



**THE YORK  
WATER COMPANY**

***MANAGEMENT AND OPERATIONS AUDIT***

**Pennsylvania Public Utility Commission  
Bureau of Audits  
Issued June 2021**

**Docket No. D-2020-3021861**

**THE YORK WATER COMPANY  
MANAGEMENT AND OPERATIONS AUDIT**

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## I. INTRODUCTION

Pennsylvania law grants the Pennsylvania Public Utility Commission (PUC or Commission) the general administrative power and authority to supervise and regulate public utilities within the Commonwealth of Pennsylvania per 66 Pa. C.S. § 501(b). Management and operational audits are required of certain Pennsylvania-based utility companies pursuant to 66 Pa. C.S. § 516(a). Specifically, the Commission can investigate and examine the condition and management of any public utility, 66 Pa. C.S. § 331(a).

In accordance with the PUC's ongoing program to identify improvements in the management and operations of fixed utilities under its jurisdiction, it was determined that a management and operations audit should be conducted of The York Water Company (York Water or company).

This report summarizes the work of the PUC's Management Audit Division and outlines its conclusions. The findings presented in the report identify areas and aspects where weaknesses or deficiencies exist. In all cases, recommendations are offered to improve, correct, or eliminate these conditions. The final, and most important step, in the management audit process is to initiate actions toward implementation of the recommendations.

### A. **Objectives and Scope**

The objectives of this focused management and operations audit were:

- To provide the Commission, York Water, and the public with an assessment of the efficiency and effectiveness of the company's operations, management methods, organization, practices, and procedures
- To identify opportunities for improvement and develop recommendations to address those opportunities
- To provide an information base for future regulatory and other inquiries into the management and operations of York Water

The scope of this audit was limited to certain areas of the company as explained in Section B, Audit Approach.

## **B. Audit Approach**

This management and operations audit was performed by the Management Audit Division of the PUC's Bureau of Audits (PUC auditors or audit staff). The audit process began with pre-fieldwork analysis as outlined below:

- A five-year internal trend (2016-2020) and ratio analysis was completed using financial and operational data obtained from the company, the Commission, and other available sources.
- Input was solicited from PUC bureaus and offices, external parties, and York Water regarding any concerns or issues they would like addressed during our review.
- Prior management and operations audits, follow-up management efficiency investigations, implementation plans, implementation plan progress reports, other Commission-conducted audits, annual diversity reports, and other available documents were reviewed.

This information was used to focus the PUC auditors' effort. Specifically, the following areas or functions were selected for an in-depth analysis and are included in this report:

- Executive Management and Organizational Structure
- Corporate Governance
- Financial Management
- Water and Wastewater Operations
- Emergency Preparedness
- Purchasing and Materials Management
- Customer Services
- Human Resources and Diversity

The pre-field work analysis was not a comprehensive evaluation of the management or operations in the functional areas not selected for in-depth examination. Had we conducted a thorough review of those areas, weaknesses or deficiencies may have come to our attention that were not identified in the limited pre-fieldwork review.

Fieldwork began on November 10, 2020 and continued intermittently through March 5, 2021. The principal components of the fact gathering process included:

- Interviews with company personnel
- Analysis of records, documents, and reports of a financial and operational nature primarily on the period 2015-2020, and the year 2021 as available
- Virtual visits to select company facilities and observation of work practices

**C. Functional Area Ratings**

For the functional areas selected for in-depth review, the PUC auditors rated the operating or performance level relative to the expected performance level at the time of the audit. This expected performance level is the state at which each functional area should be operating given the company’s resources and general operating environment. Expected performance is not a “cutting edge” operating condition; rather, it is management of a functional area such that it produces reasonably expected operating results.

Listed below are the evaluative categories used to rate each functional area’s operating or performance level:

- Meets Expected Performance Level
- Minor Improvement Necessary
- Moderate Improvement Necessary
- Significant Improvement Necessary
- Major Improvement Necessary

Our ratings for each reviewed functional area can be found in Exhibit I-1.

**Exhibit I-1  
The York Water Company  
Functional Rating Summary**

<b>Functional Area</b>	<b>Meets Expected Performance Level</b>	<b>Minor Improvement Necessary</b>	<b>Moderate Improvement Necessary</b>	<b>Significant Improvement Necessary</b>	<b>Major Improvement Necessary</b>
Executive Management and Organizational Structure	X				
Corporate Governance	X				
Financial Management	X				
Water and Wastewater Operations		X			
Emergency Preparedness		X			
Purchasing and Materials Management		X			
Customer Service		X			
Human Resources and Diversity	X				



#### **D. Benefits**

Our standard procedure is to quantify potential savings expected from implementing the recommendations made in our reports. However, for this audit, it was not possible. The anticipated benefits are of a qualitative nature and/or there was insufficient data available to quantify the effects. For example, it is difficult to estimate actual benefits when new management practices or procedures are recommended, especially if such procedures and practices did not previously exist or were not fully functional. Similarly, changes in workflow or implementation of a good business practice could result in improved effectiveness and efficiency of a specific function but cannot be easily quantified.

#### **E. Current Events**

On March 6, 2020, the Governor of Pennsylvania, Tom Wolf, declared a disaster emergency due to the COVID-19 pandemic. This and other state government actions ordered all but essential businesses and their operations closed for the safety of the general public. Although fixed utility operations such as water treatment and gas distribution are considered essential, most of the back-office functions such as corporate management, accounting and government relations were deemed nonessential. Most Pennsylvania utilities closed their business offices and allowed their employees to work remotely. The Pennsylvania Public Utility Commission also closed the main office and allowed employees, including those of the Audit Bureau, to perform their functions remotely. All nonessential travel and in-person meetings were prohibited.

As such, the COVID-19 crisis affected the approach and timeline of the audit. For example, some interviews and data request responses were delayed or modified. In all cases, the PUC auditors worked with The York Water Company to acquire information needed to issue the findings and recommendations contained within this report. Although some aspects of fieldwork were modified, we worked to minimize the impact to the conclusions presented within the report. As ever, conclusions presented within this report may change if additional information is made available. Furthermore, the focus of this report is not to evaluate special procedures or process changes due to COVID-19, although there are instances where the company's response to the pandemic may be highlighted for informational purposes. Despite the unusual circumstances, we believe that our procedures sufficiently mitigate the audit risk associated with altering our standard practice.

## **F. Recommendation Summary**

Chapters III through X provide findings, conclusions, and recommendations for each function or area reviewed in-depth during this focused audit. Exhibit I-2 summarizes the recommendations with the following priority assessments for implementation:

- **INITIATION TIME FRAME** – Estimation of how quickly the company should be able to initiate its implementation efforts given the company’s resources and general operating environment. The time necessary to complete implementation is expected to vary depending on the nature of the recommendation and the scope of the efforts necessary and resources available to effectively implement the recommendation.
  
- **BENEFITS** – Net quantifiable benefits have been provided where they could be estimated as discussed in Section D – Benefits. Our estimated overall level of benefits rankings are not solely based on quantifiable dollars but rather the Audit Staff’s assessment of the potential overall impact of the recommendation on the efficiency and/or effectiveness of the company and/or the services it provides.
  - **HIGH BENEFITS** – Implementation of the recommendation would result in major service improvements, substantial improvements in management practices and performance, and/or significant cost savings.
  
  - **MEDIUM BENEFITS** – Implementation of the recommendation would result in important service improvements, meaningful improvements in management practices and performance, and/or meaningful cost savings.
  
  - **LOW BENEFITS** – Implementation of the recommendation is likely to result in service improvements, management practices and performances, and/or enhance cost controls.

**Exhibit I-2**  
**The York Water Company**  
**Focused Management and Operations Audit**  
**Summary of Recommendations**

Rec. No.	Recommendation	Page No.	Initiation Time Frame	Benefits (including \$ estimates)
<b>Chapter III – Executive Management and Organizational Structure</b>				
	None			
<b>Chapter IV – Corporate Governance</b>				
	None			
<b>Chapter V – Financial Management</b>				
	None			
<b>Chapter VI – Water and Wastewater Operations</b>				
VI-1	Record causes and/or suspected causes of water main breaks.	33	6-12 months	Medium
VI-2	Leverage technology to reduce manual processes within the backflow prevention program.	33	6-12 months	Low
<b>Chapter VII – Emergency Preparedness</b>				
VII-1	Create a list of standard screening questions to be used for every outside vendor or consultant working on IT systems.	37	0-3 months	Medium
VII-2	Annually test physical security and incorporate live drills every three years.	37	6-18 months	Medium
VII-3	Perform additional business continuity drills to improve knowledge/capabilities.	37	6-12 months	Medium
<b>Chapter VIII – Purchasing and Materials Management</b>				
VIII-1	Review the inventory requisition process and implement changes to strengthen distribution of materials to contractors.	41	6-12 months	Low
<b>Chapter IX – Customer Service</b>				
IX-1	Continue outreach efforts to engage payment troubled customers, leverage low-income resources to mitigate the overall level of unpaid customer balances, and proactively contact customers who miss a payment.	49	0-3 months	Medium
<b>Chapter X – Human Resources and Diversity</b>				
	None			

## II. BACKGROUND

The York Water Company is the oldest investor-owned water utility in the United States of America having been in operation for over 200 years. York Water supplies water and wastewater services to customers in 40 municipalities in York County, 10 municipalities in Adams County and one municipality in Franklin County, Pennsylvania. Most York Water customers are supplied water from surface water sources in York County whereas wells are used to supply water to water customers in Adams County.

Recent acquisitions primarily of wastewater systems have spurred increases in York Water's customer base over the last five years. Specifically, York Water acquired the Felton Borough wastewater system on April 16, 2020, the Letterkenny Township Municipal Authority wastewater system on September 14, 2020, and the water and wastewater systems serving Amblebrook on December 4, 2020. As of the end of 2020, York Water served over 72,000 water and wastewater customers with an average daily consumption of approximately 20 million gallons. Exhibit II-1 shows the number of customers and the sales by customer class for 2020.

**Exhibit II-1  
The York Water Company  
Sales by Customer Class  
As of December 31, 2020**

Water						
Customer Class	Number of Customers	% of Customers	Sales (000)	% of Sales	Gallons Sold (000)	% of Gallons Sold
Residential	63,122	90.95%	\$33,965	66.70%	3,023	53.37%
Commercial	4,346	6.26%	\$7,993	15.70%	1,430	25.25%
Industrial	300	0.43%	\$3,841	7.54%	856	15.10%
Other*	1,633	2.35%	\$5,121	10.06%	355	6.27%
<b>Totals</b>	<b>69,401</b>	<b>100%</b>	<b>\$50,920</b>	<b>100%</b>	<b>5,664</b>	<b>100%</b>
Wastewater						
Customer Class	Number of Customers	% of Customers	Sales (000)	% of Sales		
Residential	3,134	95.55%	\$1,745	85.14%		
Commercial	134	4.09%	\$296	14.46%		
Industrial	4	0.12%	\$2	0.11%		
Other^	8	0.24%	\$6	0.29%		
<b>Totals</b>	<b>3,280</b>	<b>100%</b>	<b>\$1,570</b>	<b>100%</b>		

\* Other includes sales for resale and public and private fire protection customers.

^ Other includes public authorities.

Source: York Water's 2020 Annual Reports and PUC auditor analysis

As of December 31, 2020, York Water had 108 full time employees. As shown in Exhibit II-2, York Water is composed of bargaining and non-bargaining employees York Water’s current executive level organizational structure is discussed further in Chapter III – Executive Management and Organizational Structure.

**Exhibit II-2  
The York Water Company  
Employee Statistics  
As of December 2020**

	Bargaining	Non-Bargaining	Total
Total Employees	36	72	108

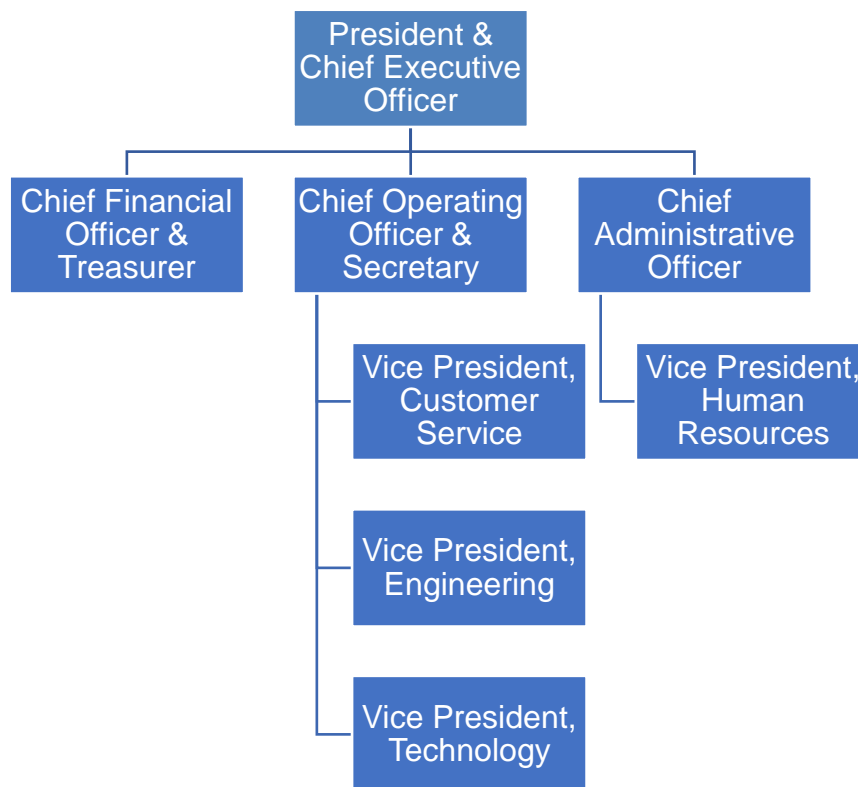
Source: Data Request CG-19

### III. EXECUTIVE MANAGEMENT AND ORGANIZATIONAL STRUCTURE

#### Background

The York Water Company’s executive management organizational structure is shown in Exhibit III-1. The York Water President and Chief Executive Officer (CEO) has three direct reports: Chief Financial Officer, Chief Operating Officer, and Chief Administrative Officer. In addition to the company’s executive management, York Water is overseen by its Board of Directors (Board), which is discussed in greater detail in Chapter IV – Corporate Governance.

**Exhibit III-1  
The York Water Company  
Executive Management Organizational Chart  
As of March 2021**



Source: Data Request GD-1

York Water’s Board of Directors were responsible for the development, assessment, and selection of the company’s 22<sup>nd</sup> President and CEO, who took office on March 1, 2020. In turn, the President and CEO is responsible for ensuring the continuity of operations across all functions of the company. To accomplish this task, the President and CEO maintains a management succession plan. The plan is updated

at least annually with input from executive management, to ensure current employees possess the skills necessary to fill next-tier positions.

Management assesses the employees using a 9box methodology, which identifies employees with high potential and high performance. Over the past few years, several of the company's experienced personnel have retired causing higher than normal turnover throughout the company. In many cases, internal candidates were selected to fulfill the vacancies. As of December 31, 2020, the average age of York Water's staff was 44 years old and the average length of service was nine years. As indicated in Exhibit III-2, the total number of York Water employees increased slightly from 106 in 2015 to 108 in 2020.

**Exhibit III-2**  
**The York Water Company**  
**Staffing Levels**  
**For the Years 2015 - 2020**

<b>Year</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Total Employees	106	104	102	110	106	108

Source: Data Request EM-1 and CG-19

Due to the company's small size, several departments have a single employee performing a specialized function (i.e., payroll, purchasing, accounts payable, etc.). York Water cross-trains employees to perform functions when the responsible employee takes leave. Furthermore, as discussed further within Chapter IX – Customer Service, York Water established a new position within its customer service function, Field Customer Service Representative, to enable more flexibility with changing departmental needs.

Around six years ago, York Water started a new employee development initiative referred to as its Operations Technician program. Entry-level engineers and technicians are hired and provided a six to twelve-month rotation through various departments at the company. After finishing the rotation, the employee is placed in a position that is the best fit for them. To further encourage employee development, York Water offers tuition assistance for employees to gain an associate, bachelor, or MBA degree. Employees are required to attain an associate degree to qualify for supervisory positions.

Annually, during September, the Board of Directors and the company's senior leadership hold a strategic planning and risk management assessment meeting. Prior to this meeting, the President and CEO coordinates with the CAO, COO and CFO in developing the agenda. The session held in September 2020 included a discussion of the company's goals and objectives, internal and external risks, planned and future acquisitions, etc. The Board's guidance received during the meeting is used by senior management to formulate the capital and operating budgets for the upcoming year.

Each January, the company's performance objectives for the upcoming year are submitted and reviewed by the Board's Compensation Committee. The performance

objectives are measurable short-term goals, which are developed by the CEO, CFO, CAO, and COO. Ultimately, the Board approves the company's performance objectives based upon a recommendation from the Compensation Committee. The objectives are tied to the annual cash incentive plan<sup>1</sup> offered to supervisors and managers to incentivize goals, often focusing on creating value for customers and shareholders (i.e., main replacement efforts, large capital projects, customer satisfaction survey, etc.). The company's progress in meeting the performance objectives is monitored throughout the year. In January of the following year, the Compensation Committee determines whether the performance objectives and the earnings per share business criteria have been met and finalizes the incentive plan payout.

In addition to oversight of the annual cash incentive plan, the Compensation Committee reviews executive compensation annually. To assist the Compensation Committee in establishing base salaries for York Water's executive management personnel, compensation is benchmarked and compared to similar utilities to ensure competitiveness.

In 2016, York Water shareholders approved a long-term incentive plan to advance the long-term success of the company and to increase shareholder value. The Compensation Committee administers the incentive plan and has the authority to determine the goals and circumstances under which long-term stock-based awards are granted to officers, directors, and key employees. The Compensation Committee bases 25% of the award on each metric:

- achieving a three-year average total shareholder return of 9.5%
- achieving a three-year average return on equity of 9.5%
- achieving a three-year average Pennsylvania Public Utility Commission justified complaint rate per 1,000 customers of less than the Pennsylvania water utility peer group average in the most recently published report
- maintaining customer rates that are less than the Pennsylvania water utility peer group average

The stock grants are typically made in the first or second quarter of the year based on a historical three-year review of metric performance, ending with the most recently completed fiscal year. The award of restricted stock at a rate of 20% of the participant's base salary, which vests over three years beginning in the third quarter of the current year, is subject to the company's clawback<sup>2</sup> policy.

In addition to participating in the cash incentive plan and Employee Stock Purchase Plan, executives at York Water are eligible to receive a traditional defined

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<sup>1</sup> Each objective within the annual cash incentive plan is worth at least five points and the number of objectives in any particular year may vary. If the company achieves at least 75% of the possible points that year and meets its earnings per share business criteria, then all eligible employees are awarded 5% of their base salary. No payout is awarded if the company does not meet 75% of the performance objectives.

<sup>2</sup> A clawback is a contractual provision whereby money paid to an employee must be returned to an employer under specific circumstances.



benefit pension plan<sup>3</sup>, a supplemental retirement plan<sup>4</sup>, a deferred compensation program, and a 401(k) savings plan. All York Water employees, including executives, can participate in an Employee Stock Purchase Plan, which offers company stock at a 5% discount to market.

### **Findings and Conclusions**

Our examination of the company's executive management and organizational structure included a review of the overall company objectives and the effectiveness of its present organizational structure to support the objectives, the company's ongoing strategic and operational planning process, its succession planning process, and the use of an incentive compensation plan. Based on our review, it appears that proper controls are in place and that the Executive Management and Organizational Structure function is being performed in a satisfactory manner.

### **Recommendations**

**None**

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<sup>3</sup> Only for employees hired before May 1, 2010.

<sup>4</sup> The supplemental retirement plan is an additional retirement benefit to encourage senior management (executives only) to stay with the company until retirement. It is paid out over 15 years beginning no earlier than age 60.

## IV. CORPORATE GOVERNANCE

### Background

As discussed in Chapter II – Background, The York Water Company is publicly traded on The NASDAQ Stock Market (NASDAQ) exchange under the symbol “YORW”. Therefore, the company is subject to the corporate governance requirements contained in the Sarbanes-Oxley Act of 2002 (SOX) and the corporate governance rules of the NASDAQ.

As of December 2020, the York Water Board of Directors (Board) consisted of eleven members including the company’s President and Chief Executive Officer (CEO), the former President and CEO, and nine independent Board members. The average tenure of the Directors, as of March 2021, was 13 years. In its March 19, 2021 Proxy Statement released to shareholders, the Board concluded, based on NASDAQ corporate governance standards, that nine of the eleven Board members are independent. The full Board met eight times during 2020 and conducted its business using the following committees:

- Audit Committee – monitors the audit functions of the independent public accountants and reviews the company’s financial reporting process and internal controls. The Audit Committee is composed of four independent Board members that are all considered “audit committee financial experts” within the meaning of applicable Security Exchange Commission (SEC) rules. The Audit Committee met four times during 2020.
- Compensation Committee – makes recommendations for compensation of directors, committee members and corporate officers (including incentives). The Compensation Committee met twice during 2020 and is composed of three independent members.
- Nomination and Corporate Governance Committee – recommends the appropriate Board structure, reviews the company’s succession planning, oversees the Board’s annual evaluation of its performance and the performance of other committees, evaluates corporate governance best practices, and recommends Director nominees for the Board. The Nomination and Corporate Governance Committee is composed of three independent members and met two times during 2020.
- Executive Committee – reviews and makes recommendations to the Board of Directors related to budgeting, ratemaking, and debt and equity financing. The Executive Committee is composed of five independent Board members, the former company President and CEO and the company’s current President and CEO. The Executive Committee met three times during 2020.

The Audit, Compensation, and Nomination and Corporate Governance Committees operate pursuant to written charters consistent with the applicable standards of the NASDAQ and the SEC. The respective charters are reviewed annually and updated as needed. The duties and responsibilities of the Executive Committee are detailed in the Board's Standing Resolutions. The Committees undergo an annual performance evaluation that is overseen by the Nomination and Corporate Governance Committee and presented to the Board. The evaluation compares the performance of the Committee with the requirements of its respective written charter.

The company's Code of Conduct and related documents are available for review by the shareholders and public at large by visiting [www.yorkwater.com](http://www.yorkwater.com). Documents available on the website include:

- Charters for the Audit, Compensation, and Nomination and Corporate Governance Committees
- Code of Conduct
- Whistleblower policy and contacts
- Environmental, Social and Governance Responsibility

As stated above, one of the main responsibilities of the Audit Committee is oversight of the external audit firm. Baker Tilly US, LLC has been York Water's external audit firm since 2003<sup>5</sup> and reports directly to the Audit Committee. The Audit Committee ensures that the firm's engagement partner is rotated at least every five years in accordance with SEC guidelines. The company last conducted an RFP for its integrated audits of financial statements and internal controls, quarterly reviews, and federal income tax return preparation for the 2016 audit.

Although York Water does not have an internal audit function, the Accounting Department is charged with ensuring that the company has strong internal controls that are consistently followed. The company's Chief Financial Officer (CFO) regularly attends Audit Committee meetings and meets one-on-one with the Chairman of the Audit Committee. Annually, during one of the meetings, the results of the company's internal control reviews are discussed.

Among the requirements of SOX is for the Audit Committee to establish procedures for:

- The receipt, retention, and treatment of complaints regarding accounting, internal accounting controls, or auditing matters; and,
- The confidential, anonymous submission by employees of concerns regarding questionable accounting or auditing matters.

York Water's Whistleblower policy describes how and where employees may report illegal or unethical behavior or violations of its Code of Conduct policy. The Whistleblower policy states that violations may be reported directly to either the

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<sup>5</sup> ParenteBeard LLC was acquired by Baker Tilly Virchow Krause, LLC in October 2014.

Corporate Compliance Officer or the Audit Committee Chairman. Issues may also be reported through the company's website.

### **Findings and Conclusions**

Our examination of the Corporate Governance function included a review of York Water's Board of Directors' organization including committee structure and charters; Board fee structure; Director independence; documents related to principles of corporate governance; policies, practices, and procedures related to internal management controls; relationships with the independent auditor, performance of non-audit services by the independent auditor and policies related to rotation of audit firms; code of conduct and whistleblower policies; annual reports to shareholders; etc. Based on our review, it appears that proper controls are in place and that the Corporate Governance function is being performed in a satisfactory manner.

### **Recommendations**

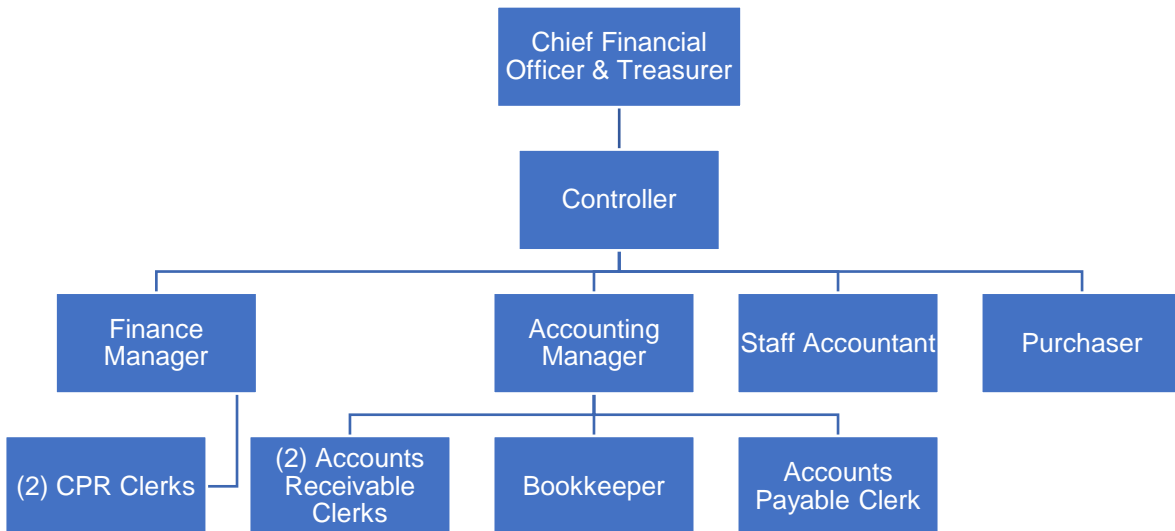
**None**

## V. FINANCIAL MANAGEMENT

### Background

The York Water Company's (York Water or company) Financial Management function operates through its Accounting Department that is led by the Chief Financial Officer (CFO) and Treasurer. The Finance and Accounting Department's organizational structure is depicted in Exhibit V-1, noting that the CFO reports directly to the York Water President/Chief Executive Officer (CEO). The CFO has responsibility for financial management and strategy including cash and debt management, financial and regulatory reporting, internal controls, and capital and operational budgeting. The CFO also participates in succession planning, strategic planning, and managing third party revenues (i.e., tank attachments, wastewater billing for municipalities, etc.). Support for York Water's rate cases are also provided through the Finance and Accounting Department.

**Exhibit V-1  
The York Water Company  
Finance and Accounting Department Organizational Chart  
As of March 2021**



Source: Data Request GD-1

The Finance and Accounting Department includes the Staff Accountant and the company's Purchaser. The Staff Accountant is responsible for financial reporting and analysis for regulatory reports and assists other departmental personnel. The Purchaser's job duties include reviewing and placing orders for materials and inventory through company approved vendors. The Controller is responsible for financial reporting and oversees the concurrent external audit of the company's assessment and testing of its internal controls, as mandated by Section 404 of the Sarbanes-Oxley Act

(SOX). Additionally, the Controller provides or receives coverage from the CFO in cases of extended absence for either employee to ensure business continuity.

The Controller also oversees the external audit of the company's General and Administrative (G&A) pension plan, which is audited annually. The company maintains two separate defined benefit pension plans. The G&A pension plan applies exclusively to non-union employees while the company offers a separate pension plan for its union employees (see Chapter X – Human Resources and Diversity for more information about employee benefits). The company's combined pension plans' assets are presented in Exhibit V-2. ERISA's minimum funding standards require comparison to actuarially determined projected benefit obligations. York Water's pension plans exceed the 80% minimum funding standards set by ERISA.

**Exhibit V-2**  
**The York Water Company**  
**Funding Status of Defined Benefit Pension Plans (in thousands)**  
**As of December 31, 2020**

Accumulated Benefit Obligation	\$ 50,578
Projected Benefit Obligation	\$ 54,106
Fair Value of Assets	\$ 56,315

Source: The York Water Company's 2020 Form 10K

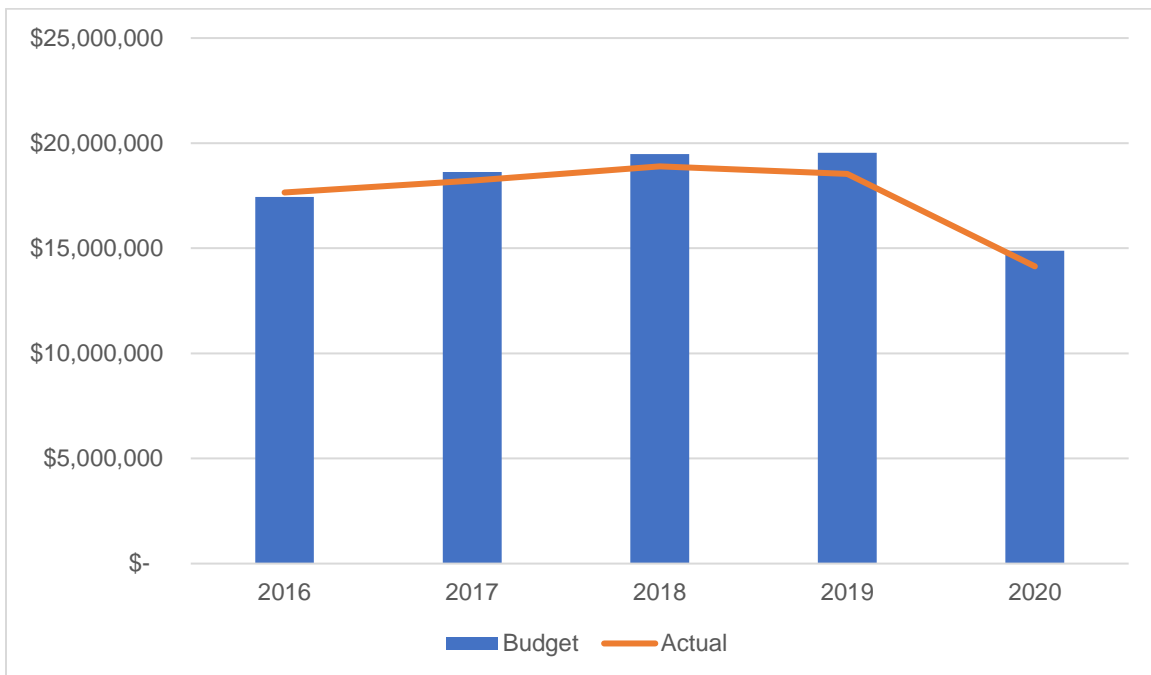
The Finance Manager is responsible for the Continuing Property Records (CPR) that are maintained by two CPR Clerks. The CPR tracks the company's capital improvement projects and assets related to their infrastructure. The Finance Manager also assists the Controller with internal control testing, filings for property and utility taxes, regulatory reporting to the PUC (i.e., PUC Annual Reports, etc.), inventory reporting and the preparation and compilation of the company's Operating Budgets.

York Water's annual budgeting process is initiated at the end of August by the CFO issuing a memorandum to all company supervisors. This memo includes a request to identify capital and operating budget items along with a budget timeline. Budget preparation also includes a review of the current year's operating expenses by account and excludes abnormal and/or one-time expenditures. All operational budgets are reviewed by the Chief Operating Officer (COO) while all finance, human resources and miscellaneous budget items are reviewed by the CFO. The CFO then forwards all approved operating budget items to the Finance Manager for inclusion within the projected operating budget. The Finance Manager then factors in projected salary increases, health insurance contributions, etc. into the projected operating budget. While the Finance Manager develops the operating budget, the CFO compiles the capital budget with input provided from departmental request forms. A subsequent meeting is held between the CFO and COO to determine the overall budget projects and associated costs before budget discussions are held with the CEO. In early-November, after a final review by the CEO, CFO and COO, the budget is presented to

the Executive Committee before it is presented to the full Board of Directors for review and approval in late-November.

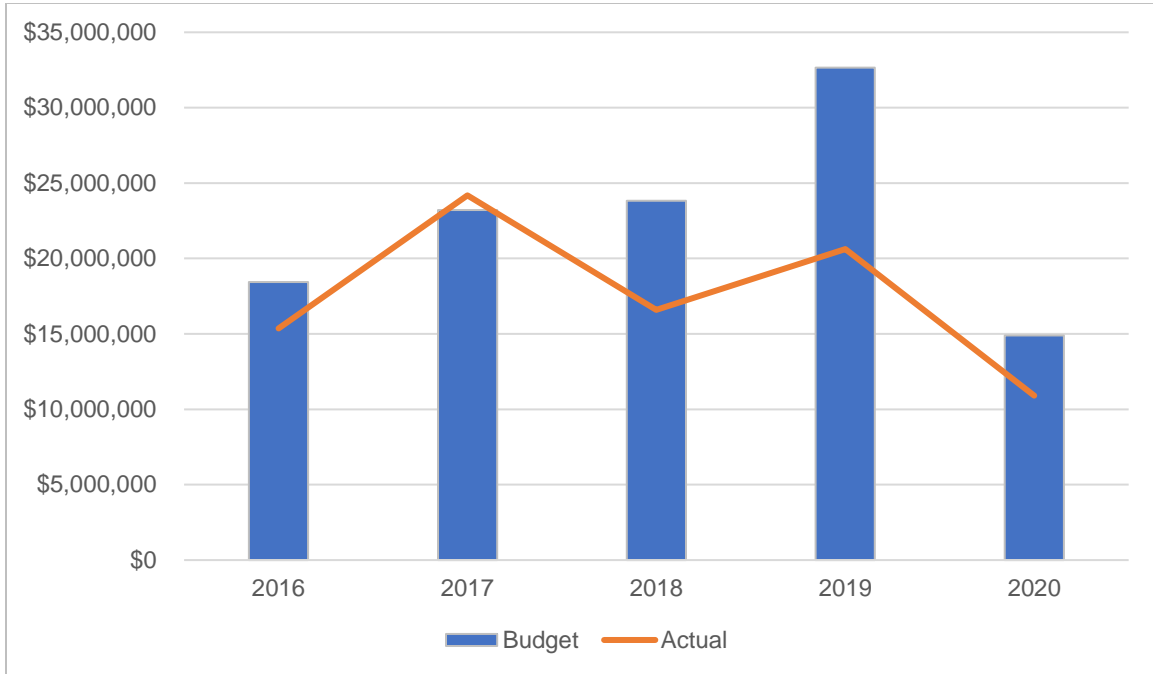
The Accounting Manager has responsibility for the accounts receivable (AR), accounts payable (AP) and bookkeeping functions, including the direct oversight of two AR Clerks, an AP Clerk, and a Bookkeeper. The Bookkeeper is responsible for the payroll function. The Accounting Manager is also responsible for York Water's financial, SEC, and budget variance reporting. Generally, most York Water account balances are consistent; therefore, any outliers (overages or shortfalls) alert the Accounting Manager that investigation is needed. The Accounting Manager contacts each respective department to assess causal factors for the budget variance and assembles the budget variance report package for presentation to the Board of Directors. The company's actual versus budget operating expenses and capital expenses for 2009 through 2013 are shown in Exhibits V-3 and V-4, respectively.

**Exhibit V-3**  
**The York Water Company**  
**Actual vs Budget Operating Expenses**  
**For the Years 2016 - September 30, 2020**



Note: 2020 data is through September.  
Source: Data Request FM-3

**Exhibit V-4**  
**The York Water Company**  
**Actual vs Budget Capital Expenses**  
**For the Years 2016 - June 30, 2020**



Note: 2020 data is through June.  
 Source: Data Request FM-4

York Water’s capital structure is illustrated in Exhibit V-5 for the years 2016 through June of 2020. The company maintains a Standard and Poor’s A- Stable corporate credit rating. In September 2020, York Water consolidated their credit lines to a single bank that resulted not only in an increased credit line, but also a more favorable borrowing rate and lower bank fees.

**Exhibit V-5**  
**The York Water Company**  
**Capital Structure**  
**For the Calendar Years 2016 - June 30, 2020**

	2016	2017	2018	2019	6/30/2020
Debt	43%	44%	43%	44%	43%
Equity	57%	56%	57%	56%	57%

Source: Data Request FM-6

As a publicly traded company on the NASDAQ Stock Market (NASDAQ), York Water is subject to SOX audits of its internal controls and testing procedures. Unlike



the New York Stock Exchange, the NASDAQ does not require its trading companies to employ the use of an internal audit function. Although York Water's SOX compliance provides a reasonable degree of certainty that its financial operations are free from abuse and fraud, the company does not staff an internal audit function. In 2018, York Water had an external auditor evaluate the company's internal controls. The external audit firm determined that York Water had effective controls over financial reporting in place to sufficiently mitigate the associated risks. The Audit Committee Chairman was comfortable with the results and does not think York Water needs to formalize an internal audit function at this time.

### **Findings and Conclusions**

Our examination of the Financial Management function included a review of cash and debt management, the capital and operating budget process, budget variance tracking and reporting, accounting policies and procedures, and staffing and managerial controls. Based on our review, it appears that proper controls are in place and that the Financial Management functions are being performed in a satisfactory manner.

### **Recommendations**

**None**

## VI. WATER AND WASTEWATER OPERATIONS

### Background

The York Water Company (York Water or company) is a regulated water and wastewater utility in Pennsylvania that employs 108 employees. It supplies approximately 20 million gallons per day of potable water to over 69,000 customers. The service area covers 51 municipalities within three counties: York, Adams, and Franklin. Although York Water does have small well-based systems, a large majority of the system is supplied by surface water for the City of York and surrounding areas. This central distribution system uses gravity to supply the necessary pressure and nine booster pumps to repump to higher areas. The finished water distribution system consists of two covered storage tanks, 25 standpipes, six finished water reservoirs, 36 pump stations and over 1,000 miles of main of various diameters and types. Exhibit VI-1, below, details the main by material type and its associated length.

**Exhibit VI-1  
The York Water Company  
Water Main by Material Type  
As of November 2020**

<b>Material</b>	<b>Length (miles)</b>
Ductile Iron	627.7
Cast Iron	339.6
Transite	7.9
Plastic	26.1
Copper	1.2
Concrete	0.6
Galvanized	0.1
<b>Total</b>	<b>1,003.2</b>

Source: Data Request WO-3

York Water also provides wastewater service to roughly 3,000 customers. The company owns and operates two wastewater collection systems and five wastewater collection and treatment systems, with nine sewage pumping stations and over 35 miles of main, as shown below in Exhibit VI-2.

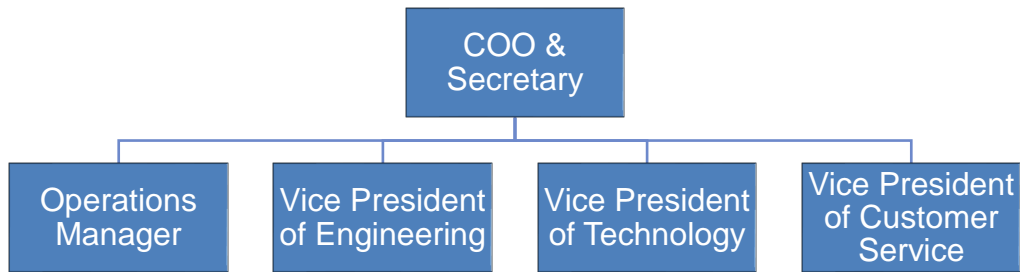
**Exhibit VI-2  
The York Water Company  
Sewer Main by Material Type  
As of November 2020**

<b>System Type</b>	<b>Material</b>	<b>Length (miles)</b>
<b>Gravity</b>	Plastic	22.4
	Vitrified Clay	10.7
<b>Pressure</b>	Plastic	2.6
<b>Total</b>		<b>35.7</b>

Source: Data Request WO-3

The engineering, customer facing, information technology and distribution operations of the company report to the Chief Operating Officer (COO) and Secretary. Under the COO and Secretary are the Operations Manager, the Vice President (VP) of Engineering, VP of Technology, and the VP of Customer Service (see Exhibit VI-3, below). This chapter of the report will focus on operations, engineering, and technology, whereas the customer service function is covered in Chapter IX – Customer Service of this report.

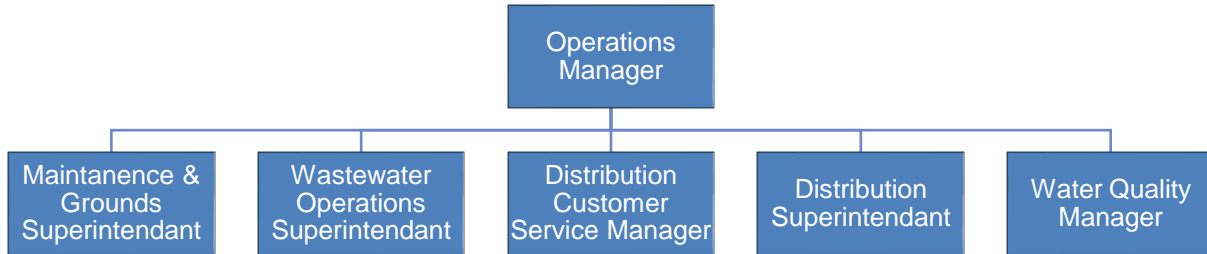
**Exhibit VI-3  
The York Water Company  
Operations Department Organizational Chart  
As of March 2021**



Source: Data Request GD-1

The Operations manager has five direct reports, the Maintenance and Grounds Superintendent, the Wastewater Operations Superintendent, the Distribution Customer Service Manager, the Distribution Superintendent, and the Water Quality Manager, as shown in Exhibit VI-4.

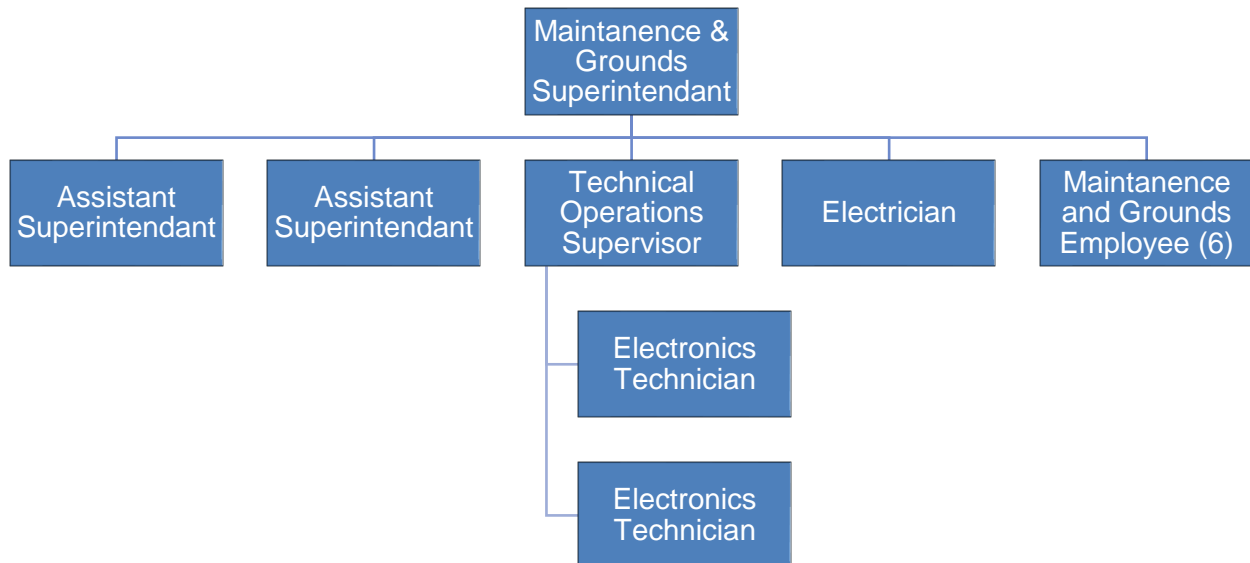
**Exhibit VI-4  
The York Water Company  
Operations Organizational Chart  
As of March 2021**



Source: Data Request GD-1

The Maintenance and Grounds Superintendent has two assistant superintendent positions, a technical operations supervisor (with two direct reports: electronics technicians), an electrician, and six additional positions all reporting directly as shown below in Exhibit VI-5. This section is responsible for maintaining above ground facilities including general grounds care (i.e., mowing and trimming, physical inspections, etc.), maintenance of facilities (i.e., fencing, gates, lighting, and security equipment), and maintenance of large equipment (i.e., pumps, generators, etc.). The group also responds to alarms at remote sites.

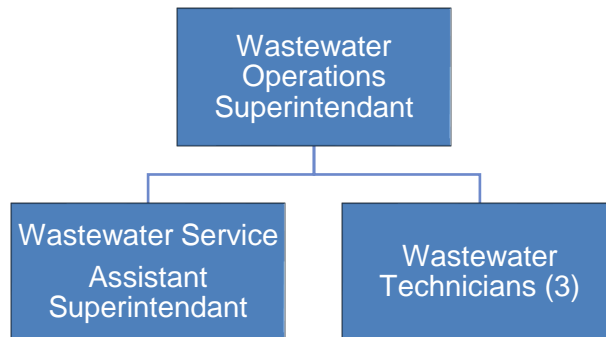
**Exhibit VI-5  
The York Water Company  
Operations: Maintenance and Grounds Organizational Chart  
As of March 2021**



Source: Data Request GD-1

The Wastewater Operations superintendent also reports directly to the Operations Manager. The position has an assistant superintendent and three wastewater technicians as direct reports, shown below in Exhibit VI-6. This group handles the operation of the company's two wastewater collection systems and five wastewater collection and treatment systems. The main duties include sampling, calibrating meters, alarm response, and general maintenance and oversight at each facility. This group also oversees construction activities for upgrades to company-owned wastewater facilities. All employees in this group are water and wastewater certified or working towards their certification.

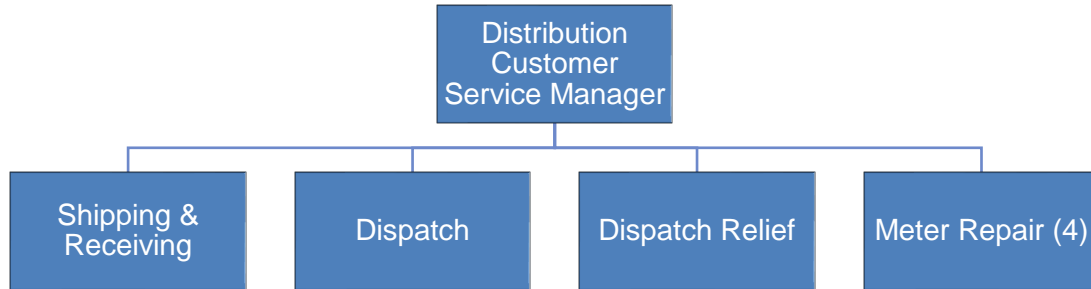
**Exhibit VI-6**  
**The York Water Company**  
**Operations: Wastewater Organizational Chart**  
**As of March 2021**



Source: Data Request GD-1

The Distribution Customer Service Manager also reports to the Operations Manager and has a total of seven direct reports. These reports include a shipping and receiving position, dispatch position, relief dispatch position, and four-meter repair positions, as shown in Exhibit VI-7. The shipping and receiving position is discussed more in depth within Chapter VIII – Purchasing and Materials Management. The dispatch positions are responsible for assigning work area(s) to the meter repair group and ensuring that customer inquiries and complaints requiring a site visit are assigned to the appropriate group for investigation.

**Exhibit VI-7**  
**The York Water Company**  
**Operations: Distribution Customer Service Organizational Chart**  
**As of March 2021**



Source: Data Request GD-1

The meter repair personnel work primarily in the field and are responsible for testing, repairing and/or replacing meters and backflow prevention devices. Meters are replaced on a 20-year cycle. The company replaces several thousand meters per year due to age. The meter replacement statistics for the last 3 years are shown in Exhibit VI-8.

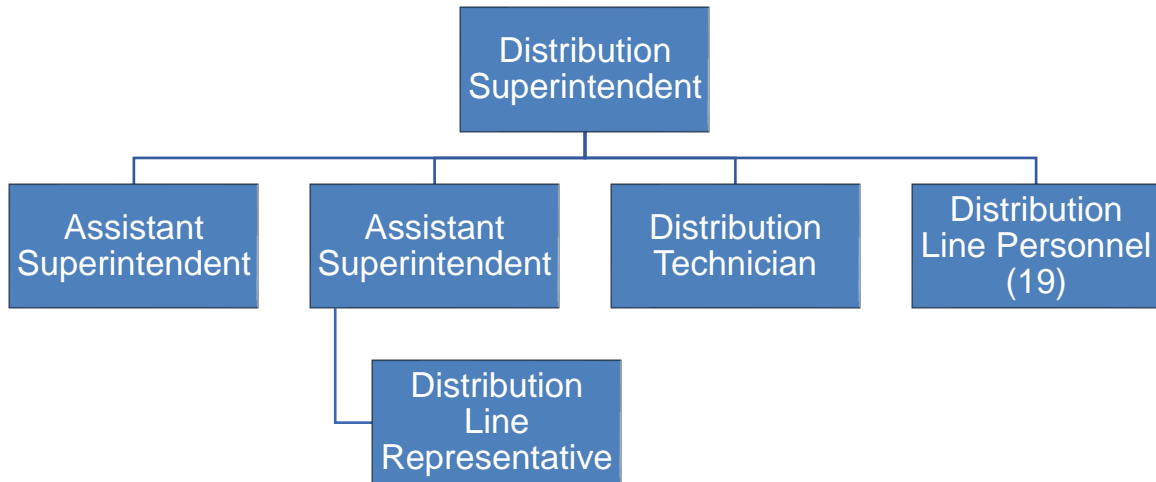
**Exhibit VI-8**  
**The York Water Company**  
**Meter Replacement Statistics**  
**For the years 2018 - 2020**

Year	# of Meters Tested	# of Failed Meter Tests	Total Meters Replaced
2018	426	1	3,432
2019	462	2	2,950
2020	557	3	2,416

Source: Data Request WO-32

Next under the Operations Manager is the Distribution Superintendent. There are 22 direct reports to this position which include: two Assistant Superintendents, a Distribution Technician, and 19 Distribution Line positions. In addition, there is a Distribution Line Representative that reports directly to one of the Assistant Superintendents, as shown in Exhibit VI-9. This group handles most of the company's underground facilities and is divided up into various key functions. There are six two-person crews that investigate and repair leaks and main breaks, one dedicated leak detection position, and five utility field personnel that investigate complaints, operate valves, and assist with new connections. One of the utility field personnel has an altered schedule working 2<sup>nd</sup> shift to provide additional flexibility when addressing customer needs. The final position, distribution line representative, handles permitting, tracks lead line replacements, and acts a dispatcher for the field personnel.

**Exhibit VI-9  
The York Water Company  
Operations: Distribution Superintendent Organizational Chart  
As of March 2021**



Source: Data Request GD-1

As previously mentioned, this group handles the tracking and testing of valves. The company’s goal is to operate 25% of all distribution valves every 4 years and are tracked within the York Water’s geographic information system (GIS). York Water regularly meets or exceeds this goal. Valve testing data for the last 5 years (2015-2020) is shown below in Exhibit VI-10.

**Exhibit VI-10  
The York Water Company  
Five Year Distribution Valve Testing Statistics  
For the years 2015 - 2020**

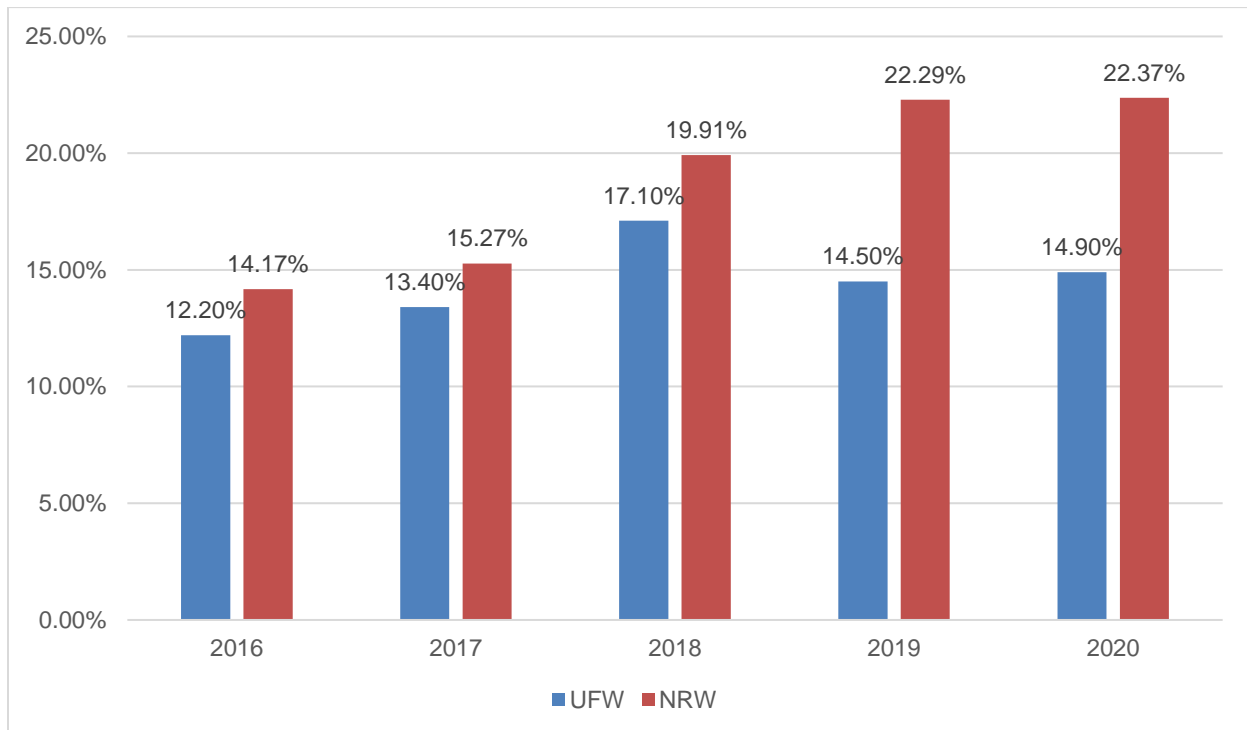
Year	Total # of valves (Non-Critical Valves 2" to 8")	Total # Inspected (Non-Critical Valves 2" to 8")	Total # of valves (Critical Valves 10" and larger)	Total # Inspected (Critical Valves 10" and larger)
	2015	8,020	3,533	3,211
2016	8,051	3,358	3,635	879
2017	8,086	2,766	3,685	1,144
2018	8,176	2,837	3,775	882
2019	8,166	2,786	3,949	792
2020	8,224	3,185	4,038	1,042

Source: Data Request WO-30

Furthermore, this group also tracks and analyzes unaccounted for water (UFW) and non-revenue water (NRW). York Water’s UFW and NRW performance can be found in Exhibit VI-11 below. As shown, York Water has maintained an UFW level

consistently below 20% per 52 Pa Code § 65.20. Nonetheless, the company experienced a marked increase in UFW in 2018 that management attributed to increased main flushing activity to comply with Pennsylvania’s Disinfection Requirements Rule (see 25 Pa Code § 109). Ultimately, York Water discovered that it was greatly underestimating water lost through flushing, leading to the increase in UFW, and quickly corrected this oversight in 2019.

**Exhibit VI-11**  
**The York Water Company**  
**Unaccounted for Water and Non-Revenue Water by Percentage**  
**For the years 2016 - 2020**



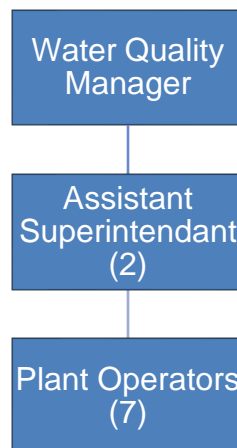
Source: York Water’s 2016-2020 PUC Annual Reports

The Water Quality Manager oversees 2 assistant superintendents reporting and a total of 7 plant operators as shown in Exhibit VI-12. The water quality section is largely responsible for water production activities from the filter plant and wells throughout the system. These duties include water quality sampling, 24/7 operation of the filter plant, and general maintenance and physical security of the filter plant equipment. In addition, this section is in the process of conducting a corrosion control pilot aimed at identifying the optimal chemical treatment of the company’s water to minimize corrosivity. The project is three phased and is entering its third phase in 2021 when the company will continue to explore the effects of pH, treatment chemicals, and changes to the system. The long-term goal is to eliminate water conditions that can lead to undesirable effects within the distribution system and can minimize the potential for elevated levels of lead, if any materials with lead are still within the system.



In addition, York Water has an ongoing initiative to replace all lead pipes (company identified as pre-1940's pipe) within their system. This replacement program was presented to and approved by the Commission at Docket No. P-2016-2577404 and included two phases. The first phase would focus on any company-owned lead pipes while phase two would replace any customer-owned service lines. The company has replaced all company-owned lead lines as of December 2018 (reported as 1,772). York Water has also replaced over 200 customer-owned service lines as of the end of 2020. There are still 12 identified customer-owned lead service lines that are scheduled to be replaced. However, the customer-owned replacement program is a voluntary program that customers must opt in. Therefore, there may be additional customer-owned lead service lines in the system that have not been identified. As such, the company continues to investigate and provide customer outreach to identify any such facility; however, the COVID 19 pandemic has limited some access to residential homes.

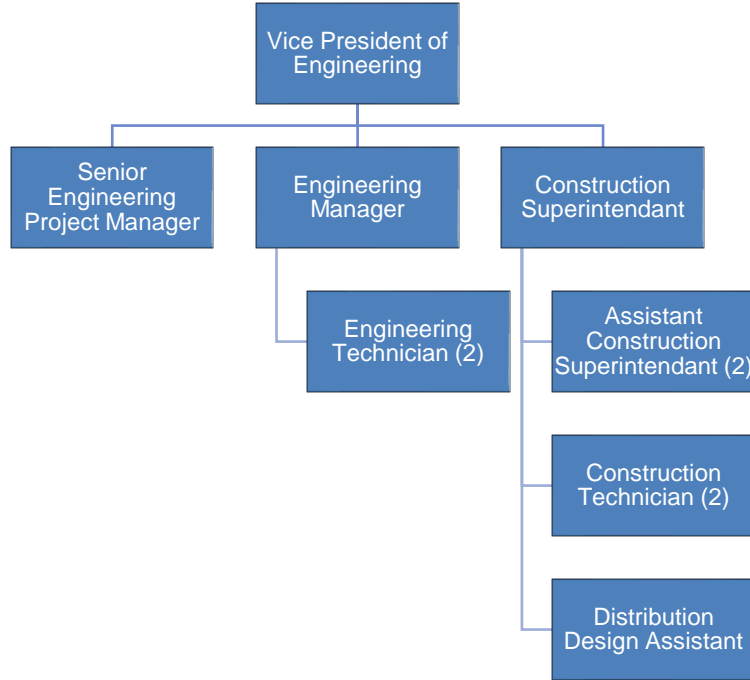
**Exhibit VI-12**  
**The York Water Company**  
**Operations: Water Quality Manager Organizational Chart**  
**As of March 2021**



Source: Data Request GD-1

Like the Operations manager, the Vice President of Engineering also reports directly to the COO and Secretary of York Water. As shown in Exhibit VI-13, the VP of engineering has three direct reports: one Senior Engineer Project Manager, an Engineering Manager, and a Construction Superintendent. The Construction Superintendent's group handles planning and cost estimating for main replacement projects, main rehabilitation projects, and new development connections. Meanwhile, the Engineering Manager's group reviews all construction plans, designs new connections and replacement facilities such as standpipes, conducts hydrant flow testing, completes regulatory reporting, and schedules and tracks water and sewer main replacement projects.

**Exhibit VI-13  
The York Water Company  
Engineering Organizational Chart  
As of March 2021**



Source: Data Request GD-1

A major focus of the Engineering group is main replacements, which is the top category in this group’s budget. Most of the main replacement efforts have focused on potable water lines as part of the company’s formal main replacement program. York Water’s planned and actual data for water main replacements for the last five years are shown below in Exhibit VI-14.

**Exhibit VI-14  
The York Water Company  
Water Main Replacement Activities by Year  
For the years 2015 - October 2020**

Year	Goals (mi)	Actual (mi)	Budget (Mil \$)	Approx. Actual cost (Mil \$)	Approx. % of Total main
2015	8	8	\$3.90	\$3.70	0.8%
2016	8	7.9	\$4.0	\$4.10	0.8%
2017	8.0	8.2	\$4.50	\$2.70	0.8%
2018	9.5	9.5	\$4.50	\$3.80	0.9%
2019	9.5	9.5	\$5.40	\$5.40	0.9%
2020 YTD*	11.4	8.9	\$9.40	\$7.30	0.9%

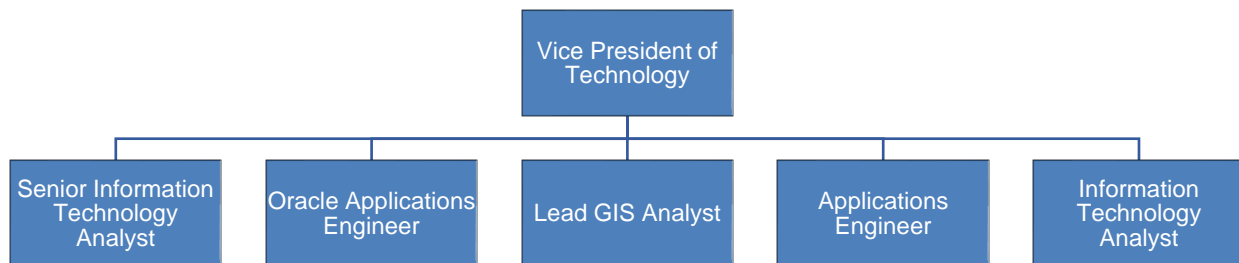
Note: 2020 data is through October.  
Source: Data Request WO-9

As the company experiences growth in wastewater, they have begun identifying and scheduling sewer main replacements as well. At this time, sewer lines are replaced on an as needed basis and are not part of the main replacement program. The company is in the process of its first sewer line replacement project which includes the replacement of a 21-inch diameter sewer main carrying flows from West York borough to the City of York wastewater treatment plant.

The engineering group is also currently in the design phase of major renovations to the Lake Williams Dam. The bulk of the upgrades will include increasing the spillway capacity, stabilizing, and improving the spillway channel, and reinforcing the upstream and downstream embankments of the impoundment area. The upgrades will address a number of identified concerns, particularly with recent updates to probable maximum flood data. There are several design options to improve the Lake Williams Dam and the final cost estimates range between \$15 to \$40 million. The project is expected to be in the permitting phase in 2021 and construction is scheduled for early 2022 to late 2023.

The VP of Technology reports directly to the COO & Secretary and has five direct reports: Senior Information Technology Analyst, Oracle Applications Engineer, Lead GIS analyst, Applications Engineer, and Information Technology Analyst as shown below in Exhibit VI-15. The Technology group handles most Oracle applications and upgrades, day to day IT issues (helpdesk), and cybersecurity (see Chapter VII – Emergency Preparedness). The GIS analyst position is responsible for mapping and converting paper maps of facilities to GIS. This GIS position was previously part of the engineering department but was moved to IT in 2018 due to its increasingly technology requirements.

**Exhibit VI-15  
The York Water Company  
Information Technology Organizational Chart  
As of March 2021**



Source: Data Request GD-1

**Findings and Conclusions**

Our examination of the Water Operations function included a review of policies and procedures, engineering and construction, operations and maintenance, inspection, damage prevention, reliability, budgeting, training, cross-connection control, unaccounted-for water (UFW), and non-revenue water (NRW). Based on our review,

York Water Company should devote additional efforts to improve its distribution operations by addressing the following:

**1. Almost all main breaks are labeled as cause unknown.**

Main breaks can occur for several reasons. Some of the reasons are outside the control of distribution companies and occur randomly like natural disasters, freeze-thaw cycle causing ground movement, extreme temperature changes, third-party line hits, etc. Meanwhile, other factors like corrosion, age related problems, material defects, etc. are less random, often occurring over time and can foretell future problems with similar main. Therefore, the Distribution group investigates and tracks data about each main break on the system including the location, material type, age, cause, etc. However, almost all causes are listed as “unknown” at York Water. Exhibit VI-16 shows main break tracking data for the years 2016 through (partial) 2020.

**Exhibit VI-16  
The York Water Company  
Main Break Causes  
For the years 2015 - November 2020**

<b>Year</b>	<b>Total No. Main Breaks</b>	<b>No. with cause listed</b>	<b>No. with Unknown Cause</b>	<b>Percent Unknown cause</b>
2015	103	5	98	95%
2016	111	0	111	100%
2017	66	3	63	95%
2018	94	2	92	98%
2019	140	9	131	94%
2020 (Through November)	52	3	49	94%

Source: Data Request WO-10

In many cases, the exact cause of a main break is not obvious. In fact, management indicated that when the exact cause of main breaks is not definitive, unknown is used to avoid speculation. However, failing to capture conditions or contributing factors to the main break, substantially reduces the effectiveness of the database. Tracking the known or suspected causes of main breaks can provide insight as to areas that might be more prone to breakage or vintages of pipe that might be more susceptible to breakage. In fact, the company has identified pipe failures due to corrosion that were caused by certain types of backfill used and had initiated a main replacement project to preemptively eliminate future main breaks, pipe failure, and water quality issues. Although this condition was spotted because of the company’s knowledge of its system, main break data can aid in this preemptive identification and support the company’s main replacement program. The auditors recognize that definitively identifying the cause may be impossible but capturing the conditions or

potential causes is useful. Therefore, York Water should add an additional field to its main break database to capture conditions, suspected cause/contributing factor, etc. in addition to definitive causes.

**2. Technology has not been leveraged to streamline and automate aspects of the company’s backflow prevention program.**

York Water’s backflow prevention program is comprised of a compliance program (i.e., ensuring customers have backflow devices installed), testing program (i.e., ensuring testable devices are tested annually), education of customer and contractors, and data tracking. The company’s program must comply with 25 Pa. Code § 109.709. Although residential devices do not require a test, industrial, public and commercial backflow devices are required to be tested annually by a certified third-party tester. York Water tracks this testing and records the results, as shown below in Exhibit VI-17.

**Exhibit VI-17  
The York Water Company  
Backflow Prevention Devices by Type  
For the years 2019 and 2020**

	2019	2020
Residential (Non-testable)	62,293	63,003
Commercial/Industrial/Public (Testable)	4,838	4,884
# of requests for tests sent	4,700	4,759
# of devices tested	3,423	3,807
% of devices tested	71%	78%

Source: Data Request WO-30

York Water personnel perform several manual tasks as part of its backflow prevention program. Each month a batch of requests to test backflow prevention devices are mailed to customers. The mailing includes a notice that testing must occur, the form of data that must be returned to the company, and a current list of certified testers. When the company receives test results from a third-party tester, this data is entered into the company’s system. Furthermore, additional mailings are generated when customers do not comply with the testing requirements and per 25 Pa. Code § 109.709. York Water uses a spreadsheet to track and identify required mailings and the processes are heavily reliant on manual processes. Therefore, the PUC auditors contend that the company could leverage existing technology to streamline the process to reduce manual processes within its backflow prevention program.

## **Recommendations**

- 1. Record causes and/or suspected causes of water main breaks.**
- 2. Leverage technology to reduce manual processes within the backflow prevention program.**

## VII. EMERGENCY PREPAREDNESS

### **Background**

On June 11, 2005, Regulations at 52 Pa. Code § 101 (Chapter 101) went into effect that require jurisdictional utilities to develop and maintain written physical security, cyber security, emergency response, and business continuity plans to protect infrastructure within the Commonwealth of Pennsylvania and to ensure safe, continuous, and reliable utility service. A jurisdictional utility is required to maintain “emergency preparedness” plans and annually file a Self-Certification Form to the Pennsylvania Public Utility Commission (PUC or Commission) documenting compliance with Chapter 101. This form, available on the PUC website, is comprised of 13 questions as shown in Exhibit VII-1.

### **Exhibit VII-1 Pennsylvania Public Utility Commission Public Utility Security Planning and Readiness Self Certification Form**

Item No.	Classification	Response (Yes–No–N/A*)
1	Does your company have a physical security plan?	
2	Has your physical security plan been reviewed in the last year and updated as needed?	
3	Is your physical security plan tested annually?	
4	Does your company have a cyber security plan?	
5	Has your cyber security plan been reviewed in the last year and updated as needed?	
6	Is your cyber security plan tested annually?	
7	Does your company have an emergency response plan?	
8	Has your emergency response plan been reviewed in the last year and updated as needed?	
9	Is your emergency response plan tested annually?	
10	Does your company have a business continuity plan?	
11	Does your business continuity plan have a section or annex addressing pandemics?	
12	Has your business continuity plan been reviewed in the last year and updated as needed?	
13	Is your business continuity plan tested annually?	

Source: Public Utility Security Planning and Readiness Self-Certification Form, as available on the PUC website at [http://www.puc.state.pa.us/general/onlineforms/pdf/Physical\\_Cyber\\_Security\\_Form.pdf](http://www.puc.state.pa.us/general/onlineforms/pdf/Physical_Cyber_Security_Form.pdf)

The PUC auditors use a NIST (National Institute of Standards and Technology) Cybersecurity Framework-based audit plan, modified to address the needs and capabilities of the PUC and the Pennsylvania utility companies. Ultimately, due to the sensitive nature of the information reviewed, specific information is not revealed in the audit report; instead, the generalities of the information reviewed are discussed.

Due to travel restrictions caused by the COVID-19 pandemic, in-person review of confidential security information (CSI) documents was not possible such as the physical security plan (PSP), emergency response plan (ERP), business continuity plan (BCP) and cybersecurity plan (CSP). Instead, the emergency plans were reviewed through alternative means constrained by limitations with technology and/or security. In addition, as travel for direct inspections was not possible, the audit staff performed remote inspections at a limited sample of company facilities using video conferencing technology when available. For these reasons, some aspects of the normal review of company security measures could not be completed during fieldwork. Therefore, the findings and conclusions discussed in this report account for the issues discovered during this modified fieldwork and do not preclude additional findings if there had been no pandemic restrictions.

The personnel assigned responsibility for testing, reviewing, and updating the cybersecurity plans for The York Water Company is the Vice President of Technology. Physical security of the facilities falls under the Operations Manager's section and the responsible positions vary by site. Nonetheless, York Water enacted its emergency and business continuity plans in response to the COVID-19 pandemic. The company complied with Governor Tom Wolf's March 19, 2020 order to close physical business locations where applicable, retaining on-site staff for water and wastewater processing. York Water also reopened its main office building to the public on May 26, 2020 enabling in-person customer service operations to resume.

## **Findings and Conclusions**

Our examination of the emergency preparedness at The York Water Company included questions regarding the PSP, CSP, ERP, BCP, vulnerability assessments, and all other associated security measures. Based on our review of the company's emergency preparedness efforts, York Water should initiate or devote additional efforts to improving their security planning and preparedness procedures by addressing the following three findings and recommendations:

### **1. There is no standard list of cybersecurity questions for outside vendors doing business with The York Water Company.**

The company had not yet developed a list of security questions to ask IT vendors but was exploring enacting such a practice. Based upon discussion with PUC auditors, the company was able to quickly produce a questionnaire. Topics covered by the vendor security questionnaire include: a general identification of data that will be used/accessed and what application the vendor will use to access this information, HR training and security awareness, information security, compliance, asset management, incident management, software safety and development, physical and environmental safety, communication and operations management, access management, third-party management, and business continuity. In addition to answering the questions, the vendor would need to provide evidence to York Water for particular security claims. All questions answered "no" or "n/a" must include an explanation. By implementing this



checklist, York Water will increase its security posture with IT vendors and ensure qualifying vendors maintain adequate levels of cybersecurity.

**2. Physical Security protocols do not incorporate live or targeted security drills.**

Pursuant to 52 PA Code § 101.3(c), physical security plans should be tested annually. The company performs a number of activities and/or testing to ensure that its facilities and employees are physically secure and regularly inspects its facilities. Although the PUC auditors agree that York Water has created a sound base program for physical security, there is room to perform additional live or targeted physical security drills. These recommended drills should not replace current initiatives but should be performed periodically to help aid in effective testing of the physical security plan. For example, live targeted drills can be conducted every three years at critical facilities when tabletop, simulation, etc. drills are conducted during the other years. Physical reviews and tests of security can help identify weak areas that can potentially lead to unauthorized access to the facility, damage to the physical plant, harm to employees, and/or tampering with the production of water.

**3. Additional business continuity drills could benefit York Water.**

As briefly discussed in the background, the York Water Company was able to successfully alter its operations at the start of the COVID-19 pandemic to ensure continuity of service. The company was also able to reopen its doors following the Governor's order signaling the reopening of York County on May 22<sup>6</sup> allowing customers to return to in-person customer service. Furthermore, the company made modifications where needed, such as creating a payment window, to ensure that customers can access the office from outside to make payments or inquiries in a safe manner.

These factors demonstrate that the company was able to implement their business continuity plan and effectively address the pandemic. Nonetheless, the PUC auditors identified an opportunity to incorporate other drills that could test additional aspects of the company's business continuity plan. Live tests coupled with tabletop, simulation, etc. types of drills provide a robust preparation for the unknown. Although the company's performance during the pandemic is commendable and has fulfilled its testing requirements pursuant to 52 Pa Code § 101.3(c), the additional testing the PUC auditors identified would prepare employees for a wider range of situations and minimize negative impacts.

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<sup>6</sup> Pennsylvania enacted a color-coded approach to the pandemic where counties would close (red phase) when certain COVID thresholds were met. All counties moved to the red phase per Governor Tom Wolf's order on March 19<sup>th</sup>. However, York County moved to the yellow phase, allowing businesses to reopen with some restrictions on May 22<sup>nd</sup> (<https://www.governor.pa.gov/wp-content/uploads/2020/05/20200521-TWW-Yellow-Phase-Order-Amendment.pdf>)

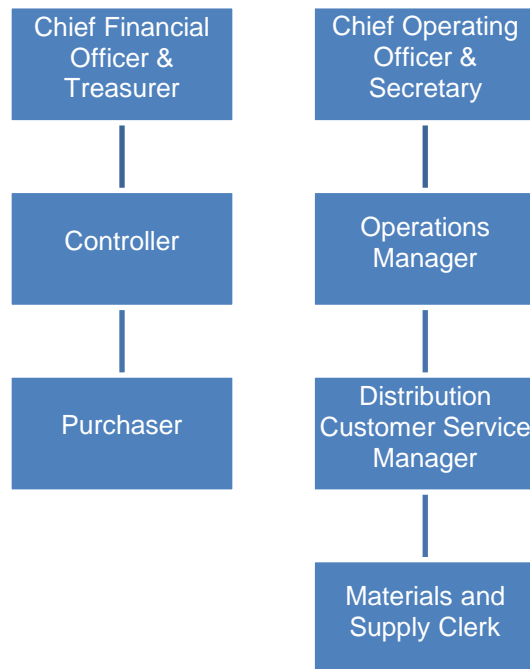
## **Recommendations**

- 1. Create a list of standard screening questions to be used for every outside vendor or consultant working on IT systems.**
- 2. Annually test physical security and incorporate live drills every three years.**
- 3. Perform additional business continuity drills to improve knowledge/capabilities.**

## VIII. PURCHASING AND MATERIALS MANAGEMENT

The York Water Company (York Water or company) manages and operates its materials management function through two groups: Finance and Accounting, and Water Operations. The Finance and Accounting department is responsible for purchasing activities, whereas shipping and receiving of materials is managed within the company's Water Operations Department. The reporting relationship for the Purchaser in the Finance and Accounting Group and the Materials and Supply (M&S) Clerk in Water Operations is presented in Exhibit VIII-1

**Exhibit VIII-1**  
**The York Water Company**  
**Purchasing and Materials Management Functional Structure**  
**As of March 2021**



Source: Data Request GD-1

Generally, all company purchases follow York Water's requisition process. Employees with access to Oracle's Purchasing Requestor module may requisition an item. Requisitions through Oracle are then either expensed or capitalized depending on the value. Items valued at less than \$2,000 are expensed; whereas, items exceeding \$2,000, have a useful life greater than one year, and/or extends the life of plant or equipment are capitalized.

Approval of a requisition order (RO) is based upon the employee's status (i.e., exempt or nonexempt) and the value of the RO. Nonexempt employees must have

ROs of any amount approved by their immediate supervisor and may require subsequent approvals depending upon the amount, whereas exempt employees may approve expense items up to \$2,500. The Distribution Service Manager may approve all inventory purchases. In addition, the President and Chief Executive Officer (CEO) must approve all capital items, expense items over \$2,500 and routine expense purchases (i.e., health insurance, legal fees, etc.) over \$25,000. Furthermore, York Water's Board of Directors must approve the requisition of all non-routine items over \$25,000 (excluding main extensions). After the RO is approved by appropriate personnel, the Purchaser creates a purchase order (PO) in Oracle and must make the purchase using an approved vendor. Blanket POs are created yearly by the Purchaser from pre-approved ROs and approved by the Operations Manager, COO, and President and CEO, if required.

All material deliveries are either received at York Water's Distribution Center or delivered directly to the work site. Deliveries to the Distribution Center are received by the M&S Clerk who reconciles delivered items with the supplier's packing slip. Packing slips are cross-checked with the purchase orders to verify accuracy. Materials are organized within the warehouse by type and sorted by size to make identifying inventory more efficient. Limited supplies are kept in the stockroom, whereas most inventoried items are stored in the warehouse. York Water utilizes an inventory management system module (IMS), which is fully integrated within Oracle, to track inventoried items from the creation of the PO through receipt of materials to issuance of inventory for specific projects.

During regular business operations, York Water's distribution field personnel or contractors complete issue slips for inventory items as needed. In the event of an emergency during weekends, evenings or holidays, authorized supervisors have access to inventory and will issue items to appropriate personnel. Monthly reports are generated through the IMS by the M&S Clerk and forwarded to the Finance and Accounting Group. Monthly reports include an inventory values report, the transaction report, and the project costs of materials.

Inventory turnover defined as the ratio of net annual issues to average inventory balances, less emergency stock indicates the number of times the inventory is "turning over" or being replenished during the year. As shown in Exhibit VIII-2, York Water's inventory turnover is within the water utility industry benchmark range of 2.0 - 4.0 turns per year. York Water, in recent years, has maintained an aggressive pipeline rehabilitation program; discussed in more detail within Chapter VI – Water and Wastewater Operations, which attributes to healthy inventory turnover ratios. As can be seen in Exhibit VIII-2, the increases in inventory levels and issues (from historical levels seen prior to 2016) are a direct result of this increased pipeline replacement.

**Exhibit VIII-2**  
**The York Water Company**  
**Inventory Turnover and Months of Supply on Hand**  
**For the years 2016 - September 2020**

<b>Category</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020 YTD*</b>
Net Annual Issues (\$)	\$3,593,145	\$4,797,690	\$2,609,513	\$3,558,746	\$3,131,524
Average Monthly Balance (\$)	\$766,848	\$835,198	\$884,426	\$988,466	\$1,064,874
Inventory Turnover	4.685	5.744	2.951	3.600	2.941
Months of Supply on Hand	2.56	2.09	4.07	3.33	4.08

\* 2020 YTD is through September.  
Source: Data Requests MM-2 and MM-3

The M&S Clerk conducts an annual physical inventory count at year end. Where discrepancies are noted, the items are recounted to ensure accuracy. Any resultant inventory adjustment is evaluated and approved by the Finance and Accounting Department. Once approved, the M&S Clerk enters the net adjustment into the IMS.

**Findings and Conclusions**

Our examination of the Purchasing and Materials Management functions included a review of the company’s purchasing policies and procedures, reporting, inventory control and oversight, storage facilities and inventory turnover. Based upon our review, the company should initiate or devote additional efforts to improve the effectiveness of its purchasing and materials management functions by addressing the following:

**1. Materials management controls regarding contractor inventory requisitions have the potential to result in shrinkage.**

As described in the background section of this chapter, York Water’s M&S Clerk handles the receipt and oversight of all materials within the company’s warehouse and stockroom as well as handling contractors’ inventory requests. York Water’s warehouse is secured and requires an employee to admit contractors. During busy periods (i.e., start of the day), multiple contractors may be waiting for materials. To get the materials distributed in a timely manner, contractors may help pick the materials on their inventory request form.

As a result, there is a potential for contractors to grab incorrect materials or more/less materials than what is on the inventory request form and the amount that would be recorded in the IMS. The M&S Clerk will visually verify the materials removed by the contractors and note discrepancies by charging that contractor’s project for the materials when possible. However, during the morning rush, it can be difficult to visually verify all required materials in a timely manner. Therefore, this could result in missing/extra inventory if the M&S Clerk cannot immediately verify the inventory that was issued.

Although PUC auditors found no instances of theft or shrinkage and the company's physical count accuracy remained greater than 99% during the audit period, the potential still exists for shrinkage to occur. However, the PUC audit staff believes that York Water has a few options to improve this process without major changes to its operations. An example would be to have contractors submit material requests the night before to the M&S Clerk who could then pull the required material before contractors arrive. Another option may toggle additional resources (like field crews) to start their day at the warehouse to help pull the material or verify contractor's orders. Furthermore, specific timeslots could be given to contractors to ensure minimal wait time. Although each of these options could help improve material controls, York Water should control the materials leaving their facilities to ensure accuracy and verification.

### **Recommendations**

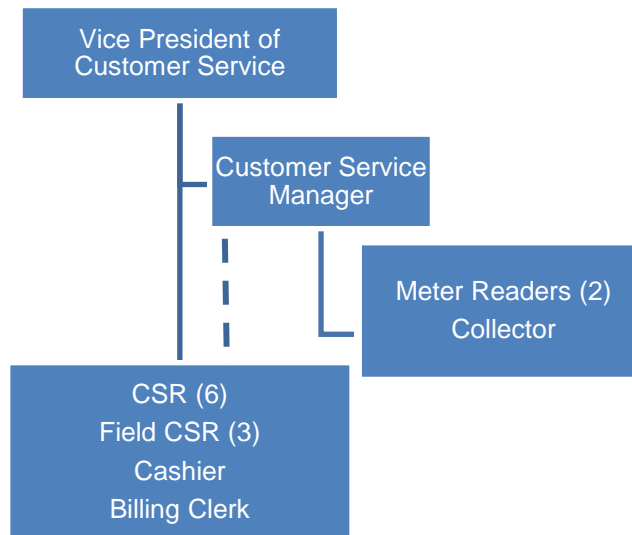
- 1. Review the inventory requisition process and implement changes to strengthen distribution of materials to contractors.**

## IX. CUSTOMER SERVICE

### Background

The York Water Company (York Water or company) provides water and wastewater service to over 72,000 customers in 51 municipalities in Adams, Franklin, and York Counties. York Water's Customer Service (CS) Department is led by the Vice President (VP) of Customer Service, who reports to York Water's Chief Operating Officer. Exhibit IX-1 illustrates the composition of the CS Department.

**Exhibit IX-1  
The York Water Company  
Customer Service Organizational Chart  
As of January 2021**



Source: Data Request GD-1, CS-22

Personnel within the CS Department are responsible for reading meters, generating bills, mailing invoices, processing payments, managing the collections process, and handling all customer inquiries and complaints for the company's water and wastewater customers. The customer call center is in the lobby of York Water's headquarters with normal business hours from 8:30 a.m. to 5:00 p.m. Monday through Friday, except holidays. The customer service side of the company's headquarters is open to the public, allowing customers to make payments and inquiries in person. Furthermore, the company is staffed 24 hours a day, seven days a week to respond to customer outages, with calls during non-business hours being routed to the water filtration plant. Exhibit IX-2 shows the customer call center statistics for the past five years.

**Exhibit IX-2  
The York Water Company  
Customer Call Center Performance  
For the years 2018 - 2020**

<b>Year</b>	<b># of Calls Answered</b>	<b>% of Calls Abandoned</b>	<b>Average time to Answer</b>	<b>% of Calls Answered within 24 Seconds</b>
<b>2018</b>	52,919	6.35%	1:24	57.50%
<b>2019</b>	50,899	6.63%	1:18	61.62%
<b>2020</b>	40,652	4.94%	1:03	66.83%

Source: Data requests CS-4 and CG-19

In early 2020, York Water established the position of Field CSR to adapt to the department's changing needs. The Field CSRs are skilled in performing field duties (i.e., meter reading, collections, etc.) and front office work (i.e., answering telephone inquiries, etc.), which enables the company to quickly shift employees based upon the needs of the department.

York Water's meter readers collect monthly meter readings over four different cycles. The company uses a mix of fixed collection network (i.e., meters that provide readings directly to York Water's headquarters) and radio frequency technology (i.e., require employees to drive in close proximity to the meter to record usage). If a reading cannot be obtained via these methods, an employee must visit the customer's property to obtain the reading.

Once usage is recorded, the Customer Service Department prepares a bill and issues it to the customer. Customers can remit payments by mail, automatic payment from their bank account, over the phone, or via the company's website. Customers also have the option to pay their bill at York Water's headquarters or a local bank. York Water installed a walk-up CS payment window in the back of the company's headquarters in December 2020. Customers are now able to pay their bill in person during normal business hours without entering York Water's building. Additional information about the effect of the COVID-19 pandemic on the company is discussed further in Finding and Conclusion No. 1 within this chapter.

In August 2020, York Water began performing the customer service functions for the City of York's sewer and refuse services. On behalf of the City of York, York Water bills, collects payments, posts termination notices and shuts off water service for non-payment of City of York sewer and refuse bills. Termination can occur because all City of York sewer and refuse customers also receive water service from York Water. It also enables York Water to provide the customers' water usage for the relevant sewer billing period to show the correlation between their water usage and the sewer bill. The company has similar agreements to provide customer service functions for other municipalities in the surrounding area.



Customer bills are due within 20 days from the mailing date. Historically<sup>7</sup>, the company initiates termination procedures after two months of non-payment. The next billing invoice sent to the customer includes a 10-day shut-off notice. After 10 days the Collections Department creates a termination service order issuing a 3-day shut-off notice posted at the customer's door followed by a 48-hour shut-off notice if the customer still has not paid. If all attempts are unsuccessful, service is terminated.

Customers can contact Customer Service at any point during the termination process to pay their bill in full, make a commitment to pay by a specific date, or enter into a payment agreement or the company's customer assistance program (CAP or York Water Cares (YWC)) if eligible. Payment agreements are offered to customers who are unable to pay their bill and are in arrears greater than \$200, with the eventual goal of eliminating the debt and removing customers from the program. Meanwhile, the CAP targets low-income customers and includes an arrearage forgiveness component and a PUC authorized program to provide plumbing repairs that reduces water consumption.

If a customer has a problem with the company, customers can submit complaints via telephone or the company's website. Complaints are initially handled by CSRs but will be elevated to a supervisor when the assigned CSR is unable to reach a resolution with the customer. The supervisor responds to elevated complaints within 24 hours. Complaints involving water quality, no water, leaks, and pressure problems are routed to the appropriate department for investigation, and an employee is dispatched to the location if the problem cannot be resolved over the phone or email. Complaints filed with the Commission usually receive a response within 48 hours by the VP of Customer Service. Exhibit IX-3 summarizes York Water's complaints filed with the Commission from 2015 through 2020.

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<sup>7</sup> See Finding and Conclusion No. 1 within this chapter for additional information about the PUC's emergency order in response to COVID-19 issued in March 2020, which affected PA utilities' ability to terminate customers.

**Exhibit IX-3  
The York Water Company  
Summary of PUC Complaints by Type  
For the Years 2015 – 2020**

<b>Year</b>	<b>Payment/Billing Issue</b>	<b>Other*</b>	<b>Formal Complaints</b>	<b>Total Complaints</b>
<b>2015</b>	118	1	3	122
<b>2016</b>	115	14	3	132
<b>2017</b>	113	3	3	119
<b>2018</b>	105	1	1	107
<b>2019</b>	100	1	1	102
<b>2020**</b>	26	4	2	32

\* "Other" includes water quality, property damage, pressure, and sewer complaints.

\*\* There were fewer PUC complaints in 2020 because of the PUC's temporary moratorium on terminations, which is discussed further in Finding and Conclusion No. 1.

Source: Data Request CG-19

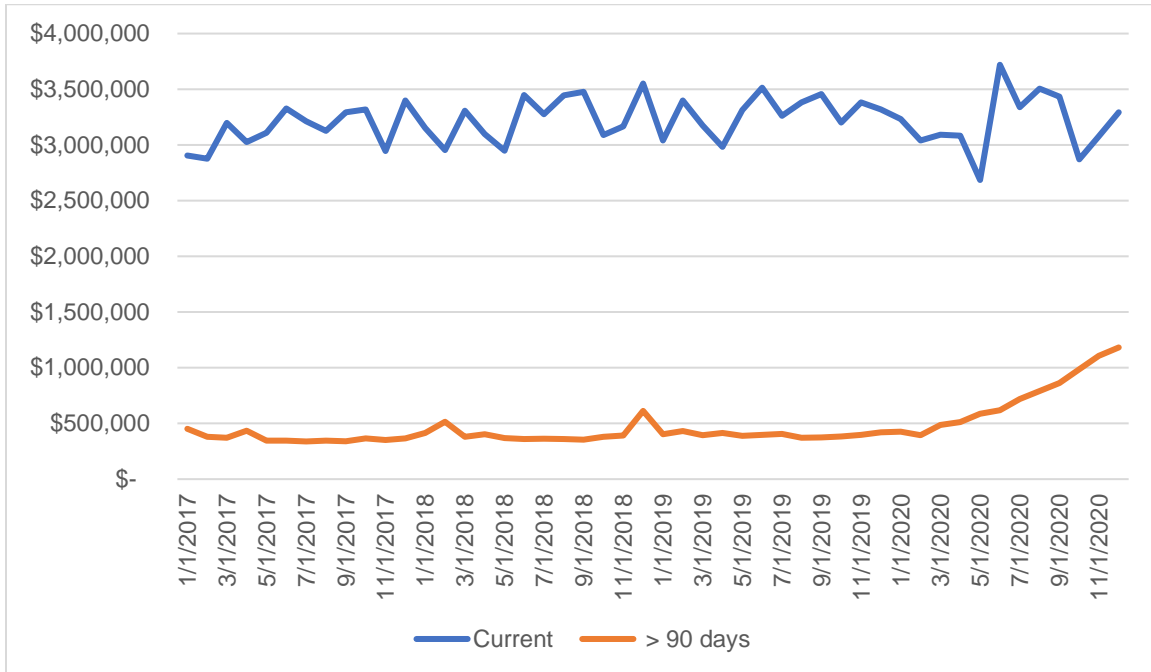
**Findings and Conclusions**

Our examination of the Customer Service function included a review of the company's policies and procedures, staffing levels, management and reporting levels, performance levels, customer outreach programs, call center statistics, etc. Based on our review, York Water should devote additional efforts to improve the efficiency and/or effectiveness of its customer service operations by addressing the following:

**1. Due to the widespread economic effects of the COVID-19 pandemic, York Water's aged receivables have increased.**

On March 13, 2020, the PUC issued an emergency order (see Docket No. M-2020-3019244) in response to the crisis created by the COVID-19 pandemic. The order set forth a moratorium on customer terminations for PA utilities regulated by the Commission (including electric, natural gas, water, wastewater, telecommunications, and steam). Pursuant to the order, all terminations for non-payment were suspended for all PA PUC regulated utilities, including York Water. Consequently, due to the worsening COVID-19 crisis and inability to terminate customers, the company's customer accounts receivable balances degraded, as shown in Exhibit IX-4.

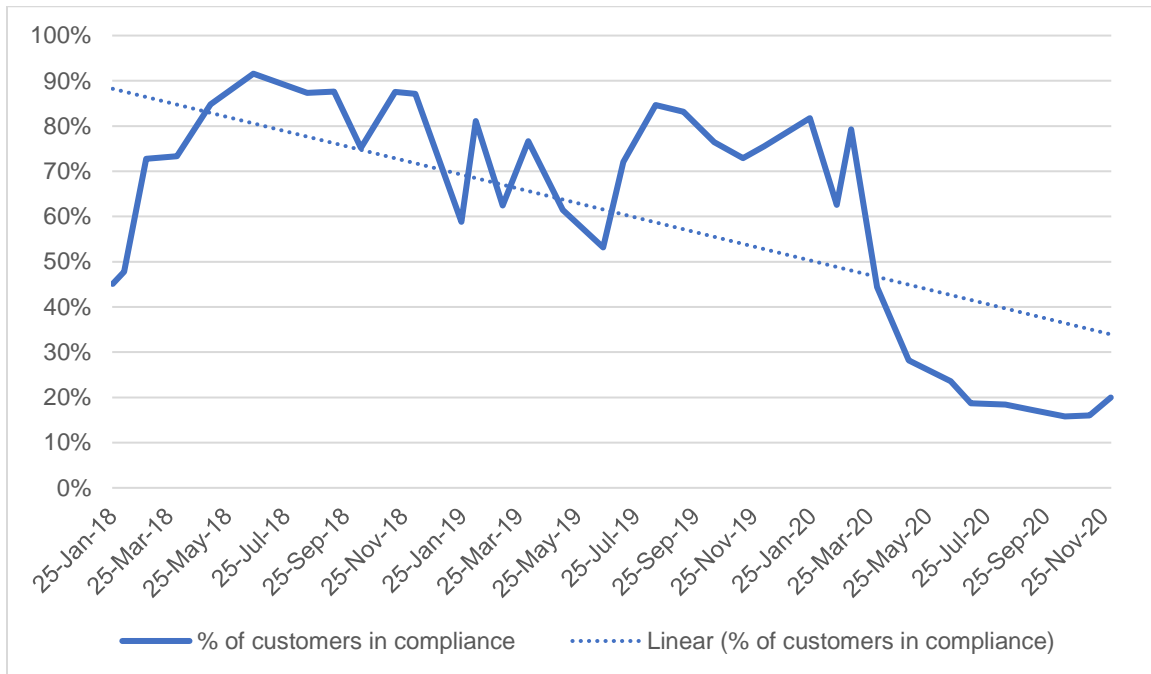
**Exhibit IX-4**  
**The York Water Company**  
**Customer Accounts Receivable Current vs. Greater than 90 Days**  
**January 2017 – December 2020**



Source: Data Requests CS-11 and CS-20

As illustrated in Exhibit IX-4, there was a significant degradation in York Water’s collections greater than 90 days past due. Between January 2017 and December 2019, accounts receivable balances greater than 90 days were generally less than \$400,000. However, during 2020 that amount increased by 200%. Although various conditions can influence accounts receivable, there is no denying the COVID-19 pandemic was a driving factor in Exhibit IX-4. The Commission’s decision to continue the moratorium on customer terminations through November 2020 had an impact on utilities like York Water. The company’s current accounts receivable balances have increased modestly over the period compared to the exponential growth of accounts receivable balances over 90 days. Furthermore, as shown in Exhibit IX-5, the percentage of customers who are complying with their payment arrangements have decreased dramatically from March through December 2020 compared to prior years (2018 and 2019).

**Exhibit IX-5**  
**The York Water Company**  
**Percentage of Customers Complying with Payment Arrangements**  
**January 2018 – December 2020**



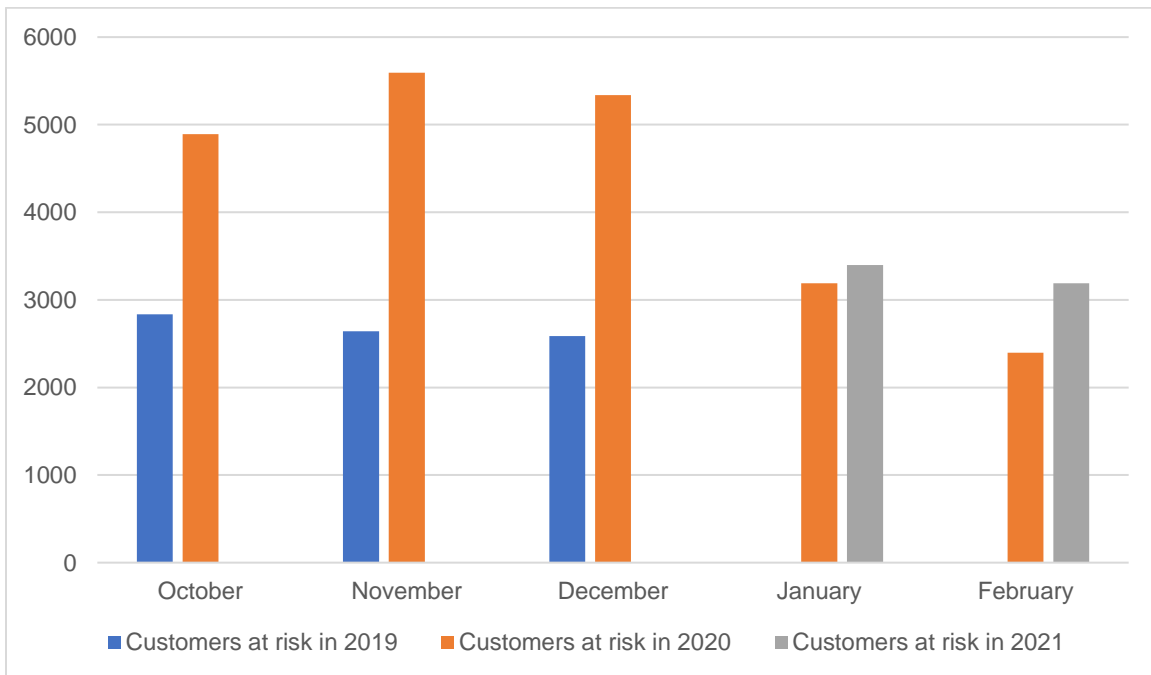
Source: Data Requests CS-12 and CG-19

At its Public Meeting on October 8, 2020, the Commission lifted this moratorium, in part, but retained some protections for certain customers based on income. The enhanced protections include: prohibiting the termination of service for low-income households (less than 300% of the Federal Poverty Level), special outreach for residential customers at risk of termination, payment arrangements for small businesses, waiver of connection/reconnection fees and late payment charges, two additional medical certifications with extensions, and flexible income verification procedures. The enhanced protections were set to expire March 31, 2021, and later reexamined by order (see Docket No. M-2020-3019244) at the Commission’s March 11, 2021 Public Meeting extending some protections to December 31, 2021. While utilities in Pennsylvania could resume terminations on November 9, 2020, York Water elected not to immediately resume terminations to afford customers time to prepare.

In 2019, York Water introduced an enhancement to its CAP program to provide funding to customers in need via community-based agencies. Throughout 2020, to reach out to customers facing economic challenges created by the pandemic, York Water posted information on its social media pages and website informing customers of the payment assistance availability of its YWC or CAP program. From 2019 through January 2021, two community-based agencies disbursed \$40,099 of the \$50,000 York Water granted towards the program. Due to the COVID-19 pandemic, the YWC program experienced significant activity in 2020 and 2021.

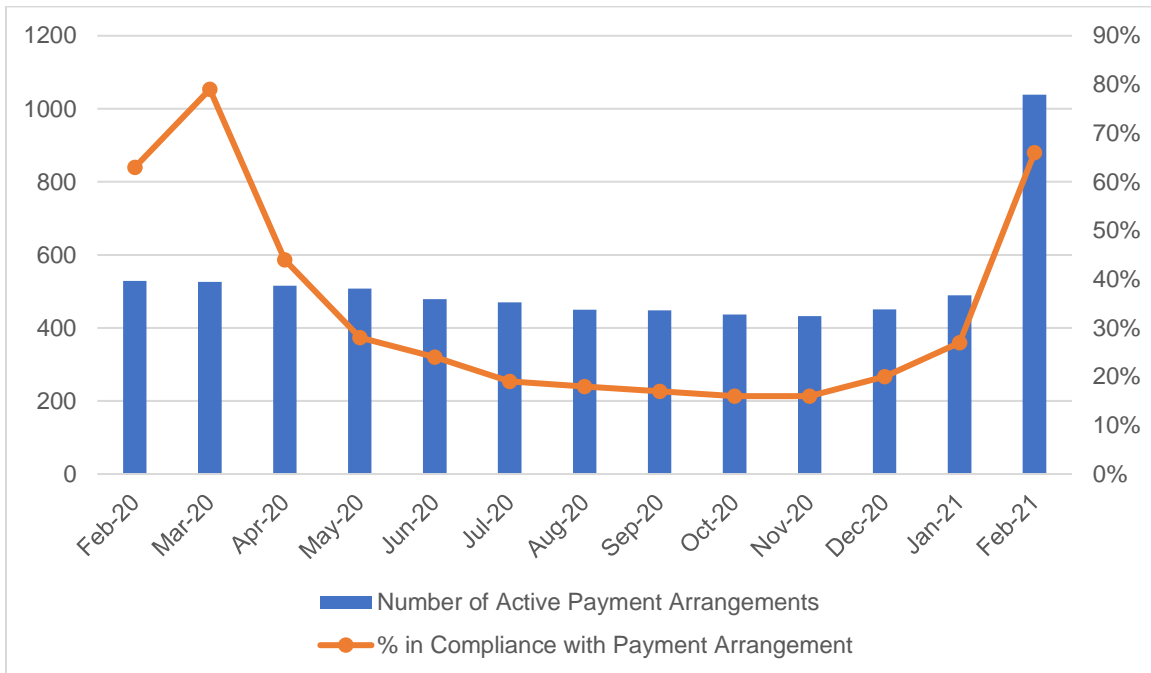
Nonetheless, as shown in Exhibit IX-6, nearly 100% more York Water customers were at risk for termination in the 4<sup>th</sup> quarter of 2020 than during the 4<sup>th</sup> quarter of 2019. When York Water resumed its termination process in January 2021, customers at risk of termination received letters informing them of such. These letters were in advance of the typical 10-day termination notice and was an additional step to afford customers additional time and notice. These customers, many of whom had not reached out to the company in months, began to contact York Water. Customers unable to pay their full outstanding balance were offered payment arrangements to pay off their arrearages over time and retain service. The result was a significant decrease in the number of customers at risk for termination in January and February, almost returning to more historical levels seen before the pandemic. This is further exemplified in Exhibit IX-7, which shows the number of payment arrangements and percentage of customers in compliance from January 2020 through February 2021. In February 2021, the number of customers with payment arrangements nearly doubled with a corresponding increase in the number of customers who are in compliance with their payment arrangements.

**Exhibit IX-6  
The York Water Company  
Residential Customers at Risk of Termination  
Select Year over Year Comparison**



Source: Data Request CG-19 and York Water's response to Docket No. M-2020-3019244

**Exhibit IX-7**  
**The York Water Company**  
**Percentage of Customers in Compliance with Payment Arrangements**  
**January and February 2021**



Source: Data Request CG-19

Nonetheless, due to the changing and uncertain environment brought about by the COVID-19 pandemic, effective and ongoing communication is critical. Customers who have never experienced financial hardship in the past may not be aware of York Water’s assistance program. Furthermore, customers who failed to qualify for assistance in the past may now qualify due to changes in circumstance. Increasing York Water’s outreach efforts can allow the greatest number of customers to maintain service, while reducing the company’s overall risk of loss due to non-payment. As highlighted in Exhibits IX-6 and IX-7, the company’s additional outreach before termination activities resumed led to a pronounced improvement in the data but will only go so far at addressing the financial burden created by the pandemic. Additional steps York Water could take include: expanding outreach by creating auto-generated mailers and/or phone calls on assistance programs after the first missed payment, streamlining access for assistance (i.e., web-based application for program), and leveraging new/existing relationships with local community-based organizations to communicate directly with financially-distressed customers. Thus, York Water should implement additional measures to communicate with distressed customers.

**Recommendation**

- 1. Continue outreach efforts to engage payment troubled customers, leverage low-income resources to mitigate the overall level of unpaid customer balances, and proactively contact customers who miss a payment.**

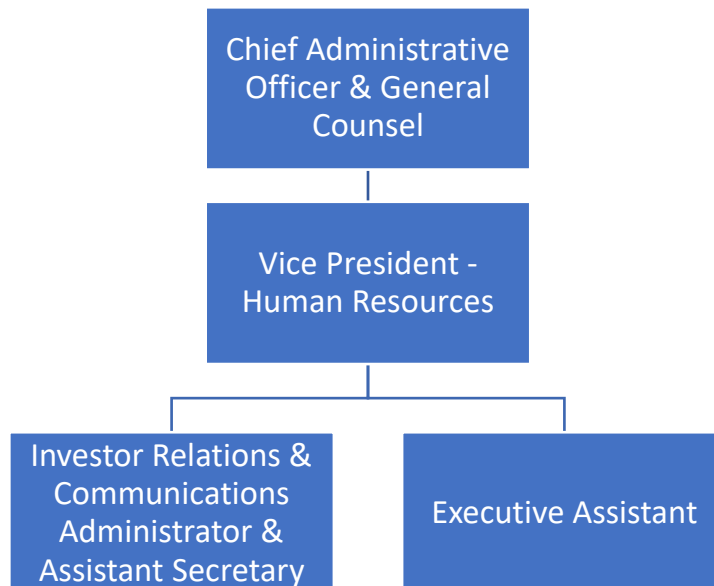
## X. HUMAN RESOURCES AND DIVERSITY

### Background

#### Human Resources

The York Water Company's (York Water or company) Human Resources (HR) Department provides recruitment and hiring, employee benefits, compensation, affirmative action, labor relations, and training services for the company. As presented in Exhibit X-1, the HR Department is comprised of three full-time employees including the Vice President (VP) of Human Resources. The VP of Human Resources oversees the Department and reports to York Water's Chief Administrative Officer (CAO) and General Counsel. Reporting to the Vice President of Human Resources are the Executive Assistant and Investor Relations & Communications Administrator & Assistant Secretary. The Executive Assistant provides administrative and clerical support for all human resource duties. The Investor Relations & Communications Administrator's primary duty is acting as a liaison between York Water and outside organizations, groups, and individuals in addition to performing administrative duties (e.g., Securities and Exchange Commission (SEC) reporting, Public Utility Commission (PUC) filings, data compilation for SEC defined insider trading, preparing written responses to new and potential stockholders' inquiries, etc.). In addition, the Investor Relations & Communications Administrator also assists the Executive Assistant in administrative and clerical duties.

**Exhibit X-1  
The York Water Company  
Human Resources Organizational Chart  
As of March 2021**



Source: Data Request GD-1

York Water utilizes Oracle Corporation's Human Resources software platform for its human resources information system (HRIS). The HRIS tracks personal data (i.e., employee name, address, phone number, etc.), employment data (i.e., date of hire, classification, compensation, etc.), and compensation data (i.e., benefit enrollment, payroll information, mandatory and voluntary deductions, leave accrual rates, etc.). The HRIS can generate standard reports (i.e., health insurance enrollment, employee stock purchase plan, 401k plan, payroll/wage reports for workers' compensation tracking, etc.) and has the capability to create ad hoc reports from any employee data point maintained within the system. York Water plans to upgrade their Oracle E-Business suite with the help of external consultants in 2021 to maximize the use of the system and increase efficiencies. Data within the HRIS is protected and can only be modified by authorized employees.

All employees are paid weekly and the payroll process is the responsibility of the Bookkeeper in the Accounting Department. The Bookkeeper uses the company's business software suite as well as Excel spreadsheets to perform payroll duties. No change to employee data can be made by the payroll process or by the Accounting Department. All modifications to the employee record are first approved by the Vice President of Human Resources before being entered into the HRIS by the Executive Assistant.

The company's strategy for succession planning at the non-executive level is to identify individuals with skills and abilities that exceed their current role. The company also promotes cross training opportunities and learning opportunities through interdepartmental collaboration. Management ensures that cross-training, mentorship, and collaboration occurs at all levels of the organization. See Chapter III – Executive Management and Organizational Structure for more information about York Water's employee development initiatives.

York Water utilizes compensation data from outside firms annually to assist in determining market rates and employee compensation, with the final decision of compensation level made by the Chief Executive Officer (CEO). The company offers a competitive benefits package with medical, dental, and vision insurance, education reimbursement, and an employee stock purchase plan. A 401k replaced the defined pension retirement plan for employees hired after July 2010. Executive level compensation is discussed within Chapter III – Executive Management and Organizational Structure.

Exhibit X-2 shows York Water's annual safety metrics compared to available OSHA statistics for the water supply industry. OSHA incidents and metrics include recordable incidents, days away from work (lost time) incidents, and DART (days away, restricted or transfer) incidents. OSHA recordable incidents are cases of illness or injury which require medical treatment beyond first aid, and may result in death, loss of consciousness, days away from work, work restriction, or transfer to another job. The company also provides their employees with a digital library that includes access to training videos, Safety Data Sheets for chemicals, etc.



**Exhibit X-2**  
**The York Water Company**  
**Annual Safety Rates**  
**For the years 2015 - October 2020**

<b>Recordable Incidence Rate</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>YTD 2020*</b>
York Water - Actual	5.22	4.42	6.22	2.63	4.32	5.49
OSHA - Average	4.7	3.2	5.4	4.3	5.1	N/A
<b>Lost Time Incidence Rate</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>YTD 2020*</b>
York Water - Actual	1.74	0	0	1.75	2.59	2.75
OSHA - Average	1.0	1.5	1.9	2.3	2.4	N/A
<b>DART Rate</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>YTD 2020*</b>
York Water - Actual	3.48	2.65	0.89	2.63	2.59	2.75
OSHA - Average	3.4	2.4	3	2.9	1.1	N/A

\* YTD 2020 data is through October.

Source: Data Request HR-6 and U.S. Bureau of Labor Statistics NAICS Code 22131

In addition to OSHA recordable rates, lost time, and days away, restrictions, or job transfers (DART), the company monitors Worker's Compensation loss runs year over year and discusses the experience modifiers that determine annual renewal rates based on claims. Experience modifiers are an objective methodology of rewarding or penalizing a business based on premium and claims. The experience modifier rate assigned to a business will be universally applied to policy pricing regardless of which insurance company quotes the coverage. All new businesses start with an experience modification rate of 1.00 because they have no prior premium or claims to merit an Experience modifier. A factor below 1.00 indicates a business with a safer work environment than a business with a higher rating. Below are York Water's experience modifiers for the previous 4 years.

**Exhibit X-3**  
**The York Water Company**  
**Annual Experience Rating Modifications**  
**For the years 2017 - 2020**

	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Experience Modifier	1.049	0.937	0.899	0.819

Source: Data Request HR-5

The Chief Operating Officer in conjunction with the VP of HR participate in monthly safety committee meetings. The committee is comprised of union, non-union,

management, and non-management personnel. Every department is represented with participants rotated yearly to ensure broad participation. Committee members main responsibilities are to engage in safety discussions/reporting and relay the information discussed at the meeting to their respective departments. Discussions cover recent or relevant reported incidents, including near misses. From there, incidents or near misses are evaluated with an emphasis on solutions and/or preventative measures.

Safety committee personnel are trained annually by a certified safety professional regarding safety incident investigations and reporting. Additional targeted training is offered to all employees based upon past incidents and/or near misses. Some of the trainings include excavation procedures, PPE, respirator use, and asbestos and hazard material handling procedures. The committee is also responsible for setting the annual safety goals. For 2020 and 2021, the goal is to have no more than four OSHA reportable incidents and four vehicle accidents. Although these stretch goals were not achieved in 2020 (as compared to OSHA recordable incidents shown in Exhibit X-2 and vehicle incidents shown in Exhibit X-3), the company consistently strives to improve safety among its employees. For example, employees were provided training regarding proper parking techniques in response to several incidents occurring when employees are backing up. The company’s past performance of vehicle accidents can be found in Exhibit X-4.

**Exhibit X-4**  
**The York Water Company**  
**Vehicle Incidents**  
**For the years 2015 - 2020**

<b>Responsibility</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>York Driver</b>	5	7	7	11	9	11
<b>Non-York Driver</b>	5	0	5	4	5	3

Source: Data Request CG-19

Diversity

York Water’s President/CEO has the ultimate responsibility for the company’s Equal Employment Opportunity (EEO) and the Affirmative Action Plan (AAP), York’s VP of HR is designated as the EEO Officer and Coordinator. The EEO Officer’s responsibilities include developing and implementing affirmative action policies and procedures and developing EEO programs such as its MWDBE vendor program where the company strives to utilize MWDBE certified vendors. In addition, York Water routinely complies with 52 Pa. Code § 69.809 by filing annual reports on diversity with the PUC.

The Pennsylvania Public Utility Commission (PUC or Commission) has encouraged utilities to proactively improve diversity in their workforce and purchasing efforts for more than two decades. In March of 1992, the Commission issued a Secretarial letter directing all jurisdictional utilities affected by Section 516 of the Public -

60 - Utility Code (i.e., utilities whose plant-in-service exceeds \$10 million) to file quarterly diversity status reports with the Commission. In May of 1994, the Commission issued an Order directing Section 516 utilities to file diversity status reports semi-annually rather than quarterly, to submit EEO plans annually, and to file diversity procurement data. In February 1995, the Commission adopted Chapter 69 regulations which encouraged utilities to include diversity efforts as a component of their business strategy. Later, in March of 1997, the Commission's diversity filing requirements changed from semi-annual to annual. The Commission is currently reviewing its diversity requirements by a notice of proposed rulemaking order at Docket L-2020-3017284 at its December 17, 2020 Public Meeting.

### **Findings and Conclusions**

Our examination of the Human Resources, Safety and Diversity functions included a review of the company's policies and procedures, compensation and benefits, employee training, safety programs, PUC diversity filings, communication methods, management philosophy, and accountability. Based on our review, it appears that proper controls are in place and that the Human Resources and Diversity functions are being performed in a satisfactory manner.

### **Recommendations**

**None**

## **XI. ACKNOWLEDGEMENTS**

We wish to express our appreciation for the cooperation and assistance given to us during this Management and Operations Audit by the officers and staff of The York Water Company.

This audit was conducted by Krystle Daugherty, Michael Savage, and Holly Gilliland of the Management Audit Staff of the Bureau of Audits.

## **XII. APPENDICES**

Appendix A      Financial and Operating Data and Statistics

**The York Water Company**  
**Financial and Operating Data and Statistics**

**Appendix A**  
**Page 1 of 2**

<b>Operating Statistics</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Compound Growth</b>
Gross Utility Plant	\$337,112,088	\$359,057,004	\$374,013,750	\$390,949,432	\$419,352,297	5.6%
Depreciation & Amortization	\$67,611,546	\$72,240,231	\$76,920,413	\$82,175,393	\$87,378,972	6.6%
Net Utility Plant	\$269,500,542	\$286,816,773	\$297,093,337	\$308,774,039	\$331,973,325	5.4%
<b>Total Water Sales &amp; Other Revenue</b>						
Residential	\$29,759,907	\$30,347,447	\$31,302,819	\$32,237,450	\$33,965,053	3.4%
Commercial	8,026,540	7,895,910	7,931,984	\$8,286,644	\$7,992,813	-0.1%
Industrial	3,791,449	3,775,791	3,965,115	\$3,946,289	\$3,840,718	0.3%
Public	724,206	715,031	734,936	\$770,366	\$660,736	-2.3%
Other	0	0	0	0	0	0.0%
Public Fire Protection	1,286,392	1,302,774	1,309,854	1,324,127	1,354,938	1.3%
Private Fire Protection	1,638,122	1,665,328	1,723,656	1,770,194	1,836,098	2.9%
Other Sales to Public	0	0	0	0	0	0.0%
<b>Total Water Sales</b>	<b>\$45,226,616</b>	<b>\$45,702,281</b>	<b>\$46,968,364</b>	<b>\$48,335,070</b>	<b>\$49,650,356</b>	<b>2.4%</b>
Other Water Revenues	\$1,964,202	\$1,856,490	\$308,992	\$1,672,503	\$2,150,617	2.3%
<b>Total Water Sales &amp; Other Revenues</b>	<b>\$47,190,818</b>	<b>\$47,558,771</b>	<b>\$47,277,356</b>	<b>\$50,007,573</b>	<b>\$51,800,973</b>	<b>2.4%</b>
<b>Gallons Sold</b>						
Residential	2,903,454	2,859,857	2,875,801	2,891,761	3,023,208	1.0%
Commercial	1,657,341	1,535,229	1,497,438	1,531,837	1,430,453	-3.6%
Industrial	935,557	907,934	947,300	903,791	855,507	-2.2%
Public	161,293	154,474	152,764	158,845	124,271	-6.3%
Other	0	0	0	0	0	0.0%
Private Fire	12,934	14,090	7,242	9,758	10,583	-4.9%
Public Fire	0	0	0	0	0	0.0%
Sales for Resale	3,137,775	3,072,074	3,084,094	3,113,378	3,243,398	0.8%
<b>Total Water Sales</b>	<b>8,808,354</b>	<b>8,543,658</b>	<b>8,564,639</b>	<b>8,609,370</b>	<b>8,687,420</b>	<b>-0.3%</b>
Total Water Delivered	6,880,086,000	6,707,867,000	7,103,162,000	7,357,390,000	7,296,000,000	1.5%
Total Sales	5,904,899,828	5,683,800,855	5,688,838,213	5,717,609,115	5,664,211,731	-1.0%
Unaccounted for Water	839,750,943	899,230,324	1,212,027,684	1,069,144,900	1,085,838,961	6.6%
Percentage of Unaccounted for Water	12.2%	13.4%	17.1%	14.5%	14.9%	5.1%
<b>Customers (Average):</b>						
<b>Unmetered Sales</b>						
Public Fire	-	-	-	-	-	
Private Fire	-	-	-	-	-	
<b>Metered Sales</b>						
Residential	59,892	60,791	61,533	62,293	63,122	1.3%
Commercial	4,237	4,258	4,272	4,290	4,346	0.6%
Industrial	303	303	302	295	300	-0.2%
Public	252	252	253	253	255	0.3%
Private Fire	1,047	1,058	1,067	1,090	1,133	2.0%
Public Fire	194	199	214	238	241	5.6%
Sales for Resale	4	4	4	4	4	0.0%
<b>Total customers</b>	<b>65,928</b>	<b>66,864</b>	<b>67,644</b>	<b>68,463</b>	<b>69,401</b>	<b>1.3%</b>
<b>Employees (Average)</b>	<b>107</b>	<b>103</b>	<b>104</b>	<b>105</b>	<b>104</b>	<b>-0.6%</b>

Source: PUC Annual Reports

**The York Water Company**  
**Financial and Operating Data and Statistics**

<b>Water Operation &amp; Maintenance Expenses</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Compound Growth</b>
Salaries and Wages	\$6,343,374	\$6,351,758	\$6,506,302	\$6,886,407	\$6,800,536	1.8%
Employee Pensions & Benefits	\$1,579,765	\$1,708,358	\$1,622,138	\$1,624,730	\$1,542,137	-0.6%
Purchased Water	\$0	\$0	\$0	\$0	\$0	0.0%
Purchased Power	\$972,132	\$977,409	\$1,015,290	\$1,078,891	\$1,217,509	5.8%
Fuel for Power Production	\$28,553	\$26,254	\$23,840	\$18,270	\$18,723	-10.0%
Chemicals	\$574,716	\$491,958	\$535,188	\$561,511	\$637,242	2.6%
Materials & Supplies	\$653,215	\$662,096	\$773,452	\$954,891	\$1,015,954	11.7%
Contractual Services	\$1,853,349	\$1,894,302	\$2,186,292	\$2,543,360	\$2,723,285	10.1%
Rent & Transportation Expenses	\$465,379	\$507,872	\$579,167	\$605,587	\$516,852	2.7%
Insurance	\$784,102	\$787,493	\$811,590	\$837,932	\$894,421	3.3%
Advertising Expenses	\$0	\$0	\$0	\$0	\$0	0.0%
Regulatory Expenses	\$58,060	\$3,000	\$1,250	\$89,678	\$105,704	16.2%
Bad Debt Expenses	\$291,108	\$290,897	\$250,884	\$258,542	\$613,555	20.5%
Miscellaneous Expenses	\$3,101,133	\$3,049,978	\$3,110,052	\$3,113,830	\$3,176,116	0.6%
<b>Total Water Operation &amp; Maintenance Expenses</b>	<b>\$16,704,886</b>	<b>\$16,751,375</b>	<b>\$17,415,445</b>	<b>\$18,573,629</b>	<b>\$19,262,034</b>	<b>3.6%</b>

Source: PUC Annual Reports



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