	(17,040)	(2,742)	16.09%
<b>Total Net Position</b>	<b>\$ (35,745)</b>	<b>\$ (59,130)</b>	<b>\$ 23,385</b>	<b>-34.87%</b>

**CONDENSED STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION**  
(Dollars expressed in thousands)

	Year Ended December 31,		Variance	
	2015	2014	Dollars	%
			Increase (Decrease)	
Operating revenues	\$ 174,164	\$ 164,255	\$ 9,909	6.03%
Operating expenses:				
Direct operating	48,009	48,647	(638)	-1.31%
Wastewater treatment	59,963	52,782	7,181	13.61%
Cooperation Agreement	7,150	7,150	-	0.00%
Subsidy of non-customer City residents	1,786	2,875	(1,089)	-37.88%
Depreciation	14,786	14,312	474	3.31%
<b>Total Operating Expenses</b>	<b>131,694</b>	<b>125,766</b>	<b>5,928</b>	<b>-22.27%</b>
Operating income	42,470	38,489	3,981	28.31%
Non-operating revenues (expenses):				
Donated property	18,129	14,708	3,421	23.26%
Interest revenue	199	213	(14)	-6.57%
Interest expense and other	(37,413)	(57,406)	19,993	-34.83%
<b>Total Non-operating Revenues (Expenses)</b>	<b>(19,085)</b>	<b>(42,485)</b>	<b>23,400</b>	<b>-18.14%</b>
<b>Net Income/(Loss)</b>	<b>\$ 23,385</b>	<b>\$ (3,996)</b>	<b>\$ 27,381</b>	<b>-685.21%</b>

**Financial Condition 2015 and 2014**

The Authority's financial condition in 2015 remained stable for a thirteenth consecutive year. Water utility revenues increased to \$110.5 million from \$105.3 million. The rate increase effective January 2016 as implemented in 2013 should have a positive impact on utility revenue and unrestricted cash. Total cash and cash equivalents stood at \$61.8 million at year-end 2015. Investment interest rates remain historically low, impacting return on reserves invested.

The Authority's strategic plan continues to focus on improving its financial condition, customer service, improving internal efficiencies, maintaining regulatory compliance and security, while providing an environment that encourages employee development.

**Requests for Information**

This financial report is designed to provide a general overview of the Authority's finances for all those with an interest in its finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Executive Director, Penn Liberty Plaza I, 1200 Penn Ave., Pittsburgh, PA 15222.

# PITTSBURGH WATER AND SEWER AUTHORITY

## STATEMENTS OF NET POSITION

*(Dollars expressed in thousands)*

DECEMBER 31, 2016 AND 2015

<b>Assets</b>	2016	2015
Current assets:		
Cash and cash equivalents	\$ 21,620	\$ 28,269
Accounts receivable, net:		
Water:		
Billed	6,388	8,127
Unbilled	5,886	4,879
Total water	12,274	13,006
Wastewater treatment:		
Billed	10,844	8,774
Unbilled	3,719	7,768
Total wastewater treatment	14,563	16,542
Other receivables	797	695
Total accounts receivable, net	27,634	30,243
Prepaid expenses	65	180
Inventory	2,218	3,174
Total current assets	51,537	61,866
Noncurrent assets:		
Restricted assets:		
Cash and cash equivalents	11,900	33,553
Investments	14,437	11,181
Total restricted assets	26,337	44,734
Capital assets, not being depreciated	88,861	70,204
Capital assets, net of accumulated depreciation	587,937	583,344
Total noncurrent assets	703,135	698,282
<b>Total Assets</b>	<b>754,672</b>	<b>760,148</b>
<b>Deferred Outflows of Resources</b>		
Deferred charge on refunding	25,008	27,728
Accumulated decrease in fair value of hedging derivatives	70,897	78,500
<b>Total Deferred Outflows of Resources</b>	<b>95,905</b>	<b>106,228</b>

(Continued)

The notes to financial statements are an integral part of this statement.



# PITTSBURGH WATER AND SEWER AUTHORITY

## STATEMENTS OF NET POSITION

*(Dollars expressed in thousands)*

DECEMBER 31, 2016 AND 2015

(Continued)

	<u>2016</u>	<u>2015</u>
<b>Liabilities</b>		
<hr/>		
Current liabilities:		
Bonds and loans payable	22,492	22,099
Accrued payroll and related obligations	924	764
Accounts payable wastewater treatment	15,283	19,788
Accounts payable and other accrued expenses	17,936	6,530
Accounts payable from restricted assets	-	4,856
Accrued interest payable from restricted assets	10,650	9,875
	<hr/>	<hr/>
Total current liabilities	67,285	63,912
Noncurrent liabilities:		
Unearned revenue	185	207
Accrued payroll and related obligations	575	750
Swap liability	86,772	96,065
Bonds and loans payable, net	733,283	741,187
	<hr/>	<hr/>
Total noncurrent liabilities	820,815	838,209
	<hr/>	<hr/>
<b>Total Liabilities</b>	888,100	902,121
	<hr/>	<hr/>
<b>Net Position</b>		
<hr/>		
Net investment in capital assets	(5,395)	(25,097)
Restricted	9,999	9,134
Unrestricted	(42,127)	(19,782)
	<hr/>	<hr/>
<b>Total Net Position</b>	<u>\$ (37,523)</u>	<u>\$ (35,745)</u>

(Concluded)

The notes to financial statements are an integral part of this statement.

# PITTSBURGH WATER AND SEWER AUTHORITY

## STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

*(Dollars expressed in thousands)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

	2016	2015
<b>Operating Revenues:</b>		
Residential, commercial, and industrial water sales	\$ 113,818	\$ 110,523
Wastewater treatment	62,125	59,963
Other	4,784	3,678
Total operating revenues	180,727	174,164
<b>Operating Expenses:</b>		
Direct operating expenses	60,687	48,009
Wastewater treatment	62,125	59,963
Cooperation agreement operating expenses:		
Indirect cost allocation - sewer conveyance	2,846	3,000
Indirect cost allocation - water	4,304	4,150
Expense of water provided by other entities:		
Subsidy of customers located in the City	1,974	1,786
Depreciation	16,657	14,786
Total operating expenses	148,593	131,694
<b>Operating Income</b>	32,134	42,470
<b>Non-operating Revenues (Expenses):</b>		
Donated property	981	18,129
Interest revenue	383	199
Investment income (loss) - change in fair value of swap	1,690	(548)
Interest and amortization	(36,966)	(36,865)
Total non-operating revenues (expenses)	(33,912)	(19,085)
<b>Net Income (Loss)</b>	(1,778)	23,385
<b>Net Position:</b>		
Beginning of year	(35,745)	(59,130)
End of year	\$ (37,523)	\$ (35,745)

The notes to financial statements are an integral part of this statement.

# PITTSBURGH WATER AND SEWER AUTHORITY

## STATEMENTS OF CASH FLOWS

*(Dollars expressed in thousands)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

	2016	2015
<b>Cash Flows From Operating Activities:</b>		
Cash received from customers	\$ 183,336	\$ 167,924
Cash paid to suppliers and employees and customer refunds	(58,420)	(47,613)
Cash paid to City of Pittsburgh under the Cooperation Agreement	(7,150)	(7,150)
Cash paid to other water companies for subsidy of customers located in the City of Pittsburgh	(1,974)	(1,786)
Cash paid to ALCOSAN for wastewater treatment	(66,630)	(58,323)
Net cash provided by (used in) operating activities	49,162	53,052
<b>Cash Flows From Investing Activities:</b>		
Purchase of investment securities	(71,774)	(93,688)
Proceeds from sale and maturities of investment securities	70,952	93,820
Interest income	383	199
Net cash provided by (used in) investing activities	(439)	331
<b>Cash Flows From Capital and Related Financing Activities:</b>		
Purchase/construction of property, plant, and equipment	(34,982)	(47,229)
Proceeds from revolving line of credit	11,800	-
Proceeds from Pennvest Loans	769	3,462
Principal payments on debt	(22,004)	(21,201)
Principal payments on capital lease	(410)	(280)
SWAP receipts	1,227	340
SWAP payments	(13,418)	(12,245)
Liquidity and remarketing fees	(1,438)	(1,415)
Interest paid on borrowings	(18,569)	(18,026)
Net cash provided by (used in) capital and related financing activities	(77,025)	(96,594)
<b>Increase (Decrease) in Cash and Cash Equivalents</b>	(28,302)	(43,211)
<b>Cash and Cash Equivalents:</b>		
Beginning of year	61,822	105,033
End of year	\$ 33,520	\$ 61,822
Consists of:		
Restricted cash and cash equivalents	\$ 11,900	\$ 33,553
Unrestricted cash and cash equivalents	21,620	28,269
	\$ 33,520	\$ 61,822
<b>Reconciliation of Operating Income to Net Cash Provided by (Used in) Operating Activities:</b>		
Operating income	\$ 32,134	\$ 42,470
Adjustments to reconcile operating income to net cash provided by (used in) operating activities:		
Depreciation	16,657	14,786
Reserve for uncollectible amounts	855	2,789
Change in:		
Accounts receivable - water and wastewater	1,856	(9,073)
Other accounts receivable	(102)	44
Prepaid expenses	115	316
Inventory	956	38
Accounts payable wastewater treatment	(4,505)	1,640
Accounts payable and other accrued expenses	1,233	334
Accrued payroll and related obligations	(15)	(271)
Unearned revenue	(22)	(21)
Net cash provided by (used in) operating activities	\$ 49,162	\$ 53,052
<b>Schedule of Non-cash Capital and Related Financing Activities</b>		
Donated property	\$ 981	\$ 18,129
Capital assets acquired through capital lease	-	7,445

The notes to financial statements are an integral part of this statement.

# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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### 1. ORGANIZATION

The Pittsburgh Water and Sewer Authority (Authority) provides water to approximately 80,000 residential, commercial, and industrial customers located in the City of Pittsburgh (City), Pennsylvania, and collects wastewater throughout the City.

A Board of Directors (Board) appointed by the Mayor of the City governs the Authority.

The Authority is a body politic and corporate, organized and existing under the Pennsylvania Municipalities Authorities Act. The Authority was established by the City in 1984 to assume responsibility from the City for management, operation, maintenance, and improvement of virtually the entire City water supply, distribution, and wastewater collection systems (the "Water and Wastewater System" or "System"). The Authority's term of existence is through 2045. At inception, the City contributed \$5.3 million to the Authority in the form of customer accounts receivable.

The Authority has the right to establish user fees and charges without being subject to the approval of any department, board, or agency of Pennsylvania or the City. The Authority is also authorized to issue bonds and notes payable solely from the Authority's revenues.

### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### Reporting Entity

These financial statements present the financial position, changes in net position, and cash flows of the Authority. The Authority is a component unit of the City in accordance with applicable guidance. The Authority's financial statements are not intended to present the financial position or results of operations of the City taken as a whole.

#### Basis of Accounting and Measurement Focus

The accompanying financial statements have been prepared using the economic resources measurement focus and the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America, as prescribed by the Governmental Accounting Standards Board (GASB). Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows.

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# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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The Authority functions as a Business-Type Activity, as defined by GASB.

### Classification of Net Position

The Authority's net position is classified into three components – net investment in capital assets; restricted; and unrestricted. These classifications are defined as follows:

- Net investment in capital assets – This component of net position consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are also included in this component of net position. If there are significant unspent related debt proceeds or deferred inflows of resources at the end of the reporting period, the portion of the debt or deferred inflows of resources attributable to the unspent amount is not included in the calculation of net investment in capital assets. Instead, that portion of the debt or deferred inflow of resources is included in the same net position component (restricted or unrestricted) as the unspent amount.
- Restricted – This component of net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets. Generally, a liability relates to restricted assets if the asset results from a resource flow that also results in the recognition of a liability or if the liability will be liquidated with the restricted assets reported.
- Unrestricted – This component of net position is the net amount of the assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or the restricted components of net position.

When an expense is incurred that can be paid using either restricted or unrestricted resources, the Authority's policy is to first apply the expense towards restricted resources and then towards unrestricted resources.

### Deposits and Investments

The Authority's cash and cash equivalents are considered to be cash on hand, demand deposits, and all highly liquid investments, both restricted and unrestricted, with maturity of three months or less at date of purchase.

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# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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Investments are recorded at fair value. Accordingly, the change in fair value of investments is recognized as an increase or decrease to investment assets and investment income.

### Fair Value Measurements

The Authority categorizes its fair value measurements within the fair value hierarchy established by accounting principles generally accepted in the United States of America. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

### Premiums and Discounts

Original issue bond premiums and discounts are amortized over the life of the related bonds using the effective interest method of amortization. The unamortized balance of premiums and discounts is presented net on the statements of net position as a decrease to bonds payable.

### Deferred Refunding Loss

In accordance with applicable guidance, the excess of the reacquisition price over the net carrying amount of refunded debt is recorded as a deferred outflow of resources on the statements of net position and amortized as a component of interest expense over the shorter of the term of the refunding issue or refunded bonds.

### Remarketing, Liquidity, and Letter of Credit Fees

Associated with the Authority's variable rate bonds, the Authority pays various fees to periodically remarket the bonds and to third parties to provide liquidity in the event that the Authority is unable to remarket the variable rate bonds and needs to repurchase the bonds on a temporary basis until they can be later remarketed. These fees are generally paid quarterly and are calculated as a percentage of the outstanding par amount of the variable rate bonds.

### Capital Assets

Capital assets owned by the Authority are recorded at cost including that portion of deferred interest that is ultimately capitalized. Depreciation of capital assets owned by the Authority is provided on the straight-line method based on the estimated useful lives of the various classes of assets. Utility assets have estimated useful lives ranging from 30 to 70 years. Non-utility assets have estimated useful lives ranging from five to 10 years.

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# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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The Authority also receives donated property relating mostly to dedicated water and sewer lines. These assets are capitalized at acquisition value at the date of the donation and depreciated in accordance with the estimated useful lives noted above.

The water and sewer system represents assets leased from the City. Amortization of capital lease assets is provided on the straight-line basis applying an estimated average remaining useful life from the inception of the lease.

Maintenance and repairs are charged to expense as incurred.

### Deferred Outflows/Inflows of Resources

In addition to assets, the statement of financial position reports a separate section for deferred outflows of resources. This separate financial statement element, *deferred outflows of resources*, represents a consumption of net position that applies to a future period(s) and so will *not* be recognized as an outflow of resources (expense) until then.

In addition to liabilities, the statement of financial position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, *deferred inflow of resources*, represents an acquisition of net position that applies to a future period(s) and so will *not* be recognized as an inflow of resources (revenue) until that time. The Authority's financial statements currently do not include that element.

### Classification of Revenues

The Authority has classified its revenues as either operating or non-operating revenues according to the following criteria:

- Operating revenues – Operating revenues include activities that have the characteristics of exchange transactions, such as residential, commercial, industrial water sales and wastewater treatment.
- Non-operating revenues – Non-operating revenues include activities that have the characteristics of non-exchange transactions, such as interest income and other revenue sources.

# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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### Compensated Absences

A liability for vacation, personal, and sick days is accrued when related benefits are attributable to services rendered and to the extent it is probable that the Authority will ultimately compensate employees.

### Inventory

Inventory is stated at cost, on a moving average price basis.

### Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

### Adoption of Accounting Pronouncements

The requirements of the following GASB Statements were adopted for the Authority's 2016 financial statements:

GASB Statement No. 72, *"Fair Value Measurement and Application."* This Statement addresses accounting and financial reporting issues related to fair value measurements.

GASB Statement No. 76, *"Hierarchy of Generally Accepted Accounting Principles for State and Local Governments."* This Statement identifies the hierarchy of generally accepted accounting principles (GAAP), reduces this hierarchy to two categories of authoritative GAAP, and addresses the use of authoritative and nonauthoritative literature in the event that the accounting treatment for a transaction or other event is not specified within a source of authoritative GAAP. This Statement supersedes Statement No. 55.

GASB Statement No. 79, *"Certain External Investment Pools and Pool Participants."* This Statement addresses accounting and reporting for certain external investment pools and pool participants. Specifically, it establishes criteria for an external investment pool to qualify for the election to measure all of its investments at amortized cost for financial reporting purposes.

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# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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### Pending Pronouncements

GASB has issued the following Statements, which will become effective in future years as shown below. Management has not yet determined the impact of these Statements on the Authority's financial statements.

GASB Statement No. 80, "*Blending Requirements for Certain Component Units – an amendment of GASB Statement No. 14,*" effective for periods beginning after June 15, 2016 (the Authority's 2017 fiscal year). The objective of this Statement is to improve financial reporting by clarifying the financial statement presentation requirements for certain component units.

GASB Statement No. 81, "*Irrevocable Split-Interest Agreements,*" effective for fiscal years beginning after December 31, 2016 (the Authority's financial statements for the year ending December 31, 2017). The objective of this Statement is to improve accounting and financial reporting for irrevocable split-interest agreements by providing recognition and measurement guidance for situations in which a government is a beneficiary of the agreement.

GASB Statement No. 83, "*Certain Asset Retirement Obligations,*" effective for fiscal years beginning after June 15, 2018 (the Authority's financial statements for the year ending December 31, 2019). The objective of this Statement is to provide financial statement users with information about asset retirement obligations that were not addressed in GASB standards by establishing uniform accounting and financial reporting requirements for these obligations.

GASB Statement No. 85, "*Omnibus 2017,*" effective for fiscal years beginning after June 15, 2017 (the Authority's financial statements for the year ending December 31, 2018). The objective of this Statement is to address practice issues that have been identified during implementation of certain GASB Statements.

### **3. TRANSACTIONS WITH THE CITY OF PITTSBURGH**

During July 1995, the City and the Authority entered into a Capital Lease Agreement and a Cooperation Agreement (collectively referred to as the "Agreements").

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# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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### Cooperation Agreement

Under the terms of the Cooperation Agreement, City water department employees became employees of the Authority. As a result, the Authority assumed various personnel-related obligations from the City's water department. Other direct costs of the System's water operations are now generally paid directly by the Authority under the Cooperation Agreement, rather than paid by the City and reimbursed by the Authority. The City provides the Authority with various services in accordance with the Cooperation Agreement and the Authority reimburses the City for direct and indirect costs attributed by the City to the operation and maintenance of the System.

Under the Agreements, the Authority provides up to 600 million gallons of water annually for the City's use without charge. Also, the Authority assumes the City's obligation for the cost of subsidizing water service to residents of the City situated beyond the Authority's service area so that those water users pay charges that mirror the rates of the Authority.

### System Leases

The Capital Lease Agreement stipulates minimum lease payments of approximately \$101 million, all of which were satisfied during the initial three years of the capital lease.

The Capital Lease Agreement has a term of thirty years and provides the Authority with the option to purchase the System for one dollar in 2025.

### Pension

Employees of the Authority participate in the City's Municipal Pension Fund Plan (Plan). Employees who became members of the Plan prior to January 1, 1988 are required to contribute 5% of pre-tax pay. Those joining thereafter are required to contribute 4%. The Authority's 2016 and 2015 payroll covered by the Plan was approximately \$13,400 and \$12,782, respectively. Employee contributions for the years 2016 and 2015 amounted to \$533 and \$519, respectively.

The City's obligations relative to the Plan are determined in accordance with various Pennsylvania statutes. The extent of the Authority's participation in such obligations with respect to those former City employees whose membership continued upon becoming employees of the Authority is determined by the shared interpretation of the City and Authority of the intent of the Cooperation Agreement.

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# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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Uncertainty exists about the future obligation of the Authority and its employees to make contributions to the Plan. Such contributions are contingent upon the continuing eligibility of the Authority's employees to participate in the City's Plan. Eligibility for ongoing employee participation in the City's Plan could end if the Authority were to introduce another pension plan. At this time, the Authority and City have no definite plans to establish another pension plan for the Authority, other than an agreement in principle that the Authority should have its own plan in the future. Future obligations of the Authority to make contributions to the Plan may also be subject to other amendments of the existing arrangement agreed-upon by the Authority and the City.

Normal retirement benefits are available upon attainment of age sixty and completion of twenty service years. Early retirement benefits are available upon attainment of age fifty and completion of eight service years. Early retirement benefits may be deferred until age sixty or may be obtained upon retirement at a reduced level. A member who terminates employment after attaining age forty and completing eight service years can sustain eligibility for benefits by continuing contributions through age fifty. A member who terminates employment after attaining fifteen service years, but has been a member since before January 1, 1975, can be vested by continuing contributions through age fifty.

Retirement benefits for employees who were members of the Plan are based upon a percentage of either three-year or four-year average pay, depending on date of hire, subject to certain specified minimum monthly benefit amounts. Special membership and benefit rules apply to those experiencing disability.

The "net pension liability" is an actuarial present value of credited projected benefits (a standardized measure for financial statement disclosure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future by the Plan as a result of members' service to date) less the pension plan's net position available for paying such benefits. The measure is intended to help users assess the Plan's funding status on a going concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among public employee retirement systems. The Plan has not reported or attributed measurements of assets or the net pension liability on the basis of the group of members who are Authority employees.

Additional information about the Plan and required supplementary information showing the Plan's progress in accumulating sufficient assets to pay benefits when due is presented in the City's Comprehensive Annual Financial Report.

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# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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### 4. REVENUE AND ACCOUNTS RECEIVABLE

#### Water

Water sales revenue is recognized as earned during the period when water is supplied to customers. Customers are billed on a monthly billing cycle by the Authority based on actual or estimated meter readings. The Authority recognizes unbilled accounts receivable for water service provided prior to year-end that is billed during the following year.

Water accounts receivable are presented net of a reserve for uncollectible amounts. This reserve, based on an analytical review of projected monthly active accounts receivables balances, is recognized coincident with recognition of revenue. At December 31, 2016 and 2015, the reserve for uncollectible water accounts was approximately \$14.77 million and \$14.57 million, respectively. The Authority has rights to utilize collection agencies, service terminations, liens, and real property sales to protect its interests, limit further losses, and motivate payments from delinquent customers.

#### Wastewater Treatment

Although the Authority does not provide wastewater treatment, it assumed responsibility for certain wastewater treatment revenue and expenses beginning in 1996. Effective May 2004, the Authority began direct billing City residents for current and delinquent wastewater treatment charges and remitting to ALCOSAN the aggregate amount of service charges billed. Wastewater treatment activity and the related assets and liabilities appear on the statements of revenue, expenses and changes in net position and the statements of net position, respectively. During 2015, certain wastewater treatment only accounts were not timely billed due to issues with the Authority's billing process. The majority of these issues were corrected during 2016. The related estimated amount of unbilled accounts receivable at year-end has been recorded on the statement of net position. At December 31, 2016 and 2015, the reserve for uncollectible wastewater accounts was approximately \$7.86 million and \$7.20 million, respectively.

# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

### 5. CAPITAL ASSETS

Capital assets consisted of the following at December 31, 2016 and 2015:

	Balance at January 1, 2016	Additions	Reclassifications/ Transfers	Balance at December 31, 2016
Capital assets, not being depreciated:				
Construction in progress	\$ 70,204	\$ 39,907	\$ (21,250)	\$ 88,861
Capital assets, being depreciated:				
Utility assets	837,067	21,102	-	858,169
Non-utility assets	22,195	148	-	22,343
Total capital assets, being depreciated	859,262	21,250	-	880,512
Less accumulated depreciation	(275,918)	(16,657)	-	(292,575)
Total capital assets, being depreciated, net	583,344	4,593	-	587,937
Total capital assets	<u>\$ 653,548</u>	<u>\$ 44,500</u>	<u>\$ (21,250)</u>	<u>\$ 676,798</u>
	Balance at January 1, 2015	Additions	Reclassifications/ Transfers	Balance at December 31, 2015
Capital assets, not being depreciated:				
Construction in progress	\$ 31,233	\$ 46,914	\$ (7,943)	\$ 70,204
Capital assets, being depreciated:				
Utility assets	802,961	34,106	-	837,067
Non-utility assets	22,120	75	-	22,195
Total capital assets, being depreciated	825,081	34,181	-	859,262
Less accumulated depreciation	(261,132)	(14,786)	-	(275,918)
Total capital assets, being depreciated, net	563,949	19,395	-	583,344
Total capital assets	<u>\$ 595,182</u>	<u>\$ 66,309</u>	<u>\$ (7,943)</u>	<u>\$ 653,548</u>

During 2016 and 2015, the Authority received donated utility assets of \$981 and \$18,129, respectively, related to various development projects.

# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

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### 6. PAYROLL AND RELATED OBLIGATIONS

Payroll and related obligations presented on the statements of net position are comprised of:

	Balance at December 31, 2015	Change	Balance at December 31, 2016	Current Portion
Compensated absences	\$ 544	\$ (115)	\$ 429	\$ 63
Workers' compensation	254	(35)	219	10
Payroll, withholdings, and taxes	716	135	851	851
	<u>\$ 1,514</u>	<u>\$ (15)</u>	<u>\$ 1,499</u>	<u>\$ 924</u>

  

	Balance at December 31, 2014	Change	Balance at December 31, 2015	Current Portion
Compensated absences	\$ 639	\$ (95)	\$ 544	\$ 38
Workers' compensation	504	(250)	254	10
Payroll, withholdings, and taxes	642	74	716	716
	<u>\$ 1,785</u>	<u>\$ (271)</u>	<u>\$ 1,514</u>	<u>\$ 764</u>

### 7. BONDS AND LOANS PAYABLE

To finance its initial capital improvement program, the Authority issued Daily Adjustable Demand Water and Wastewater System Revenue Bonds of \$93,600 in 1984 ("1984 Bonds"). In 1985, the Authority issued Water and Wastewater System Adjustable Rate Tender Revenue Bonds ("1985 Bonds") that accomplished an advance refunding which defeased the 1984 Bonds. In 1986, the Authority issued \$134,700 Water and Wastewater System Adjustable Rate Tender Revenue Bonds ("1986 Bonds") to finance the next phase of its capital improvement program. In July 1991, the Authority issued \$248,329 Water and Wastewater System Revenue Refunding Bonds, Series A of 1991 ("1991 Bonds") which refunded the outstanding 1985 and 1986 Bonds. The principal of defeased 1986 Bonds still outstanding at December 31, 2016 and 2015 is \$0 and \$21,225, respectively. In connection with the debt refunding, the Authority recorded a deferred refunding loss of \$32,568, which

# PITTSBURGH WATER AND SEWER AUTHORITY

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is being amortized as an adjustment to interest expense over the life of the bonds. At December 31, 2016 and 2015, the remaining unamortized deferred refunding loss was \$2,158 and \$2,330, respectively, and the transaction is shown as a deferred outflow of resources and will be amortized through 2037.

### Series 1998

In March 1998, the Authority issued \$93,355 Series A First Lien Revenue Bonds ("1998 Series A Bonds"), the proceeds of which were used to defease through an advance refunding the entire balance of 1995 Series A Bonds outstanding (\$89,850); \$36,440 Series B First Lien Revenue Bonds ("1998 Series B Bonds"), the proceeds of which are dedicated to a capital improvements program; and \$101,970 Series C Subordinate Revenue Bonds ("1998 Series C Bonds"), the proceeds of which were used to defease through an advance refunding the entire balance of the 1995 Series B Bonds outstanding (\$98,410). At December 31, 2016 and 2015, the remaining unamortized deferred refunding loss of \$324 and \$350, respectively, on the transaction is shown as a deferred outflow of resources and will be amortized through 2037.

The 1998 Series B Bonds are capital appreciation bonds with an original issuance amount of \$36,440. The 1998 Series B Bonds have maturity values ranging from \$2.3 million to \$26.9 million from 2017 to 2030. The bonds were issued to yield rates from 5.18% to 5.3%. The 1998 Series B Bonds accrue and compound interest on a semi-annual basis and are carried at cost plus accrued interest. Total maturity value of the 1998 Series B Bonds is \$146.8 million.

The 1998B Bonds at December 31, 2016 and 2015 have carrying amounts of approximately \$86 million and \$81 million, respectively.

A portion of the 1998 Bonds is subject to optional redemption in various face amounts beginning March 1, 2008.

### Series 2007

During March 2007, the Authority issued \$158,895 Series 2007 First Lien Water and Sewer Revenue Bonds ("2007 Bonds"): \$43,720 Series A of 2007 (fixed rate), \$57,585 Series B-1 of 2007 (variable rate demand), and \$57,590 Series B-2 of 2007 (variable rate demand). The purpose of this bond issue was to refund the Series 2002 and Series 2005 Bonds (the refunded bonds). Proceeds of the 2007 Bonds were invested in an escrow account to pay principal and interest on the refunded bonds from the time of refunding through the bonds' earliest optional call dates. In connection with the debt refundings, the Authority recorded a

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# PITTSBURGH WATER AND SEWER AUTHORITY

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deferred refunding loss of \$6,032, which is being amortized as an adjustment to interest expense over the life of the bonds using the effective interest method. At December 31, 2016 and 2015, the remaining unamortized deferred refunding loss is \$1,110 and \$1,201, respectively. The remaining unamortized deferred refunding loss at December 31, 2016 and 2015 represents only the portion related to the Series 2007 A bonds, as the Series 2007 B-1 and B-2 were currently refunded during 2013.

The 2007 A Bonds were issued at a bond premium of \$2,660, which is being amortized as an adjustment to interest expense over the life of the bonds using the effective interest method.

The 2007 Series A Bonds bear interest at rates ranging from 4.00% to 5.00%. Interest is payable in semi-annual installments on March 1 and September 1 until maturity. The 2007 Series A Bonds are subject to extraordinary redemption prior to maturity at the option of the Authority in the event of a condemnation, damage or destruction of the water and sewer system.

The 2007 Series A Bonds at December 31, 2016 and 2015, have carrying amounts of approximately \$5.5 million and \$10.7 million, respectively.

### Series 2008

During May 2008, the Authority issued \$93,635 Series 2008 Water and Sewer System First Lien Revenue Bonds ("2008 Fixed Rate Bonds"): \$68,970 Series A of 2008 (fixed rate, taxable) and \$24,665 Series D-1 of 2008 (fixed rate). The purpose of this bond issue was to advance refund portions of certain maturities of the Series 1993A and Series 2003 Bonds, to fund the costs of certain capital additions, to fund the premium for the Bond Insurance Policy securing payments on 2008 Fixed Rate Bonds, and to fund termination payments on certain interest rate swaps.

During June 2008, the Authority issued \$320,515 Series 2008 Water and Sewer System First Lien Revenue Bonds ("2008 Variable Rate Demand Bonds"): \$145,495 Series B of 2008 (variable rate demand), \$51,910 Series C-1 of 2008 (variable rate demand), \$51,885 Series C-2 of 2008 (variable rate demand), and \$71,225 Series D-2 of 2008 (variable rate demand). The purpose of this bond issue was to currently refund the Series 1998A and Series 1998C, to currently refund certain maturities of the Series 2007 B-1 and Series 2007 B-2 Bonds, to advance refund certain maturities of the Series 1998B Bonds, to fund approximately \$98 million of certain capital additions, to fund the premium for the Bond Insurance Policy securing payments on 2008 Variable Rate Demand Bonds, and to fund termination payments on certain interest rate swaps.

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# PITTSBURGH WATER AND SEWER AUTHORITY

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*(Dollars expressed in thousands unless otherwise indicated)*

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In connection with these advance refundings, portions of the proceeds of the 2008 Bonds were deposited into irrevocable trusts with an escrow agent to provide for certain debt service payments on the refunded bonds. The advance refunding resulted in a deferred refunding loss of \$18,119, which is amortized as an adjustment to interest expense over the life of the 2008 Bonds using the effective interest method. At December 31, 2016 and 2015, the remaining unamortized deferred refunding loss was \$9,944 and \$10,736, respectively, and the transaction is shown as a deferred outflow of resources and will be amortized through 2037.

At December 31, 2016 and 2015, the principal of the defeased 2003 Bonds outstanding was \$0 and \$9,000, respectively. The maturity value of defeased 1998B compound interest bonds outstanding at December 31, 2016 and 2015 was \$19,800.

The Taxable 2008 Series A Bonds bear interest at rates ranging from 6.36% to 6.61%. Interest is payable in semi-annual installments on March 1 and September 1 until maturity. The Taxable 2008 Series A Bonds are subject to optional redemption, in whole or in part, on any date, at the option of the Authority. The Taxable 2008 Series A Bonds that mature in 2018 and 2024 are subject to mandatory sinking fund payments beginning in 2017 and continuing through 2024.

The 2008 Series D-1 Bonds (together with the Taxable 2008 Series A Bonds and the 2008 Fixed Rate Bonds) bear interest at rates ranging from 4.50% to 5.00%. Interest is payable in semi-annual installments on March 1 and September 1 until maturity. The 2008 Series D-1 Bonds which mature on or after September 1, 2019 are subject to optional redemption, in whole or in part, on any date, at the option of the Authority at any time on or after September 1, 2018, at 100% of the principal amount plus accrued interest.

The 2008 Series B, C, and D-2 Bonds (2008 Variable Rate Bonds) as originally offered bear interest at a variable rate with interest payments due on the first business day of each month. Interest rates are reset weekly; the fluctuating rate per annum to be determined by the respective remarketing agents. The weekly rate is subject to a cap of 12% per annum.

The Series B Bonds were reoffered on October 16, 2009. The reason for this reoffering was the replacement of expiring standby bond purchase agreements on these variable rate bonds with letters of credit. The reoffering did not change the interest rate mode on these variable rate bonds. During 2016, the Series B-1 letter of credit (\$72,750,000) was renewed for five years with Bank of America and will expire on October 22, 2021. During 2016, the Series B-2 letter of credit (\$72,745,000) was renewed with PNC for five years and will expire on October 22, 2021.

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# PITTSBURGH WATER AND SEWER AUTHORITY

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During August 2011, the 2008 Series C-1-A, B and C bonds were reoffered. The bonds were reoffered at a term rate of .45% through September 2012. During August 2012, the 2008 Series C-1-A, B and C bonds were again reoffered. The bonds were reoffered at a term rate of .40% through September 2013.

During November 2009, the remaining C-1 Bonds were reoffered as the C1-D Series of \$26,910,000. These bonds were also issued in a term interest rate mode, fixing the interest rate at 2.625% through September of 2012. During August 2012, the C1-D Series were again reoffered. The bonds were reoffered at a term rate of 1.40% through August 2015. As of September 1, 2015, the bonds were converted to the LIBOR-based interest rate mode. At December 31, 2016 and 2015, the interest rate was 1.122% and 1.868%, respectively. Liquidity facilities provided by Bank of America Merrill Lynch on the 2008 C1-D Series bond were renewed as of November 3, 2014 and expire on September 3, 2017.

During September 2013, the 2008 Series C-1A, B and C bonds were converted and reoffered. The bonds were converted to index interest rate mode. The reoffered bonds are as follows: Series C1-A \$10,000,000; Series C1-B \$10,000,000; and Series C1-C \$5,000,000.

During November 2014, the 2008 Series C-1A, B, C, and C-2 were reissued and restructured to bear interest based upon 70% of one-month LIBOR. The fixed rate paid on the swaps by the Authority was amended from 3.998% to 3.50%. Liquidity facilities provided by Bank of America Merrill Lynch (C-1A, 1B, 1C) and JP Morgan Chase (C-2) were also renewed as of November 3, 2014 and expire on September 3, 2017 and November 3, 2018, respectively.

Liquidity facilities provided by PNC on the 2008 D-2 Series bonds were renewed as of July 9, 2014 and expire on August 4, 2017.

Variable Rate Bonds are subject to optional redemption, in whole or in part, on any date, at the option of the Authority. The 2008 Series B Bonds that mature on September 1 of 2039 are subject to mandatory sinking fund redemption. The 2008 Series C Bonds that mature on September 1 of 2035 are subject to mandatory sinking fund redemption. The 2008 Series D-2 Bonds that mature on September 1 of 2040 are subject to mandatory sinking fund redemption.

The 2008 Series Bonds are subject to extraordinary redemption prior to maturity at the option of the Authority in the event of a condemnation, damage or destruction of the water and sewer system.

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The 2008 Fixed Rate Bonds were issued at a bond premium of \$824, which is being amortized as an adjustment to interest expense over the life of the bonds using the effective interest method.

The 2008 Bonds at both December 31, 2016 and 2015 have carrying amounts of approximately \$414 million.

Variable rate bonds require a liquidity facility and/or a letter of credit. The Authority is subject to the risk that the bank does not renew the credit facility and/or that the pricing changes throughout the life of the bonds. Additionally, the Authority purchased insurance as a credit enhancement on the variable rate bonds. Trading spreads on the bonds and the preservation of the liquidity facility may be largely linked to the credit quality of the insurance provider. Therefore, if there is an event that would adversely affect the investor's perception of the credit quality of the insurer, the Authority could be subject to paying higher credit spreads on the bonds and risk losing the liquidity facility.

In conjunction with the issuance of the 2008 Variable Rate Bonds, the Authority entered into various pay fixed/receive variable interest rate swaps to effectively change the Bonds' variable interest rates to synthetic fixed rates. These swap transactions are discussed in Note 8: Interest Rate Swaps.

### Series 2013

During December 2013, the Authority issued \$130,215 Series A First Lien Revenue Refunding Bonds ("2013 Series A Bonds"), the proceeds of which were used to defease through current refunding the entire balance of the Series 2003, Series 2007 B-1, and Series 2007 B-2 and pay certain amounts in respect of termination of certain interest rate swap agreement related to the Series 2007 B-1 and B-2 bonds; \$86,695 Series B First Lien Revenue Bonds ("2013 Series B Bonds"), the proceeds of which are to fund certain water and sewer system capital improvement projects and reimburse the Authority for certain capital expenditures paid for by the Authority. In connection with the debt refundings and swap termination, the Authority recorded a deferred refunding loss of \$16,389, which is being amortized as an adjustment to interest expense over the life of the bonds. At December 31, 2016 and 2015, the remaining unamortized deferred refunding loss was \$11,472 and \$13,111, respectively, and the transaction is shown as a deferred outflow of resources and will be amortized through 2023. The refunding was completed to reduce the Authority's debt service payments over the next 20 years by approximately \$813 and to obtain an economic gain (difference between present values of old and new debt service payments) of \$844.

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The 2013 Bonds were issued at a bond premium of \$14,828, which is being amortized as an adjustment to interest expense over the life of the bonds.

The 2013 Bonds at December 31, 2016 and 2015 have carrying amounts of approximately \$178 million and \$192 million, respectively.

### Revolving Line of Credit

In July 2016, the Authority obtained an \$80 million revolving line of credit to finance certain capital projects. The revolving line of credit is secured by the revenues of the Authority. The Authority has until July 1, 2020 to request revolving advances on the line of credit, at which time the Authority has the option to convert the unpaid principal amount of the outstanding revolving advances to a term loan advance. Each revolving advance bears interest at the LIBOR Index Rate, which ranged from 1.3016% to 1.4958% for the year ended December 31, 2016. At December 31, 2016, the Authority had drawn \$11.8 million in revolving advances.

### State Loans

The Authority has several loans outstanding from PENNVEST for various capital projects and water and sewer improvement projects, with carrying amounts of approximately \$34 million and \$36 million at December 21, 2016 and 2015. Interest rates vary from 1.00% to 3.25%.

### Capital Lease

During 2015, the Authority entered into a lease agreement as lessee for financing the acquisition of utility assets valued at \$7,445. The utility asset has a ten-year estimated useful life. Depreciation on the utility asset began in 2016. This lease agreement qualifies as a capital lease for accounting purposes and, therefore, has been recorded at the value of future minimum lease payments as of the inception date. At December 31, 2016, the outstanding balance of the capital lease was \$6,755.

### Swap Borrowing

During November 2014, the Authority terminated the original 2008 Series 2008 C-1A, C-1B, C-1C and C-2 swaps and reissued and restructured to bear interest based upon 70% of one month LIBOR. At termination, those derivative instruments had an aggregate fair value of

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# PITTSBURGH WATER AND SEWER AUTHORITY

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(\$9,471), which is considered a swap borrowing from the counterparty. The swap borrowing is being amortized over the remaining life of the bond.

Bonds, state loans payable, revolving line of credit, capital lease, and swap borrowing consisted of the following at December 31, 2016 and 2015:

	Balance at December 31, 2015	Additions	Accretion	Reductions	Balance at December 31, 2016
Bonds and loans payable:					
Revenue bonds:					
1998 Series B	\$ 81,136	\$ -	\$ 4,377	\$ -	\$ 85,513
2007 Series A	10,700	-	-	(5,220)	5,480
2008 Series A	68,970	-	-	-	68,970
2008 Series B-1	72,750	-	-	-	72,750
2008 Series B-2	72,745	-	-	-	72,745
2008 Series D-1	24,665	-	-	-	24,665
2008 Series D-2	71,225	-	-	-	71,225
2008 Series C-2	51,820	-	-	-	51,820
2008 Series C-1A	10,000	-	-	-	10,000
2008 Series C-1B	10,000	-	-	-	10,000
2008 Series C-1C	5,000	-	-	-	5,000
2008 Series C-1D	26,840	-	-	-	26,840
2013 Series A	106,905	-	-	(11,620)	95,285
2013 Series B	84,880	-	-	(1,860)	83,020
	<u>697,636</u>	<u>-</u>	<u>4,377</u>	<u>(18,700)</u>	<u>683,313</u>
State loans (PENNVEST)	36,051	769	-	(3,304)	33,516
Revolving line of credit	-	11,800	-	-	11,800
Capital lease	7,165	-	-	(410)	6,755
Swap borrowing	8,911	-	-	(432)	8,479
	<u>749,763</u>	<u>12,569</u>	<u>4,377</u>	<u>(22,846)</u>	<u>743,863</u>
Unamortized bond (discount) premium	13,523	23	-	(1,634)	11,912
Total bonds and loans, net	<u>\$ 763,286</u>	<u>\$ 12,592</u>	<u>\$ 4,377</u>	<u>\$ (24,480)</u>	<u>\$ 755,775</u>

# PITTSBURGH WATER AND SEWER AUTHORITY

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	Balance at December 31, 2014	Additions	Accretion	Reductions	Balance at December 31, 2015
Bonds and loans payable:					
Revenue bonds:					
1998 Series B	\$ 76,977	\$ -	\$ 4,159	\$ -	\$ 81,136
2007 Series A	15,645	-	-	(4,945)	10,700
2008 Series A	68,970	-	-	-	68,970
2008 Series B-1	72,750	-	-	-	72,750
2008 Series B-2	72,745	-	-	-	72,745
2008 Series D-1	24,665	-	-	-	24,665
2008 Series D-2	71,225	-	-	-	71,225
2008 Series C-2	51,820	-	-	-	51,820
2008 Series C-1A	10,000	-	-	-	10,000
2008 Series C-1B	10,000	-	-	-	10,000
2008 Series C-1C	5,000	-	-	-	5,000
2008 Series C-1D	26,840	-	-	-	26,840
2013 Series A	118,290	-	-	(11,385)	106,905
2013 Series B	86,695	-	-	(1,815)	84,880
	<u>711,622</u>	<u>-</u>	<u>4,159</u>	<u>(18,145)</u>	<u>697,636</u>
State loans (PENNVEST)	35,645	3,462	-	(3,056)	36,051
Capital lease	-	7,445	-	(280)	7,165
Swap borrowing	9,335	-	-	(424)	8,911
	<u>756,602</u>	<u>10,907</u>	<u>4,159</u>	<u>(21,905)</u>	<u>749,763</u>
Unamortized bond (discount) premium	15,140	24	-	(1,641)	13,523
Total bonds and loans, net	<u>\$ 771,742</u>	<u>\$ 10,931</u>	<u>\$ 4,159</u>	<u>\$ (23,546)</u>	<u>\$ 763,286</u>

# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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Debt service payments on the Revenue Bonds at December 31, 2016 are as follows:

	Revenue Bonds		
	Principal	Interest	Total
2017	\$ 17,714	\$ 29,710	\$ 47,424
2018	18,572	28,756	47,328
2019	19,454	27,765	47,219
2020	20,506	26,805	47,311
2021	21,389	25,699	47,088
2022-2026	105,171	135,458	240,629
2027-2031	76,875	173,949	250,824
2032-2036	177,445	58,076	235,521
2037-2040	173,075	16,601	189,676
	630,201	\$ 522,819	\$ 1,153,020
Accretion	53,112		
Total	\$ 683,313		

Debt service payments of the State Loans at December 31, 2016 are as follows:

	State Loans		
	Principal	Interest	Total
2017	\$ 3,324	\$ 632	\$ 3,956
2018	3,388	569	3,957
2019	3,453	504	3,957
2020	3,520	437	3,957
2021	3,588	369	3,957
2022-2026	11,788	997	12,785
2027-2031	4,357	217	4,574
2032-2033	98	1	99
	\$ 33,516	\$ 3,726	\$ 37,242

Repayment of the revolving line of credit will begin once the Authority has drawn all available advances from the line.

# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

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Minimum lease payments of the capital lease at December 31, 2016 are as follows:

	Capital Lease		Total
	Principal	Interest	
2017	\$ 424	\$ 223	\$ 647
2018	438	208	646
2019	454	193	647
2020	469	178	647
2021	485	162	647
2022-2026	2,691	544	3,235
2027-2029	1,794	93	1,887
	<u>\$ 6,755</u>	<u>\$ 1,601</u>	<u>\$ 8,356</u>

Amortization on the swap borrowing is as follows:

Year Ending December 31,	Principal	Interest
2017	\$ 441	\$ 181
2018	451	171
2019	461	161
2020	471	151
2021	481	141
2022-2026	2,566	544
2026-2031	2,783	254
2032-2035	825	24
	<u>\$ 8,479</u>	<u>\$ 1,627</u>

Interest payments were calculated for the Variable Rate Bonds using the synthetic fixed rate interest rates as described in Note 8.

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# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

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Interest and amortization expense for the years ended December 31 is as follows:

	<u>2016</u>	<u>2015</u>
Bond, loan and swap interest	\$ 29,262	\$ 29,697
Accretion	4,377	4,159
Amortization of deferred refunding loss, discounts and premiums	1,109	1,155
Liquidity and remarketing fees	1,406	1,331
Other	812	523
	<u>\$ 36,966</u>	<u>\$ 36,865</u>

In accordance with the provisions of the trust indentures for the 1998, 2007A, 2008, and 2013 Bonds, the Authority has created a number of funds that are restricted for specific purposes. The complement of these restricted funds, collectively referred to on the statements of net position as "Restricted Assets," at December 31, 2016 and 2015 was:

	<u>2016</u>	<u>2015</u>
Capital project funds	\$ 1	\$ 19,929
Debt service and reserve funds	16,337	15,671
Operating reserve account	9,418	8,554
Other funds	581	580
	<u>\$ 26,337</u>	<u>\$ 44,734</u>

Among the Authority's debt covenants is one which requires that rates charged by the Authority will be sufficient to satisfy a formula which is intended to ensure that the Authority will be able to satisfy debt service requirements. The trust indenture also requires that revenue collections be deposited into a Revenue Fund and disbursed therefrom as provided for in the trust indenture. This Revenue Fund constitutes the vast majority of unrestricted funds cash and cash equivalents. At December 31, 2016, the Authority was in compliance with this covenant.

# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

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### 8. INTEREST RATE SWAPS

Interest rate swaps disclosures (not in thousands) as of December 31, 2016 and 2015 are presented below.

Interest rate swaps at December 31, 2016 and 2015:

Current Notional Amount	Effective Date	Maturity Date	Interest Rate Paid	Interest Rate Received	Counterparty Credit Rating	Underlying Bonds
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**Hedging derivatives, Cash flow hedges, Receive variable - pay fixed, Interest rate swaps:**

\$ 72,747,500	6/12/2008	9/1/2039	4.038%	SIFMA	BBB+	Series 2008 B-1
41,464,000	11/3/2014	9/1/2035	2.000%	70% 1mo LIBOR	BBB+	Series 2008 C *
72,747,500	6/12/2008	9/1/2039	4.038%	SIFMA	A+	Series 2008 B-2
71,225,000	6/12/2008	9/1/2040	4.103%	SIFMA	A+	Series 2008 D-2

**Investment derivatives, Receive variable - pay fixed, Interest rate swap:**

62,196,000	11/3/2014	9/1/2035	3.500%	70% 1mo LIBOR	A+	Series 2008 C
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\* - This swap is the on-market component of the 2008 C hybrid investment and reflects the on-market rate as of November 3, 2014, the date of reissuance/restructuring of the underlying bonds.

# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

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YEARS ENDED DECEMBER 31, 2016 AND 2015

### Interest Rate Swap – Fair Value Information:

Notional Amount	12/31/2014 Fair Value *	Change in Fair Value	12/31/2015 Fair Value *	Change in Fair Value	12/31/2016 Fair Value *
<b>Hedging derivatives, Cash flow hedges, Receive variable - pay fixed, Interest rate swaps:</b>					
\$ 72,747,500	\$ (22,323,381)	\$ (2,481,762)	\$ (24,805,143)	\$ 2,407,018	\$ (22,398,125)
41,464,000	(1,873,220)	(689,646)	(2,562,866)	627,794	(1,935,072)
72,747,500	(22,323,381)	(2,481,762)	(24,805,143)	2,407,018	(22,398,125)
71,225,000	(23,659,774)	(2,667,061)	(26,326,835)	2,161,420	(24,165,415)
	(70,179,756)	(8,320,231)	(78,499,987)	7,603,250	(70,896,737)
<b>Investment derivatives, Receive variable - pay fixed, Interest rate swap:</b>					
62,196,000	(17,016,919)	(548,432)	(17,565,351)	1,690,469	(15,874,882)
Total	\$ (87,196,675)	\$ (8,868,663)	\$ (96,065,338)	\$ 9,293,719	\$ (86,771,619)

\* The fair value is an estimated net present value of the expected cash flows calculated using relevant mid-market data inputs and based on the assumption of no unusual market conditions or forced liquidation.

The Authority has the recurring fair value measurement as of December 31, 2016 for the swap values noted above. The swaps are valued using significant other observable inputs (Level 2 inputs).

### Description of 2008 Swaps

During fiscal year 2008, the Authority entered into five pay-fixed, receive-variable interest rate swap contracts. The interest rate swaps were effective June 12, 2008. Beginning September 1, 2008, the Authority began to make semi-annual interest payments on the 1<sup>st</sup> of each March and September through September 1, 2035 (two swaps); September 1, 2039 (two swaps); and, September 1, 2040 (for one swap), respectively. The Counterparties make monthly interest payments on the 1<sup>st</sup> of each calendar month, which began July 1, 2008 through September 1, 2035 for two of the swaps; September 1, 2039 for two of the swaps; and September 1, 2040 for one swap.

The intention of the 2008 swaps is to effectively change the Authority's variable interest rate on the \$145,495 Water and Sewer System (Variable Rate Demand) First Lien Revenue Refunding Bonds Series B of 2008, on the \$71,225 Water and Sewer System (Variable Rate Demand) First Lien Revenue Bonds Series D-2 of 2008, and on the \$103,795 Water and

# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

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Sewer System (Variable Rate Demand) Subordinate Revenue Refunding Bonds Series C of 2008 (the bonds) to synthetic fixed rates of 4.038%, 4.103%, and 3.998%, respectively.

During November 2014, the 2008 Series C Bonds were reissued and restructured to bear interest based upon 70% of one-month LIBOR. In conjunction with this reissuance/restructuring, the floating rate on the Series 2008 C swaps was converted from SIFMA to 70% of one-month LIBOR and the fixed rate was amended from 3.998% to 3.50%. With respect to the Series 2008 C swap treated as an effective hedge, this “off-market” swap is considered to be a hybrid instrument consisting of an on-market swap and a borrowing. The on-market swap rate is calculated as of the date of reissuance. The borrowing will be amortized over the remaining life of the swap and is included in bonds and loans payable on the statement of net position. See Note 7: Bonds and Loans Payable for detail on the borrowing.

The bonds will accrue interest at a weekly rate that is determined by a remarketing agent on each effective rate date. The interest rate on the bonds may not exceed 12%. Per the interest rate swap agreements, the Authority will receive SIFMA Municipal Swap Index while paying fixed rates as noted in the chart above.

The interest payments on the interest rate swaps are calculated based on notional amounts, all of which reduce, beginning on September 1, 2012 for the 2008 C Bonds, September 1, 2032 for the 2008 D2 Bonds and September 1, 2035 for the 2008 B Bonds, so that the notional amounts approximate the principal outstanding on the respective bonds. The interest rate swaps expire consistent with the final maturity of the respective bonds.

### Accounting and Risk Disclosures

During the years ended December 31, 2016 and 2015, the Authority paid \$13,418 and \$12,245, respectively, fixed and received \$1,227 and \$340, respectively, variable related to their outstanding swap agreements.

As noted in the tables above, current period changes in fair value for the interest rate swaps that are accounted for as hedges are recorded on the statements of net position as an adjustment to deferred outflows. Additionally, current period changes in fair value for the interest rate swap accounted for as an investment is recorded on the statements of revenues, expenses, and changes in net position as a component of investment income.

The fair value of the outstanding interest rate swaps as of December 31, 2016 and 2015 is reported on the statements of net position as a swap liability.

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# PITTSBURGH WATER AND SEWER AUTHORITY

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The Authority has the ability to early terminate the interest rate swaps and to cash settle the transaction on any business day by providing at least two business days' written notice to the counterparty. Evidence that the Authority has sufficient funds available to pay any amount payable to the counterparty must be provided at the time notice is given. At early termination, the Authority will be required to pay or receive a settlement amount which is comprised of the fair value of the terminated transaction(s) based on market quotations and any amounts accrued under the contract(s).

Through the use of derivative instruments such as interest rate swaps, the Authority is exposed to a variety of risks, including credit risk, interest rate risk, termination risk, basis risk, and rollover risk.

- Credit risk is the risk that a counterparty will not fulfill its obligations. The credit ratings by Moody's Investors Service, Inc., a nationally recognized statistical rating organization for the respective counterparties are listed in the table above. If a counterparty failed to perform according to the terms of the interest rate swap agreement, there is some risk of loss to the Authority, up to the fair value of the swaps.

The Authority currently does not enter into master netting arrangements with its counterparties. As such, each derivative instrument should be evaluated on an individual basis for credit risk. As the Authority's derivative instruments currently have a negative fair value position to the Authority at year-end, the Authority is not exposed to credit risk at December 31, 2016.

Concentration of credit risk: The Authority currently has two counterparties, with three and two outstanding interest rate swaps, respectively. The Authority's outstanding market value as of December 31, 2016 and 2015, respectively, is \$(62,438,422) and \$(68,697,329) with one counterparty and \$(24,333,197) and \$(27,368,009) with the second counterparty. Both counterparties operate in the same markets and could be similarly impacted by changes in economic or other conditions.

It is the Authority's policy to require counterparty collateral posting provisions in its non-exchange traded derivative instruments. Their terms require collateral to be posted if the respective counterparty's credit rating falls below BBB+ by Standard & Poor's and the swap insurer becomes bankrupt. The amount of collateral to be posted is calculated based on derivatives in asset positions to the Authority. As of year-end, the counterparties had not and were not required to post collateral for these transactions.

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# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

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- Termination risk is the risk that a derivative's unscheduled end will affect the Authority's asset/liability strategy or will present the Authority with potentially significant unscheduled termination payments to the counterparty. The counterparties to the interest rate swaps do not have the ability to voluntarily terminate the interest rate swap; however, the Authority is exposed to termination risk in the event that one or more of the counterparties default. During 2014, 2008 C swaps were terminated and reissued.
- Interest rate risk is the risk that changes in interest rates will adversely affect the fair values of a government's financial instruments or cash flows. The interest rate swap that is accounted for as an investment exposes the Authority to interest rate risk. The interest rate swap is highly sensitive to changes in interest rates; changes in the variable rate will have a material effect on the swap's fair value. The interest rate swap will terminate on September 4, 2035.
- Basis risk is the risk that arises when variable interest rates on a derivative and an associated bond or other interest-paying financial instrument are based on different indexes. The Authority is subject to basis risk as the interest index on the variable rate arm of the swaps is based on the SIFMA Municipal Swap Index and the variable interest rate on the bonds is based on a different index, a weekly rate that is determined by a remarketing agent. Although expected to correlate, the relationships between different indexes vary and that variance could adversely affect the Authority's calculated payments, and as a result cost savings or synthetic interest rates may not be realized.

The Authority is further subject to basis risk in the event that the underlying bonds become fixed rate Bank Bonds or that the maturity of the underlying bonds is accelerated as discussed in Note 7: Bonds and Loans Payable.

- Rollover risk is the risk that a derivative associated with the Authority's debt does not extend to the maturity of that debt. When the derivative terminates, the associated debt will no longer have the benefit of the derivative. The Authority is not exposed to rollover risk as the swap agreements terminate on the same day the last payment is due on the respective bonds.

### Contingencies

All of the Authority's derivative instruments include provisions that require the Authority to post collateral in the event that the credit ratings of its credit support provider's senior long

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# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

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term, unsecured debt credit rating falls below BBB+ by Standard & Poor's and FSA, the swap insurer, becomes bankrupt. The amount of collateral to be posted is calculated based on derivatives in negative fair value positions to the Authority. The collateral is to be posted in the form of cash, U.S. Treasuries or other approved securities. As of year-end, the Authority had not and was not required to post collateral for these transactions.

### **9. DEPOSITS AND INVESTMENTS WITH FINANCIAL INSTITUTIONS**

The Authority is authorized to invest in: obligations of the U.S. Government and government-sponsored agencies and instrumentalities; fully insured or collateralized certificates of deposits; commercial paper of the highest rating; repurchase agreements collateralized by government obligations or securities; highly rated bank promissory notes or investment funds or trusts; and, as to trustee assets, as otherwise permitted by the trust indenture as supplemented and amended in 1998. Throughout the years ended December 31, 2016 and 2015, the Authority invested its funds in such authorized investments. The Authority does not have a formal investment policy which addresses custodial credit risk, interest rate risk, credit risk, or concentration of credit risk.

GASB Statement No. 40, "*Deposit and Investment Risk Disclosures*," requires disclosures related to the following deposit and investment risks: credit risk (including custodial credit risk and concentration of credit risk), interest rate risk, and foreign currency risk. The following is a description of the Authority's deposit and investment risks:

Custodial Credit Risk – Custodial credit risk is the risk that in the event of a bank failure, the Authority's deposits may not be returned to it. As of December 31, 2016 and 2015, \$23,605 and \$27,700, respectively, of the Authority's bank balance of \$23,855 and \$28,700, respectively, was exposed to custodial credit risk; \$23,605 and \$9,256 of these amounts exposed to custodial credit risk are collateralized in accordance with Act 72 of the Pennsylvania state legislature, which requires the institution to pool collateral for all governmental deposits and have the collateral held by an approved custodian in the institution's name. These deposits have carrying amounts of \$21,620 and \$28,269 as of December 31, 2016 and 2015, respectively, all of which is reported as current assets in the statements of net position.

# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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At December 31, 2016, the Authority held the following investment balances:

	<u>Carrying value</u>	<u>Maturity in years Less than 1 year</u>
PA INVEST	\$ 8,573	\$ 8,573
Money market	11,900	11,900
U.S. Treasury bills	5,864	5,864
Commercial paper	-	-
Total Investments	<u>\$ 26,337</u>	<u>\$ 26,337</u>

At December 31, 2015, the Authority held the following investment balances:

	<u>Carrying value</u>	<u>Maturity in years Less than 1 year</u>
PA INVEST	\$ 8,550	\$ 8,550
Money market	33,553	33,553
U.S. Treasury bills	900	900
Commercial paper	1,731	1,731
Total Investments	<u>\$ 44,734</u>	<u>\$ 44,734</u>

Money market funds are included in cash and cash equivalents as non-current restricted assets on the statements of net position.

The carrying value of the Authority's investments is the same as their fair value amount. U.S. Treasury bills are valued using quoted market prices (Level 1 inputs). Commercial paper is valued using quoted prices for identical securities in markets that are not active (Level 2 inputs).

The Authority's investments in money markets and PA INVEST (external investment pool) are the same as the value of the pool shares and are reported at amortized cost, which approximates market. All investments in an external investment pool that are not SEC registered are subject to oversight by the Commonwealth. The Authority can withdraw funds from INVEST without limitations or fees.



# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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**Interest Rate Risk** – Interest rate risk is the risk that changes in the interest rates will adversely affect the fair market value of the Authority’s investments. The Authority is not subject to interest rate risk, as all of its investments at December 31, 2016 and 2015 had maturities of less than one year.

**Credit Risk** – Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation. As of December 31, 2016, the Authority’s investments in PA INVEST were rated AAAM by Standard & Poor’s. The Authority’s investments in U.S. Treasury bills at December 31, 2016 were rated A-1+ by Standard & Poor’s.

**Concentration of Credit Risk** – Concentration of credit risk is the risk of loss attributed to the magnitude of a government’s investments in a single issuer. The Authority places no limit on the amount it may invest in any one issuer. The Authority has no investments of greater than 5% with one issuer.

As further described in Note 8, the Authority has a derivative instrument that is accounted for as an investment. Credit and interest rate risks related to this investment are described in Note 8.

# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

### 10. NET POSITION

Net position represents the difference between assets, deferred outflows of resources, and liabilities. An analysis of net position amounts is as follows:

	December 31,	
	2016	2015
Net investment in capital assets:		
Net property, plant, and equipment	\$ 676,798	\$ 653,548
Debt subject to capital improvements	(699,185)	(710,641)
Swap liability net of deferred outflow	(15,875)	(17,565)
Swap borrowing	(8,479)	(8,911)
Deferred charge on refunding	25,008	27,728
Accounts payable for capital items	-	(4,856)
Restricted for capital activity and debt service:		
Capital projects	1	19,929
Debt service and reserve funds	16,337	15,671
	<u>(5,395)</u>	<u>(25,097)</u>
Restricted assets:		
Operating reserve account	9,418	8,554
Other funds	581	580
	<u>9,999</u>	<u>9,134</u>
Unrestricted	<u>(42,127)</u>	<u>(19,782)</u>
Total net position	<u>\$ (37,523)</u>	<u>\$ (35,745)</u>

### 11. OPERATING LEASE

#### Operating Lease

The Authority leases office space. The term of the lease is for twenty years commencing on August 1, 2007 and ending on July 31, 2027. The lease is subject to an automatic roll-over for five years, if the Authority does not communicate in writing one year prior to expiration that it desires not to extend the lease. The general terms of the lease require the lessor to provide for utilities, building repairs, maintenance, and real estate taxes.

# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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The total minimum future commitments under the lease for year ended December 31, 2016 are as follows:

2017	\$	627
2018		661
2019		661
2020		661
2021		661
2022-2026		3,407
2027		513
	\$	<u>7,191</u>

The total annual rental for office space was approximately \$676 and \$647 for 2016 and 2015, respectively.

## 12. COMMITMENTS AND CONTINGENCIES

The Authority is proceeding with a capital improvement program which the Authority's independent engineer has estimated will entail expenditure of the existing construction funds and potential future bond issues.

In addition to the matters discussed below and in Note 13, Consent Agreement, various other claims and lawsuits are pending against the Authority. The ultimate outcome of these claims and lawsuits cannot presently be determined and, accordingly, no provision for amounts arising from settlements has been made in these financial statements. In the opinion of management, the effect on the financial statements of potential losses associated with any such claim and/or lawsuit should not be material.

During 2016, the Authority initiated an arbitration proceeding against Veolia Water North America (Veolia), the previous management company of the Authority. Veolia subsequently asserted counterclaims against the Authority. Both parties have denied the claims against each other. Currently, the arbitration is pending and the Authority and Veolia are engaged in mediation.

The Authority was insured for general liability coverage through 2001; however, effective January 1, 2002, it became self-insured. In previous years, the Authority established a fund to pay for deductibles, small claims, and other litigation costs. At year-end, the balance in this fund was approximately \$581. This fund is grouped with "Restricted Assets" on the

# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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statements of net position. During 2016 and 2015, the Authority paid \$0 from this fund for claims.

Impact of lead mitigation efforts are currently being evaluated by the Authority.

### **13. CONSENT AGREEMENT**

The Authority is subject to federal regulation under the Clean Water Act (1977) and regulations adopted under that Act. Among the specific requirements applicable to the Authority's system are those imposed by the United States Environmental Protection Agency's Combined Sewer Overflow (CSO) Policy (1994). On January 29, 2004, the Authority and the City of Pittsburgh executed a Consent Order and Agreement (COA) regarding wet weather sewer overflows within the City. The other signatories to the COA are the Pennsylvania Department of Environmental Protection (DEP) and the Allegheny County Health Department (ACHD).

Generally, the COA requires the Authority and the City to assess the City sewers to develop a plan with ALCOSAN to address wet weather sewer overflows within the City. The COA is part of a sewer assessment program for all municipalities served by ALCOSAN. To date, assessment activities have been completed for all accessible critical sewers and separate sanitary sewers with the exception of any additional sewers discovered through continued research and investigation. Ongoing pipe and manhole repairs are being completed to provide CCTV access to remaining inaccessible critical/sanitary sewer pipes. Assessment activities for non-critical sewers are to be completed on a longer schedule. The majority of accessible non-critical manholes have been inspected with ongoing efforts to complete any remaining or newly identified. The required Wet Weather Feasibility Study (WWFS) was submitted to the DEP and ACHD on time in July of 2013. This long-term control plan outlined system-wide improvements, including Green Infrastructure (GI) that the Authority would implement over the next 20 years.

As this COA with the DEP expired in March 2015, the U.S. Environmental Protection Agency (USEPA) became the main regulatory body to which the Authority is responsible. On January 21, 2016 the USEPA issued a Clean Water Act Section 308 Information Request to the Authority. The nature of the request is to provide a jurisdictional basis for USEPA to engage the Authority/City in an enforcement action by consent, or a Consent Decree (CD). The Authority intends that through such an action, it can more fully participate in the implementation of interim regional wet weather activities, controls, and improvements. The Authority further understands that such an action will also permit the Authority/City to participate more fully in the identification and implementation of any final wet weather

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# PITTSBURGH WATER AND SEWER AUTHORITY

## NOTES TO FINANCIAL STATEMENTS

*(Dollars expressed in thousands unless otherwise indicated)*

YEARS ENDED DECEMBER 31, 2016 AND 2015

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control measures for the region. The USEPA 308 request requires the Authority to submit detailed information on past CSO performance and activities. It also requires the Authority to conduct a source reduction analysis for the entire service area, followed by GI demonstration projects to be completed by December 2017. The results of the analysis and demonstration projects will be used to determine the details in the final consent decree.

In addition to the assessment, the USEPA 308 request requires the Authority and the City to continue implementing the Nine Minimum Controls to reduce combined sewer overflows, and to perform repairs and maintenance of deficiencies revealed by the assessment. The Authority maintains an expedited response to significant structural failures of the sewer system where imminent structural failures are determined by a professional engineer and prioritized for repair. Ongoing sewer line replacement, point repair, lining, point lining, and gunite projects have been implemented to address structural deficiencies. The USEPA 308 request also requires the submission of monthly reports updating the progress of the evaluations and improvements, as well as water quality impacts.

Given the broad scope of a potential CD, the size of the City sewer system, and the various conditions and/or deficiencies that may be discovered by the assessment, it is difficult to predict the total cost of compliance with the CD. Moreover, it is difficult to predict what, if any, largescale and/or regional capital improvements may be required after the completion of the assessment to address wet weather sewer overflows in the City and in the ALCOSAN service area. The Authority hired two engineering firms to assess and model the sewer system, and has fulfilled the first portion of the USEPA 308 request due by March 31, 2016. The second phase of the request supplied a source reduction study which was submitted December 1, 2016 and GI Demonstration projects must be constructed and performance evaluations completed by December 1, 2017. An additional 308 request from EPA was received in October of 2016 seeking more detailed information and further actions regarding the assessment of the Authority's sewer system. This response was delivered on time in January 2017 and continues to require additional monthly reporting.

The Authority, along with the other impacted local municipalities, is awaiting a response from the USEPA and the DEP on its proposed regional plan. Costs associated with CD and COA compliance will be reflected in the capital improvement program and funded by proceeds of potential future bond issuances.

## **Supplementary Information**

# PITTSBURGH WATER AND SEWER AUTHORITY

## COMBINING STATEMENT OF NET POSITION

*(Dollars expressed in thousands)*

DECEMBER 31, 2016

	Water	Sewer	Sewer Treatment	Total
<b>Assets</b>				
Current assets	\$ 34,530	\$ 17,007	\$ -	\$ 51,537
Noncurrent assets	471,100	232,035	-	703,135
<b>Total Assets</b>	<b>505,630</b>	<b>249,042</b>	<b>-</b>	<b>754,672</b>
<b>Deferred Outflows of Resources</b>				
Deferred charge on refunding	16,755	8,253	-	25,008
Accumulated decrease in fair value of hedging derivatives	47,501	23,396	-	70,897
<b>Total Deferred Outflows of Resources</b>	<b>64,256</b>	<b>31,649</b>	<b>-</b>	<b>95,905</b>
<b>Liabilities</b>				
Current liabilities	45,081	22,204	-	67,285
Noncurrent liabilities	549,946	270,869	-	820,815
<b>Total Liabilities</b>	<b>595,027</b>	<b>293,073</b>	<b>-</b>	<b>888,100</b>
<b>Net Position</b>				
Net investment in capital assets	(3,615)	(1,780)	-	(5,395)
Restricted	6,700	3,299	-	9,999
Unrestricted	(24,332)	(17,795)	-	(42,127)
<b>Total Net Position</b>	<b>\$ (21,247)</b>	<b>\$ (16,276)</b>	<b>\$ -</b>	<b>\$ (37,523)</b>

# PITTSBURGH WATER AND SEWER AUTHORITY

## COMBINING STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

*(Dollars expressed in thousands)*

YEAR ENDED DECEMBER 31, 2016

	Water	Sewer	Sewer Treatment	Total
<b>Operating Revenues</b>	\$ 78,659	\$ 39,943	\$ 62,125	\$ 180,727
<b>Operating Expenses:</b>				
Direct operating expenses	40,660	20,027	-	60,687
Wastewater treatment	-	-	62,125	62,125
Cooperation agreement operating expenses:				
Indirect cost allocation - sewer conveyance	-	2,846	-	2,846
Indirect cost allocation - water	4,304	-	-	4,304
Expense of water provided by other entities:				
Subsidy of customers located in the City	1,974	-	-	1,974
Depreciation	11,160	5,497	-	16,657
Total operating expenses	58,098	28,370	62,125	148,593
<b>Operating Income</b>	20,561	11,573	-	32,134
<b>Non-operating Revenues (Expenses):</b>				
Donated property	657	324	-	981
Interest revenue	257	126	-	383
Investment income - change in fair market value of swap	1,132	558	-	1,690
Interest and amortization	(24,767)	(12,199)	-	(36,966)
Total non-operating revenues (expenses)	(22,721)	(11,191)	-	(33,912)
<b>Net Income (Loss)</b>	(2,160)	382	-	(1,778)
<b>Net Position:</b>				
Beginning of year	(19,087)	(16,658)	-	(35,745)
End of year	\$ (21,247)	\$ (16,276)	\$ -	\$ (37,523)