



**Office of the Washington State Auditor  
Pat McCarthy**

September 3, 2020

Mayor and City Council  
City of Tacoma  
Tacoma, Washington

**Contracted CPA Firm's Audit Report on Financial Statements**

We have reviewed the audit report issued by a certified public accounting (CPA) firm on the financial statements of the Water Division, (doing business as Tacoma Water), a division of the City of Tacoma's Department of Public Utilities, for the fiscal year ended December 31, 2019. The City contracted with the CPA firm for this audit and requested that we accept it in lieu of performing our own audit.

Based on this review, we have accepted this report in lieu of the audit required by RCW 43.09.260. The Office of the Washington State Auditor did not audit the accompanying financial statements and, accordingly, we do not express an opinion on those financial statements.

This report is being published on the Office of the Washington State Auditor website as a matter of public record.

Sincerely,

Pat McCarthy  
State Auditor  
Olympia, WA

***Americans with Disabilities***

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# 20 Tacoma Water 19 Annual Financial Report

FOR THE FISCAL YEAR ENDING  
**DECEMBER 31, 2019**  
PREPARED BY THE FINANCE DEPARTMENT

**TACOMA  WATER**  
TACOMA PUBLIC UTILITIES

## **Report of Independent Auditors on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards***

The Chair and Members of the Public Utility Board  
City of Tacoma, Department of Public Utilities, Water Division  
Tacoma, Washington

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of City of Tacoma, Department of Public Utilities, Water Division (the Division), which comprise the statements of net position as of December 31, 2019, and the related statements of revenue, expenses, and changes in net position, and cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated May 18, 2020.

### **Internal Control over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the Division's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Division's internal control. Accordingly, we do not express an opinion on the effectiveness of the Division's internal control.

*A deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

## **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the City of Tacoma, Department of Public Utilities, Water Division's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

## **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

A handwritten signature in dark ink, appearing to read "Mess Adams" followed by a stylized monogram or initials.

Tacoma, Washington  
May 18, 2020



# Public Utility Board

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Chair

BRYAN FLINT

Vice-Chair

MARK PATTERSON

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Finance Director

DEPARTMENT OF PUBLIC UTILITIES

CITY OF TACOMA

City of Tacoma, Washington  
Department of Public Utilities, Water Division  
Doing Business as

# Tacoma Water

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# Financial Data

## **Report of Independent Auditors**

The Chair and Members of the Public Utility Board  
City of Tacoma, Department of Public Utilities, Water Division  
Tacoma, Washington

### **Report on the Financial Statements**

We have audited the accompanying financial statements of City of Tacoma, Department of Public Utilities, Water Division (the Division), which comprise the statements of net position as of December 31, 2019 and 2018, and the related statements of revenue, expenses, and changes in net position, and cash flows for the years then ended, and the related notes to the financial statements.

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

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

### ***Auditor's Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America, and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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



## ***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of City of Tacoma, Department of Public Utilities, Water Division as of December 31, 2019 and 2018, and the results of its operations and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

## ***Other Matters***

### ***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that the accompanying management's discussion and analysis, Schedule of Proportionate Share of the Net Pension Liability Last 10 Years, Schedule of Contributions Last 10 Fiscal Years, and Schedule of Proportionate Share of the Collective OPEB Last 10 Years, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### ***Other Information***

Our audit was conducted for the purpose of forming an opinion on the financial statements taken as a whole. The statistical data and the superintendent's report are presented for purposes of additional analysis, and are not a required part of the financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on it.

## ***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated May 18, 2020, on our consideration of the City of Tacoma, Department of Public Utilities, Water Division's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Division's internal control over financial reporting and compliance.



Tacoma, Washington  
May 18, 2020

# Management Discussion and Analysis

The following discussion and analysis of Tacoma Water's (Utility) financial performance provides an overview of the financial activities for the years ended December 31, 2019, 2018 and 2017. This discussion and analysis is designed to assist the reader in focusing on the significant financial issues, provide an overview of the financial activities, and identify changes in the financial position. We encourage readers to consider the information presented here in conjunction with the financial statements and the accompanying notes taken as a whole.

The management of the Finance Department of the City of Tacoma is responsible for preparing the accompanying financial statements and for their integrity. The statements were prepared in accordance with generally accepted accounting principles (GAAP) in the United States of America, applied on a consistent basis, and include amounts that are based on management's best estimates and judgments.

The basic financial statements, presented on a comparative basis for the years ended December 31, 2019 and 2018, include Statements of Net Position, Statements of Revenues, Expenses and Changes in Net Position, and Statements of Cash Flows. The Statements of Net Position present information on all of Tacoma Water's assets, deferred outflows of resources, liabilities, and deferred inflows of resources with the difference being reported as net position. The Statements of Revenues, Expenses and Changes in Net Position report all of the revenues and expenses during the time periods indicated. The Statements of Cash Flows provide information on cash receipts and disbursements during the year and report changes in cash resulting from operating, non-capital financing, capital and related financing, and investing activities.

The Notes to Financial Statements provide additional disclosures that are essential to a full understanding of the data provided in the financial statements. They are an integral part of Tacoma Water's presentation of financial position, results of operations and changes in cash flows.

## Financial Highlights

- The net position of Tacoma Water was \$602.8 million in 2019, \$581.7 million in 2018, and \$556.8 million in 2017. Of these amounts, \$71.2 million in 2019, \$61.7 million in 2018, and \$58.2 million in 2017 is reported as unrestricted net position and is available to finance day-to-day operations without constraints established by debt covenants or other legal requirements.
- Tacoma Water's total net positions increased by \$21.1 (3.6%) million in 2019, \$24.9 (4.5%) million in 2018, and \$7.2 (1.3%) million in 2017.
- Operating revenues were \$102.5 million in 2019, an increase of \$604,000 (0.6%). Operating revenues were \$101.9 million in 2018, an increase of \$7.3 million (7.7%) compared to 2017, which was primarily due to an average rate increase of 4.0% and an increase in consumption.
- In 2019, Tacoma Water's net utility plant of \$874.7 represented an increase of \$3.7 million (0.4%) compared to the 2018 \$871.0 million balance. This is primarily due to a net increase of \$22.4 million in plant in service offset by an increase in accumulated depreciation of \$22.7 million and an increase in construction work in progress of \$3.9 million. In 2018, Tacoma Water's net utility plant of \$871.0 million represented a decrease of \$2.5 million (0.3%) compared to \$873.5 million in 2017. This is primarily due to a net increase of \$23.8 million in plant in service offset by an increase in accumulated depreciation of \$21.9 million and a decrease in construction work in progress of \$4.4 million.

## Overview of the Financial Statements

Tacoma Water reported net operating income of \$21.7, \$24.7, and \$16.9 million in 2019, 2018, and 2017 respectively. In 2019, operating revenues increased by \$604,000 and operating expenses increased by \$3.5 million. For 2018, operating revenues increased by \$7.3 million and operating expenses decreased by \$0.5 million.

The following tables highlight Tacoma Water's past three years' operating results and gallons billed.

### Operating Results

(In thousands)

Category	2019	2018	2017 (As Restated)	19/18	18/17
				Increase (Decrease)	Increase (Decrease)
Operating Revenues	\$ 102,545	\$ 101,941	\$ 94,644	\$ 604	\$ 7,297
Operating Expenses	80,823	77,284	77,736	3,539	(452)
Net Operating Income	21,722	24,657	16,908	(2,935)	7,749
Net Non-Operating Expenses	(9,009)	(12,178)	(15,342)	3,169	3,164
Capital Contributions	12,776	16,441	9,139	(3,665)	7,302
Federal BAB Subsidies	3,609	3,596	3,582	13	14
Transfers	(8,020)	(7,625)	(7,093)	(395)	(532)
Change in Net Position	\$ 21,078	\$ 24,891	\$ 7,194	\$ (3,813)	\$ 17,697

### Gallons Billed

(In millions)

Type of Customer	2019	2018	2017	19/18	18/17
				Increase (Decrease)	Increase (Decrease)
Residential	8,250	8,470	8,251	(220)	219
Commercial & Industrial	9,079	9,170	8,838	(91)	332
Wholesale	889	886	936	3	(50)
Total	18,218	18,526	18,025	(308)	501

## Net Position

Net position may serve over time as a useful indicator of an entity's financial position. The analysis highlights net position for the last three years.

### Statements of Net Position (In thousands)

Description	2019	2018	2017 (As Restated)	19/18 Increase (Decrease)	18/17 Increase (Decrease)
Net Utility & Non-Utility Plant	\$ 875,153	\$ 871,501	\$ 874,012	\$ 3,652	\$ (2,511)
Current & Other Assets	242,004	244,134	229,630	(2,130)	14,504
Total Assets	1,117,157	1,115,635	1,103,642	1,522	11,993
Deferred Outflows	13,609	5,882	10,114	7,727	(4,232)
Total Assets & Deferred Outflows	\$ 1,130,766	\$ 1,121,517	\$ 1,113,756	\$ 9,249	\$ 7,761
Net Position:					
Net Investment in Capital Assets	\$ 457,157	\$ 449,840	\$ 445,995	\$ 7,317	\$ 3,845
Restricted for:					
Water Capital and Sys Dev Chg	71,829	64,770	50,149	7,059	14,621
Debt Service Funds	2,644	1,995	2,506	649	(511)
Net Pension Asset	-	3,438	-	(3,438)	3,438
Unrestricted	71,187	61,695	58,196	9,492	3,499
Total Net Position	602,817	581,738	556,846	21,079	24,892
Long-Term Debt	431,270	447,563	463,619	(16,293)	(16,056)
Current & Other LT Liabilities	59,384	50,734	55,931	8,650	(5,197)
Total Liabilities	490,654	498,297	519,550	(7,643)	(21,253)
Deferred Inflows	37,295	41,482	37,360	(4,187)	4,122
Total Net Position, Liabilities & Deferred Inflows	\$ 1,130,766	\$ 1,121,517	\$ 1,113,756	\$ 9,249	\$ 7,761

## Revenues

Tacoma Water's operating revenues were \$102.5 million in 2019, an increase of \$603,000 (0.6%) compared to 2018. Sales of water increased in 2019 by a net of \$792,000 of which \$3.2 million is due to an average service rate increase of 2.5% effective January 1, 2019 and a decrease in usage of \$2.4 million. This is offset by a decrease in other operating revenues of \$669,000 and an increase in contract resource obligations of \$480,000 from Regional Water Second Supply (RWSS) Partners to reimburse Tacoma Water for O&M related expenses.

Tacoma Water's operating revenues were \$101.9 million in 2018, an increase of \$7.3 million (7.7%) compared to 2017. Sales of water increased in 2018 by a net of \$6.0 million of which \$3.8 million is due to an average service rate increase of 4.0% effective January 1, 2018 and an increase in usage of \$2.2 million. This is offset by a decrease in contract resource obligations of \$0.2 million from Regional Water Second Supply (RWSS) Partners to reimburse Tacoma Water for O&M related expenses.

The following table highlights water sales by type of customer for 2019, 2018\* and 2017.

<b>Water Sales</b> (In thousands)					
Type of Customer	2019	2018*	2017	19/18 Increase (Decrease)	18/17 Increase (Decrease)
Residential & Domestic	\$60,848	\$59,625	\$52,540	\$ 1,223	\$ 7,085
Commercial & Industrial	19,836	19,225	17,409	611	1,816
Special Rate	6,883	6,874	6,322	9	552
Wholesale	2,787	3,253	3,069	(466)	184
Unbilled Revenue	(112)	473	660	(585)	(187)
Total	<u>\$90,242</u>	<u>\$89,450</u>	<u>\$80,000</u>	<u>\$ 792</u>	<u>\$ 9,450</u>

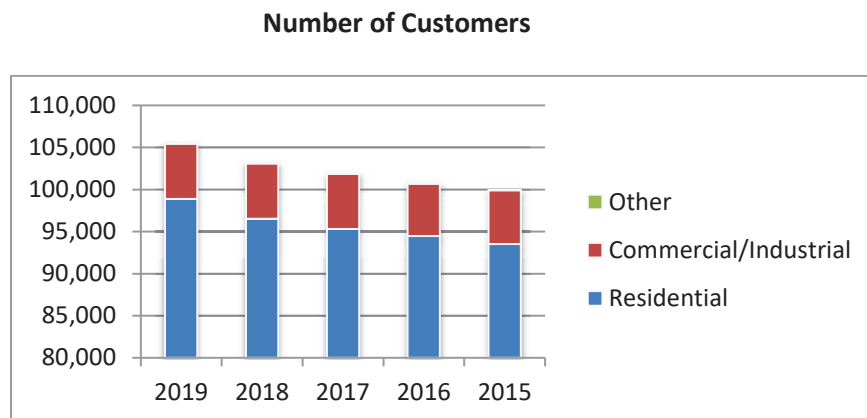
\* \$3,403 was reclassified from Other Operating Revenues to Sales of Water of which, \$3,234 was reclassified to Residential and \$169 was reclassified to Commercial & Industrial.

Approximately 67.4%, 66.7% and 65.7% of water sales were to residential and domestic customers in 2019, 2018, and 2017 respectively. Commercial and industrial sales were 22.0%, 21.5%, and 21.8% total sales for each year. Special rate sales were 7.6%, 7.7%, and 7.9% of sales respectively.

### Customers

Over the last five years, the overall number of customers has remained relatively stable. In 2019, 2018, and 2017 93.6% of all customers were residential while 6.4% were commercial and industrial.

Below is a graphical representation of the number of customers by customer type for the last 5 years.

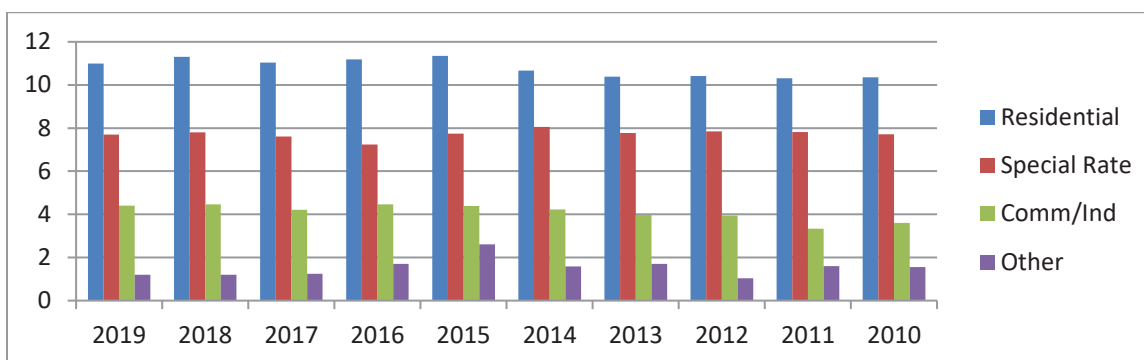


### Water Users

Tacoma Water generates the majority of its revenues from its residential and domestic customer base. Consumption is measured in 100 cubic feet (CCF). In the years 2019, 2018, and 2017 residential customers used 11.0 million CCF (45.3%), 11.3 million CCF (45.7%) and 11.0 million CCF (45.8%) of total consumption respectively. Special Rate customers used approximately 7.7 million CCF (31.8%), 7.8 million CCF (31.5%) and 7.6 million CCF (31.6%) respectively. Commercial and industrial customers used 4.4 million CCF (18.1%), 4.5 million CCF (18.0%) and 4.2 million CCF (17.4%) respectively. The remaining 1.2 million CCF (4.8%), 1.2 million CCF (4.8%) and 1.3 million CCF (5.2%) respectively was consumed by other customers.

Below is a graphical representation of the annual water usage by customer type for the last 10 years.

**Annual Water Usage**  
(In millions of CCF)



## Expenses

### 2019 Compared to 2018

In 2019, operating expenses increased \$3.5 million (4.6%), compared to a decrease of \$0.5 million (0.6%) in 2018.

Operations expenses increased \$3.0 million. Pension expense attributed to \$2.4 million of the increase. Salaries and Wages increased \$532,000. Fleet maintenance costs increased \$391,000 offset with a decrease in contributions to the fleet replacement fund of \$564,000. The remaining variance was spread across multiple functional accounts and not attributed to a specific event.

### 2018 Compared to 2017

In 2018, operating expenses decreased \$0.5 million (0.6%), compared to an increase of \$2.4 million (3.2%) in 2017.

Contributing to the decrease in operating expense related to adjustments from pension items causing a decrease of \$5.4 million allocated across the Division in labor expense as follows: Source \$1.1 million, Treatment \$0.8 million, Transmission \$0.2 million, Distribution \$2.5 million, and Admin & General \$0.8 million.

While overall expenses decreased, professional services increased \$1.6 million due to the completion of the Integrated Resource Plan (IRP) as well as various condition assessments and the completion of the Puyallup River Bridge Crossing. The increase affected Source of Supply by \$0.7 million, Transmission by \$0.2 million, Distribution by \$0.2 million, and Admin & General by \$0.5 million.

Depreciation expense increased by \$2.1 million (8.7%) in 2018 due to a net increase in depreciable assets of \$24.4 million during 2017.



The following table highlights Tacoma Water's operating expenses for 2019 – 2017.

<b>Operating Expenses</b> (In thousands)					
Category	2019	2018	2017 (As Restated)	19/18 Increase (Decrease)	18/17 Increase (Decrease)
Operations Expense					
Power Pumping Expense	\$ 803	\$ 598	\$ 558	\$ 205	\$ 40
Transmission & Storage Expense	2,153	2,493	2,633	(340)	(140)
Distribution Expense	15,462	12,305	14,691	3,157	(2,386)
Total Operations Expense	18,418	15,396	17,882	3,022	(2,486)
Production Expense					
Source of Supply	7,351	7,878	7,657	(527)	221
Water Treatment	7,472	6,548	7,144	924	(596)
Total Production Expense	14,823	14,426	14,801	397	(375)
Administrative and General					
Customer Accounting & Service	5,304	5,240	5,017	64	223
Other Administrative & General	11,793	10,830	11,222	963	(392)
Total Administrative and General	17,097	16,070	16,239	1,027	(169)
Depreciation	25,296	26,118	24,038	(822)	2,080
Taxes	5,189	5,274	4,776	(85)	498
Total Operating Expenses	\$ 80,823	\$ 77,284	\$ 77,736	\$ 3,539	\$ (452)

### Non-Operating Revenues

Interest income increased \$3.5 million. The share of earnings is based on daily cash balances and the interest rates have been higher compared to 2018.

Other income decreased \$1.4 million. In 2018 there was a \$2.8 million sale of land offset with an increase in timber sales of \$1.6 million in 2019. The remaining variance was not attributable to a specific event.

### Capital Assets

Tacoma Water invests in a broad range of utility assets and at the end of 2019 had \$875.0 million in net utility plant, an increase of \$3.7 million from 2018.

Plant in service increased \$22.4 million. The increase is primarily due to the increase of \$14.2 million in cast iron main additions and replacements, \$2.9 million in services, pipes and accessories, \$2.2 million in meters, \$1.1 million in hydrants, and \$1.5 million in structure and improvements for pipeline number 4 at Swan Creek Crossing. Also in 2019, 10.2 net miles of water main were added or replaced and construction was completed on 25 private contracts resulting in 10.5 net miles.

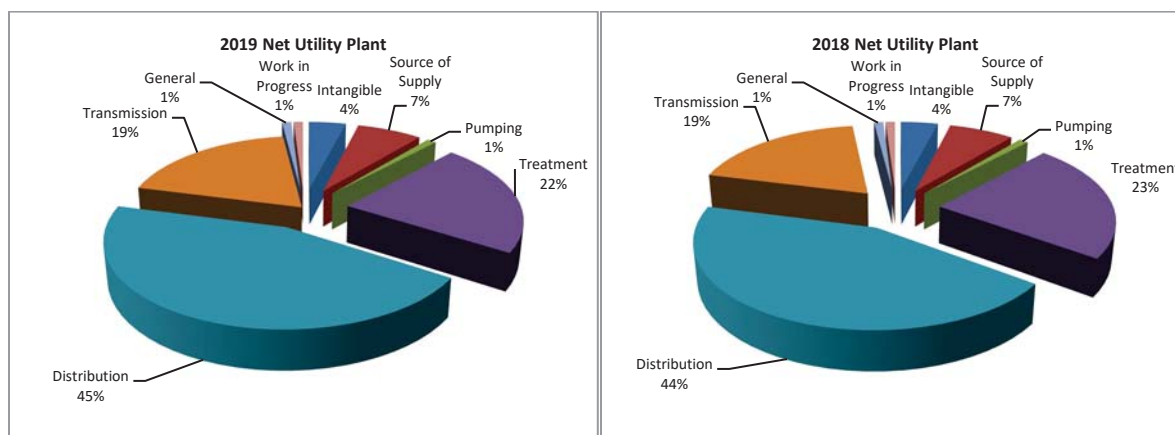
At the end of 2018, Tacoma Water had \$871.0 million in net utility plant, a decrease of \$2.5 million compared to 2017. Plant in Service increased \$23.8 million. This increase is primarily due to the increase of \$12.0 million in cast iron main additions and replacements, \$3.8 million in services, pipes and accessories, \$2.7 million in meters, \$1.4 million in hydrants, \$1.5 million in the permanent decant facility, and \$1.0 million in structure and improvements for pipeline number 1 at Deep Creek. Also in 2018, 10.6 net miles of water main were added or replaced and construction was completed on 27 private contracts resulting in 10.9 net miles.

The following table summarizes Tacoma Water's capital assets, net of accumulated depreciation, for 2017 – 2019.

**Capital Assets, Net of Accumulated Depreciation**  
(In thousands)

				19/18 Increase (Decrease)	18/17 Increase (Decrease)
Net Utility Plant	2019	2018	2017		
Intangible Plant	\$ 37,567	\$ 37,358	\$ 36,922	\$ 209	\$ 436
Source of Supply Plant	56,111	57,048	58,872	(937)	(1,824)
Pumping Plant	5,323	5,488	5,362	(165)	126
Water Treatment Plant	191,946	200,493	210,052	(8,547)	(9,559)
Transmission Plant	169,458	170,388	172,672	(930)	(2,284)
Distribution Plant	390,998	379,876	365,830	11,122	14,046
General Plant	11,799	12,834	11,907	(1,035)	927
Construction Work In Progress	11,458	7,523	11,902	3,935	(4,379)
Total	\$ 874,660	\$ 871,008	\$ 873,519	\$ 3,652	\$ (2,511)

The following graphs provide a visual presentation of the allocation of Tacoma Water's capital investments in 2019 and 2018.



Additional information on capital assets can be found in Note 4 of the financial statements.

### Debt Administration

At December 31, 2019 Tacoma Water had outstanding revenue bond obligations of \$367.5 million (net of unamortized bond premiums), a decrease of \$9.0 million compared to 2018. As of year-end 2018, the Utility had outstanding revenue bond obligations of \$376.5 million (net of unamortized bond premiums), a decrease of \$8.0 million compared to 2017.

All outstanding bonds are rated Aa2 by Moody's Investors Service and AA by Standard & Poor's.

Tacoma Water is required by bond covenants to maintain a debt service coverage ratio of 1.25 for principal and interest. Debt service coverage ratios (excluding RWSS) were 2.91, 3.24, and 2.33 in 2019, 2018 and 2017 respectively.

At the end of 2019, Tacoma Water had an outstanding State loan balance of \$78.7 million compared to \$85.6 million in 2018 and \$92.6 million in 2017.

Additional information on Tacoma Water's long-term debt can be found in Note 5 of the financial statements and in the supplementary statistical data.

## **Summary**

The management of the Finance Department of the City of Tacoma is responsible for preparing the accompanying financial statements and for their integrity. We prepared the financial statements according to GAAP in the United States of America, and they fairly portray Tacoma Water's financial position and operating results. The Notes to Financial Statements are an integral part of the basic financial statements and provide additional financial information.

The financial statements have been audited by Moss Adams LLP. We have made available to them all pertinent information necessary to complete the audit.

Management considers and takes appropriate action on audit recommendations. Management has established and maintains a system of internal controls which includes organizational, administrative and accounting processes. These controls provide reasonable assurance that records and reports are complete and reliable, that assets are used appropriately and that business transactions are carried out as authorized.

## **Request for Information**

Water financial statements are designed to provide a general overview of the Division's finances, as well as to demonstrate the Division's accountability to its customers, investors, creditors, and other interested parties. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to City of Tacoma, Finance Department, 747 Market Street, Room 132, Tacoma, WA 98402-2773.

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# Financial Statements

City of Tacoma, Washington  
Department of Public Utilities  
Tacoma Water

Statements of Net Position

	DECEMBER 31,	
	2019	2018
<b>ASSETS AND DEFERRED OUTFLOWS</b>		
<b>UTILITY PLANT</b>		
In Service, at Original Cost	\$1,144,604,458	\$1,122,191,727
Less - Accumulated Depreciation	(281,402,926)	(258,706,369)
Total	863,201,532	863,485,358
Construction Work In Progress	11,458,149	7,523,075
Net Utility Plant	874,659,681	871,008,433
<b>NON-UTILITY PROPERTY</b>	492,963	492,963
<b>SPECIAL FUNDS</b>		
Construction Funds	11,631,800	24,023,847
Debt Service Funds	4,410,284	3,829,716
Bond Reserve Funds	22,117,189	22,001,861
System Development Charge Fund	73,294,466	68,588,649
Other Cash & Equity in Pooled Investments	43,548,980	41,560,872
Total Special Funds	155,002,719	160,004,945
<b>CURRENT ASSETS</b>		
Operating Funds Cash and Equity in		
Pooled Investments	68,315,838	62,263,679
Accounts Receivable	5,548,749	5,677,615
(Net of Allowance for Doubtful Accounts		
of \$401,319 in 2019 and \$235,119 in 2018)		
BABs Interest Subsidies Receivable	301,180	300,223
Accrued Unbilled Revenues	5,818,438	5,930,220
Materials and Supplies	2,780,929	2,469,505
Interfund Receivable	-	756,845
Prepayments	2,177,545	2,061,872
Total Current Assets	84,942,679	79,459,959
<b>OTHER ASSETS</b>		
Regulatory Asset-Surcharges	2,058,552	1,230,816
Net Pension Asset	-	3,438,481
Total Other Assets	2,058,552	4,669,297
<b>TOTAL ASSETS</b>	1,117,156,594	1,115,635,597
<b>DEFERRED OUTFLOWS OF RESOURCES</b>		
Unamortized Losses on Refunding Bonds	988,939	1,176,183
Deferred Outflows for Pensions	12,149,265	4,409,587
Deferred Outflows for OPEB	471,177	295,709
Total Deferred Outflows of Resources	13,609,381	5,881,479
<b>TOTAL ASSETS AND DEFERRED OUTFLOWS</b>	<u>\$1,130,765,975</u>	<u>\$1,121,517,076</u>

*The accompanying notes are an integral part of these financial statements*



	DECEMBER 31,	
NET POSITION, LIABILITIES AND DEFERRED INFLOWS	2019	2018
<b>NET POSITION</b>		
Net Investment in Capital Assets	\$457,157,165	\$449,840,004
Restricted for:		
Water Capital and System Development Charge	71,828,854	64,770,212
Debt Service Funds	2,644,067	1,995,011
Net Pension Asset	-	3,438,481
Unrestricted	71,186,476	61,694,649
Total Net Position	602,816,562	581,738,357
<b>LONG-TERM DEBT</b>		
Revenue Bonds	359,501,868	368,866,796
Public Works Trust Fund Loans	14,617,694	17,314,465
Drinking Water State Revolving Fund Loan	57,150,308	61,381,554
Total Long-Term Debt	431,269,870	447,562,815
<b>CURRENT LIABILITIES</b>		
Current Maturities of Long-Term Debt	14,878,017	14,538,017
Current Maturities of Long-Term Liabilities	172,616	176,932
Accrued Taxes	1,675,031	1,819,063
Accrued Expenses and Contracts Payable	1,333,747	1,952,946
Salaries, Wages and Fringe Benefits Payable	909,860	800,231
Interest Payable	1,766,217	1,834,705
Customers' Deposits	352,101	343,367
Interfund Payables	-	1,565,741
Total Current Liabilities	21,087,589	23,031,002
<b>LONG-TERM LIABILITIES</b>		
Muckleshoot Agreements	6,412,903	6,585,519
Customer Advances for Construction	7,307,036	6,779,253
Unearned Revenue	7,515,125	7,270,183
Long-Term Accrued Compensated Absences	2,136,217	2,197,439
Net Pension Liability	10,264,957	-
Net OPEB Liability	3,565,886	3,780,897
Other Long-Term Liabilities	1,095,022	1,089,901
Total Long-Term Liabilities	38,297,146	27,703,192
<b>TOTAL LIABILITIES</b>	490,654,605	498,297,009
<b>DEFERRED INFLOWS OF RESOURCES</b>		
Rate Stabilization	35,575,447	35,575,447
Deferred Inflows for Pensions	1,348,807	5,853,098
Deferred Inflows for OPEB	370,554	53,165
Total Deferred Inflows of Resources	37,294,808	41,481,710
<b>TOTAL NET POSITION, LIABILITIES, AND DEFERRED INFLOWS</b>	\$1,130,765,975	\$1,121,517,076

City of Tacoma, Washington  
Department of Public Utilities  
Tacoma Water

Statements of Revenues, Expenses and Changes in Net Position

	YEAR ENDED DECEMBER 31,	
	2019	2018
<b>OPERATING REVENUES</b>		
Sale of Water	\$90,242,382	\$89,449,720
Other Operating Revenues	7,395,437	8,064,792
Contract Resource Obligation Revenues	4,906,935	4,426,947
Total Operating Revenues	102,544,754	101,941,459
<b>OPERATING EXPENSES</b>		
Operations	18,417,608	15,396,131
Production	14,823,858	14,426,404
Administrative and General	17,097,702	16,069,679
Depreciation	25,295,078	26,117,843
Taxes	5,188,882	5,273,751
Total Operating Expenses	80,823,128	77,283,808
Net Operating Income	21,721,626	24,657,651
<b>NON-OPERATING REVENUES (EXPENSES)</b>		
Interest Income	7,370,377	3,876,762
Other	1,802,296	3,215,049
Interest on Long-Term Debt	(19,409,128)	(20,600,723)
Amortization of Premium and Loss on Refunding	1,227,683	1,331,209
Total Non-Operating Expenses	(9,008,772)	(12,177,703)
Net Income Before Capital Contributions and Transfers	12,712,854	12,479,948
Capital Contributions		
Cash	6,949,044	11,114,722
Donated Capital Assets	5,826,586	5,326,027
Federal BAB Subsidies	3,609,359	3,596,241
Transfers		
City of Tacoma Gross Earnings Tax	(8,019,638)	(7,695,412)
Transfer to/from Other Funds	-	70,350
<b>CHANGE IN NET POSITION</b>	21,078,205	24,891,876
<b>NET POSITION - BEGINNING OF YEAR</b>	581,738,357	556,846,481
<b>TOTAL NET POSITION - END OF YEAR</b>	\$602,816,562	581,738,357

*The accompanying notes are an integral part of these financial statements*

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City of Tacoma, Washington  
Department of Public Utilities  
Tacoma Water

Statements of Cash Flows

	YEAR ENDED DECEMBER 31,	
	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES:		
Cash from Customers	\$101,966,404	\$101,669,197
Cash Paid to Suppliers	(23,691,714)	(23,224,687)
Cash Paid to Employees	(27,067,863)	(26,247,978)
Taxes Paid	(5,332,914)	(5,011,026)
NET CASH FROM OPERATING ACTIVITIES	45,873,913	47,185,506
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Transfer to Other Funds	-	70,350
Transfer Out for Gross Earnings Tax	(8,019,638)	(7,695,412)
NET CASH FROM NONCAPITAL FINANCING ACTIVITIES	(8,019,638)	(7,625,062)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:		
Capital Expenditures, Net	(23,152,078)	(19,129,503)
Principal Payments on Long-Term Debt	(14,538,017)	(13,378,017)
Principal Payments on Muckleshoot LT Liability	(176,932)	(181,355)
Interest Paid	(19,445,278)	(19,777,878)
BABs Federal Interest Subsidies	3,608,402	3,594,958
Contributions in Aid of Construction (Cash)	6,949,044	11,114,722
System Development Charges & Other LT Liabilities	777,844	334,524
NET CASH FROM CAPITAL FINANCING ACTIVITIES	(45,977,015)	(37,422,549)
CASH FLOWS FROM INVESTING ACTIVITIES		
Interest Received on Investments	7,370,377	3,876,762
Other Net Non-Op Revenues and Expenses	1,802,296	3,215,049
NET CASH FROM INVESTING ACTIVITIES	9,172,673	7,091,811
NET CHANGE IN CASH AND EQUITY IN POOLED INVESTMENTS	1,049,933	9,229,706
CASH AND EQUITY IN POOLED INVESTMENTS AT JANUARY 1	222,268,624	213,038,918
CASH AND EQUITY IN POOLED INVESTMENTS AT DECEMBER 31	\$223,318,557	\$222,268,624

*The accompanying notes are an integral part of these financial statements*

	YEAR ENDED DECEMBER 31,	
	2019	2018
RECONCILIATION OF NET OPERATING INCOME TO NET CASH FROM OPERATING ACTIVITIES:		
Net Operating Income	\$21,721,626	\$24,657,651
Adjustments to Reconcile Net Operating Income to Net Cash From Operating Activities:		
Depreciation	25,295,078	26,117,843
Pension (Credits) Expense	1,459,469	(3,386,195)
OPEB (Credits) Expense	(73,090)	125,707
Cash from Changes in Operating Assets and Liabilities:		
Accounts Receivable and Unbilled Revenue	240,648	(838,314)
Interfund Receivables	756,845	(687,583)
Regulatory Asset-Public Fire Protection Fees	-	456,635
Regulatory Asset-Surcharges	(827,736)	122,979
Materials and Supplies	(311,424)	(66,200)
Prepayments	(115,673)	(822,196)
Accrued Taxes	(144,032)	262,725
Salaries, Wages and Fringe Benefits Payable	109,629	74,456
Long-Term Accrued Compensated Absences	(61,222)	128,936
Customers' Deposits	8,734	(13,562)
Accrued Expenses and Contracts Payable	(619,198)	583,712
Interfund Payables	(1,565,741)	468,912
Total Adjustments	24,152,287	22,527,855
NET CASH FROM OPERATING ACTIVITIES	\$45,873,913	\$47,185,506
Reconciliation of Cash and Equity in Pooled Investments to Balance Sheet:		
Cash and Equity in Pooled Investments in Special Funds	\$155,002,719	\$160,004,945
Cash and Equity in Pooled Investments in Operating Funds	68,315,838	62,263,679
Cash and Equity in Pooled Investments at December 31	\$223,318,557	\$222,268,624
NON CASH INVESTING, CAPITAL, AND FINANCING ACTIVITIES		
Donated Assets	\$5,826,586	\$5,326,027

City of Tacoma, Washington  
Department of Public Utilities  
Tacoma Water

Notes to Financial Statements  
Years Ended December 31, 2019 and 2018

**NOTE 1 OPERATIONS**

**OPERATIONS OF TACOMA WATER** – The Division, doing business as Tacoma Water, is a division of the City of Tacoma, Washington (the City), Department of Public Utilities (the Department) and is included as an enterprise fund in the Comprehensive Annual Financial Report (CAFR) of the City. The Department consists of Tacoma Power, Tacoma Water and Tacoma Rail and is governed by a five-member Public Utility Board (the Board) appointed by the City Council. Certain matters relating to utility operations such as system expansion, issuance of bonds and fixing of utility rates and charges are initiated and executed by the Board, but also require formal City Council approval.

Tacoma Water owns and operates the City's Water System which includes a surface water supply source (the Watershed); several extensive well fields; a water transmission system consisting of several pipelines, water treatment and quality facilities; various reservoirs, standpipes and pump stations; and an extensive distribution system. Tacoma Water had supplied water to approximately 105,663 customers and had 249 employees as of December 31, 2019. Tacoma Water's service area includes the City of Tacoma and urbanized areas of Pierce and South King Counties. Water service outside the City limits is provided under franchises granted by both Pierce and King Counties and multiple other cities. Tacoma Water is organized functionally as Water Distribution Engineering, Water Distribution Operations, Water Quality, Water Supply, Asset and Information Management, and Water Finance and Analytics.

Prior to 2020, Tacoma Water was organized as Water Distribution Engineering, Water Distribution Operations, Water Quality, Water Supply, Water Asset and Information Management, and Water Finance and Analytics. In 2020, Tacoma Water reorganized to combine groups by functions in support of a 2020-2025 strategic plan.

**WATER DISTRIBUTION ENGINEERING** – To plan, forecast and model distribution system expansion and renewal and replacements; engineer, design, and oversee construction of mains, hydrants, services, meters, pressure reducing valves and pressure zones; provide excellent customer service and key account management; support growth and development through coordination, permitting and contracting; promote water conservation through outreach and customer programs.

**WATER DISTRIBUTION OPERATIONS** – To effectively operate and maintain the various components of the distribution system including mains, hydrants, valves, services and meters; to respond to and repair main breaks and leaks; to install new services and hydrants as needed for development; to manage the warehouse and materials purchasing; to provide customer service for outages and all other water service issues; to oversee and manage the apprenticeship program; and to provide effective leadership for Tacoma Water's safety program.

**WATER QUALITY** – To manage, operate and maintain the Green River Filtration Facility, Headworks, and Watershed, assure natural resource management of Water utility lands including the Watershed, provide for fish and wildlife habitat management, install, operate and maintain water treatment equipment within the system, respond to all matters relating to water quality from the source to the customer, monitor for contaminants to assure regulatory compliance, coordinate changing water system security needs and participate in shaping water quality legislation and regulations.



**WATER SUPPLY** – Designs, constructs, operates and maintains the following of the City’s water supply structures: transmission mains and appurtenances, rights-of-ways, wells, pump stations and other mechanical/electrical equipment, storage tanks and reservoirs, pressure reducing stations, Tacoma Water buildings and properties, communication and telemetry systems (including the Water Control Center), corrosion control facilities, and administers water rights and tracks water system security issues, while overseeing and managing Tacoma Water’s emergency preparedness and coordinating with outside agencies.

**WATER ASSET AND INFORMATION MANAGEMENT** – Prepares system and strategic plans, supports Tacoma Water’s Geographic Information System and Hydraulic Model operating technologies, promotes use and maturity of TPU information technologies, and oversees asset management implementation which incorporates risk, levels of service, and lifecycle costs into the Tacoma Water decision making process.

**WATER FINANCE AND ANALYTICS** – Is responsible for the utility's long range financial plan, rate and charge development, budget development and reporting, and rate and financial policies. This group provides financial, supply and demand, and customer analytics and reports to support decision-making by executive management, policymakers and the RWSS Partners. It also develops and administers special retail and wholesale water supply agreements in pursuit of the utility's strategic objectives. Starting in 2018, the group set up a Programs and Analytics group that is currently engaged in enterprise efforts to improve the organization’s maturity in the areas of performance management and analytics.

**REGIONAL WATER SUPPLY SYSTEM** – The Regional Water Supply System (RWSS) is a partnership formed by Tacoma, the City of Kent, Covington Water District and Lakehaven Utility District (the “Participants”) to permit, design, finance, construct, operate, maintain and receive delivery of water from the Second Supply Project. The Second Supply Project consists of the following components: (i) water from the exercise of Tacoma Water’s Second Diversion Water Right, (ii) the Second Supply Pipeline, (iii) improvements made at the Headworks diversion dam and intake, (iv) Second Supply Project fisheries and environmental enhancements, (v) the right to store water as a result of the Howard Hanson Dam Additional Storage Project, and (vi) associated Treatment Facilities. Participants’ rights and obligations with regard to the Second Supply Project are called out in the Second Supply Project Agreement. Tacoma has a 15/36 Participant Share and each of the others have a 7/36 Participant Share. A Participant Share represents a Participant’s proportional right to receive water delivered by the Second Supply Project and represents a Participant’s obligation to pay project costs, including Fixed and Variable Operation & Maintenance Costs, Initial Project Construction Costs and ongoing Capital Expenditures. Tacoma, consistent with the Project Agreement, is the owner and operator of the Second Supply Project.

## **NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**BASIS OF ACCOUNTING AND PRESENTATION** – The financial statements of the Division are prepared under the accrual basis of accounting in accordance with GAAP issued by the Governmental Accounting Standards Board (GASB) applicable to governmental entities that use proprietary fund accounting. The financial statements use a flow of economic resources measurement focus to determine financial position and the change in financial position. The accounting principles used are similar to those applicable to business in the private sector and are maintained on the accrual basis of accounting. Revenues are recognized when earned, and costs and expenses are recognized when incurred.

The Division follows the provisions set forth in regulatory accounting guidance. In general, regulatory accounting permits an entity with cost-based rates to defer certain costs or income that would otherwise be recognized when incurred to the extent that the rate-regulated entity is recovering or expects to recover such amounts in rates charged to its customers.

The Division generally follows the uniform system of accounts prescribed by the National Association of Regulatory Utility Commissioners and the Division of Audits of the Washington State Auditor’s Office.

**ACCOUNTING CHANGES** - Effective for the fiscal year 2019, the Division implemented the following new accounting and reporting standards issued by the Governmental Accounting Standards Board (GASB):

GASB Statement No. 83 - *Certain Asset Retirement Obligations*. The object of this statement is to address accounting and financial reporting for asset retirements that carry legally enforceable remediation obligations. It establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources. This statement will enhance comparability of financial statements among governments by establishing uniform criteria to recognize and measure decision-usefulness of the information provided to finance statement users by requiring disclosure related to those assets. Division evaluated provisions prescribed by GASB 83 and there were no asset retirement obligations applicable to the Division as of December 31, 2019.

GASB Statement No. 84 – *Fiduciary Activities*. The object of this statement is to improve the identification of fiduciary activities and how they should be reported. It establishes criteria for identifying activities related to control of those assets. Control is defined as holding the assets or the ability to use, exchange, or employ the assets in a manner that provides benefits to the intended recipients. Division evaluated provisions prescribed by GASB 83 and there were no fiduciary activities applicable to the Division as of December 31, 2019.

GASB Statement No. 88 – *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*. The object of this statement is to improve the information that is disclosed in the notes related to debt, clarifying which liabilities should be included when disclosing that information. Debt is defined as a fixed liability that arises from a contractual obligation to pay cash or other assets as established at the contract date. This Statement requires that existing and additional information be provided for direct borrowings and direct placement of debt separately from other debt. Where applicable the Division has made the required adjustments as prescribed by GASB Statement No. 88.

GASB Statement No. 89 – *Accounting for Interest Cost Incurred before the End of a Construction Period*. The object of this statement now requires that interest cost incurred before the end of the construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will no longer be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund. Where applicable the Division has made the required adjustments as prescribed by GASB Statement No. 89. The Division elected to early adopt the implementation of this standard as of January 1, 2019 and therefore no interest was capitalized during 2019.

GASB Statement No. 90 – *Majority Equity Interests (an Amendment of GASB Statements No. 14 & 61)*. The object of this statement is to clarify the reporting of the City's majority equity interest in a legally separate organization and the component units of 100% equity acquisition. Equity is defined as a financial interest evidenced through an explicit, measurable right to net resources of an organization that is usually based on an investment of financial or capital resources by a government.

**CASH AND EQUITY IN POOLED INVESTMENTS** – The Division's fund cash balances are a "deposit" with the City Treasurer's Tacoma Investment Pool (TIP) for the purpose of maximizing interest earnings through pooled investment activities. Cash and equity in pooled investments in the TIP are reported at fair value and changes in unrealized gains and losses are recorded in the Statements of Revenues, Expenses and Changes in Net Position. Interest earned on such pooled investments is allocated daily to the participating funds based on each fund's daily equity in the TIP.

The TIP operates like a demand deposit account in that all City departments, including the Division, have fund balances which are their equity in the TIP. Accordingly, balances are considered to be cash equivalents.

The City of Tacoma Investment Policy permits legal investments as authorized by state law including Certificates of Deposit with qualified public depositories (as defined in Chapter 39.58 of the Revised Code of Washington (RCW)), obligations of the U.S. Treasury, Government Sponsored Agencies and Instrumentalities, bonds issued by Washington State and its Local Governments with an A or better rating, general obligation bonds issued by any State or Local Government with an A or better rating, Bankers' Acceptances, Commercial Paper, Repurchase and Reverse Repurchase agreements, and the Washington State Local Government Investment Pool (LGIP). Daily liquidity requirement to meet the City's daily obligations is maintained by investing a portion of the City's Investment Pool in the LGIP and in certificates of deposit with Home Street Bank, and Opus Bank.

The Division's equity in that portion of the City of Tacoma Investment Pool held in qualified public depositories at December 31, 2019 and 2018 is entirely covered by the Federal Deposit Insurance Corporation (FDIC) and the Washington State Public Deposit Protection Commission (WSPDPC).

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, longer-term investments have greater exposure to changes in market interest rates. The City of Tacoma investment policy allows for authorized investments up to 60 months to maturity. One way the City manages its exposure to interest rate risk is by timing cash flows from maturities so that portions of the portfolio are maturing over time to provide cash flow and liquidity needed for operations.

Credit risk is generally the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. Repurchase agreements and commercial paper are protected by the Federal Deposit Insurance Corporation (FDIC) insurance up to \$250,000. All deposits not covered by the FDIC are covered by the WSPDPC. The WSPDPC is a statutory authority established under RCW 39.58. It constitutes a fully insured or fully collateralized pool. The WA State Treasures LGIP is authorized by RCW 43.250. The LGIP is operated like a 2A7 fund and is collateralized by short-term legal investments.

**ACCOUNTS RECEIVABLE AND ACCRUED UNBILLED REVENUES** – Accounts receivable consist of amounts owed by private individuals and organizations for goods delivered or services rendered in the regular course of business operations. Receivables are shown net of allowances for doubtful accounts. The Division accrues an estimated amount for services that have been provided but not billed, which is included in accounts receivable as of December 31, 2019 and 2018.

**ALLOWANCE FOR DOUBTFUL ACCOUNTS** – A reserve has been established for uncollectible accounts receivable based on historical write-off trends and knowledge of specific circumstances that indicate collection of an account may be unlikely. Generally, accounts receivable are considered past due after 30 days.

**INTERFUND TRANSACTIONS** – Unsettled transactions between City funds at year-end are recorded as due to or due from other funds.

**MATERIALS AND SUPPLIES INVENTORY** – Materials and supplies consist primarily of items for maintenance of Division assets and are valued at the lower of average cost or fair market value.

**RESTRICTED ASSETS** – In accordance with bond resolutions, agreements and laws, separate restricted funds have been established. These funds consist of cash and investments in pooled investments with restrictions externally imposed and legally enforceable, established by the City Council. Generally, restricted assets include bond construction, reserve and debt service funds, system development charges funds, notes and contracts receivable, and customer deposits.

**BOND PREMIUM AND LOSS ON REFUNDING** – Bond premiums are amortized over the life of the bonds using the weighted average of the bonds outstanding, are presented as an offset to the long-term debt balance in the statement of net position. Losses on refunding are amortized on a straight-line basis over the applicable bond period, and are presented as deferred outflows in the statement of net position.

**RATE STABILIZATION** – The Division has established a rate stabilization account to reduce significant year-to-year variations in rates. Amounts deposited into the account are excluded from the statement of revenues, expenses and changes in net position in accordance with regulated operations. Revenue will be recognized in subsequent periods when it is withdrawn in accordance with rate decisions and debt service covenants.

**UTILITY PLANT AND DEPRECIATION** – Utility plant is stated at original cost, which includes both direct costs of construction or acquisition and indirect costs. The cost of maintenance and repairs is charged to expense as incurred, while the cost of replacements and betterments is capitalized. Assets are capitalized when costs exceed \$5,000 and the useful life exceeds one year.

Depreciation is recorded using a straight-line composite method based on National Association of Regulatory Utility Commissioners (NARUC) recommended economic asset lives from 13 to 60 years for related operating assets placed in service at the beginning of the year. The original cost of property together with removal cost, less salvage, is charged to accumulated depreciation at such time as property is retired and removed from service.

The economic lives for plant in service are as follows:

Source of Supply Plant	34 years
Pumping Plant	40 years
Water Treatment Plant	28 years
Transmission Plant	60 years
Distribution Plant	53 years
General Plant	13 years

**CONSTRUCTION WORK IN PROGRESS** – Capitalizable costs incurred on projects which are not in service or ready for use are held in construction in progress. When the asset is ready for service, related costs are transferred to capital assets. Upon determining that a project will be abandoned, the related costs are charged to expense.

**ASSET VALUATION** – The Division periodically reviews the carrying amount of its long-lived assets for impairment. An asset is considered impaired when estimated future cash flows are less than the carrying amount of the asset. In the event the carrying amount of such asset is not deemed recoverable, the asset is adjusted to its estimated fair value. Fair value is generally determined based on discounted future cash flows.

**ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION (AFUDC)** – AFUDC represents the cost of borrowed funds used for the construction of utility plant, net of interest earned on unspent construction funds. Capitalized AFUDC is shown as part of the cost of utility plant and as a reduction of interest income and expense through the fiscal year ended December 31, 2018. Effective January 1, 2019, the Division implemented GASB 89, therefore no interest was capitalized during 2019.

**CONTRIBUTIONS IN AID OF CONSTRUCTION AND SYSTEM DEVELOPMENT CHARGES –**

GASB Statement No. 33, which addresses accounting for contributed capital, requires that contributed capital be recognized as change in net position. Capital contributions include new service connections and system development charges. System development charges are collected on all new services prior to installation to ensure required new source, transmission and storage facilities needed to meet new demands are funded.

The charge was developed using a cost-of-service approach and includes a share of historical plant investment and projected future outlays that will increase system capacity. Because the funds collected for this charge can only be used for system expansion projects, the balance is reflected as restricted in the Division's net position.

System development charges on uncompleted projects are recorded in other long term liabilities.

**REGULATORY ASSETS** – The Division has deferred Public Fire Protection Fees, Hyada Surcharges, Andrain Surcharges and Curran Road Surcharges to future periods matching the time when the revenues and expenses are included in rates. The deferred balance is reduced as fees and surcharges are recovered and amortized as expenses on the statements of revenues, expenses and changes in net position.

**INTANGIBLE ASSETS** – In accordance with GASB No. 51, “Accounting and Financial Reporting for Intangible Assets”, land use rights such as easements and right-of-ways are recorded as intangible assets.

**COMPENSATED ABSENCES** – The City has two different policies for compensated absences. The City's original policy allows employees to accrue vacation based on the number of years worked with a maximum accrual equal to the amount earned in a two-year period. These employees also accrue one day of sick leave per month without any ceiling on the maximum accrued. The City implemented a new policy in 1998 allowing employees to earn PTO (personal time off) without distinction between vacation and sick leave. Employees who worked for the City prior to the change could choose to stay with the original policy or opt to convert to the new policy. The amount of PTO earned is based on years of service. The maximum accrual for PTO is 960 hours, and upon termination, employees are entitled to compensation for unused PTO at 100%. Vacation pay and PTO are recorded as a liability and expense in the year earned.

Employees in the original policy accumulate sick leave at the rate of one day per month with no maximum accumulation specified. Employees receive 25% of the value at retirement or 10% upon termination for any other reason. In the event of death, beneficiaries receive 25% of the value. Sick leave pay is recorded as a liability and an expense in the year earned.

The accrued liability is computed at 100% vacation and PTO while sick leave is accrued at 10%, which is considered the amount vested or 25% if the employee meets retirement criteria. Based on historical information, 10% of compensated absences are considered short term.

**OPERATING REVENUE** – Service rates are authorized by the Tacoma City Council. Revenues are recognized as earned and include an estimate of revenue earned but not billed to customers as of year-end. Utility revenues are derived primarily from the sale and transmission of water. Utility revenue from water sales is recognized when the water is delivered to and received by the customer.

Tacoma Water receives contract resource obligation revenue and debt service payments from our partners in the Second Supply Project Agreement which are recorded as operating revenue.

**NON-OPERATING REVENUES AND EXPENSES** – These are items that do not qualify as operating defined above such as interest and gain (loss) on disposition of property.

**TAXES** – The City charges the Division a Gross Earnings Tax at the rate of 8.0%. In addition, the Division pays a 5.029% public utility tax to the State on a certain portion of revenues identified as utility revenues. The Division also pays business and occupation tax to the State at the rate of 1.5% on certain other non-utility revenues. The Division is exempt from payment of federal income tax.

**NET POSITION** – The Statement of Net Position reports all financial and capital resources. The difference between assets and deferred outflows, and liabilities and deferred inflows is net position. There are three components of net position: net investment in capital assets, restricted and unrestricted.

Net investment in capital assets consists of capital assets, less accumulated depreciation, reduced by the outstanding balances of any bonds, loans or other borrowings, less outstanding construction funds that are attributable to the acquisition, construction, or improvements of those assets.



Net position components are restricted when constraints placed on net position use are either (1) externally imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments or (2) imposed by law through constitutional provisions or enabling legislation.

Unrestricted net position components are those that are not “net investment in capital assets” or “restricted”.

**ARBITRAGE REBATE REQUIREMENT** – The Division is subject to the Internal Revenue Code (“IRC”), Section 148(f), related to its tax-exempt revenue bonds. The IRC requires that earnings on gross proceeds of any revenue bonds that are in excess of the amount prescribed will be surrendered to the Internal Revenue Service. As such, the fund would record such a rebate as a liability. The Division had no liability in the current or prior year.

**ENVIRONMENTAL REMEDIATION COSTS** - The Division recognizes environmental obligations and accruals for expected pollution remediation outlays which are recorded when one of the five obligating events occurs and are adjusted as further information develops or circumstances change.

The five obligating events are applied when the Division is: 1) compelled to take action because of an imminent endangerment, 2) the Division is in violation of a pollution prevention-related permit or license, 3) the Division is named or evidence indicates that it will be named by a regulator as a responsible party or potentially responsible party, 4) named in a lawsuit to compel participation in pollution remediation or 5) the Division commences or legally obligates itself to commence pollution remediation.

Costs related to environmental remediation are charged to operating expense when the liability is recognized; outlays are capitalized when goods and services are acquired under specific circumstances. Measurement is based on the current value of the outlays for the individual remediation components using the expected cash flow technique, adjusted for recoveries from other parties and insurance.

**SHARED SERVICES** – The Division receives certain services from other departments and agencies of the City, including those normally considered to be general and administrative. The Division is charged for services received from other City departments and agencies.

**USE OF ESTIMATES** – The preparation of the financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. The Division used estimates in determining reported unbilled revenues, allowance for doubtful accounts, accrued compensated absences, depreciation, Other Post Employment Benefit (OPEB), pension, self-insurance liabilities and other contingencies. Actual results may differ from these estimates.

**SIGNIFICANT RISKS AND UNCERTAINTIES** – The Division is subject to certain business risks that could have a material impact on future operations and financial performance. These risks include, but are not limited to, water conditions, weather and natural disaster-related disruptions, collective bargaining labor disputes, fish and other endangered species act issues, Environmental Protection Agency regulations and federal government regulations.

**RECLASSIFICATIONS** – Changes have been made to prior year account classifications as needed to conform to the current year presentation format.



**NOTE 3 INVESTMENTS MEASURED AT FAIR VALUE**

The City measures and records its investments within the fair value hierarchy established by generally accepted accounting principles.

The hierarchy is based on the valuation inputs used to measure the fair value of the asset, where fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. These guidelines recognize a three-tiered fair value hierarchy, as follows:

- Level 1 – Level 1 inputs are quoted (unadjusted) prices in active markets for identical assets or liabilities that the government can access at the measurement date. Observable markets include exchange markets, dealer markets, brokered markets and principal-to-principal markets.
- Level 2 – Level 2 inputs are other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. These inputs are sourced from pricing vendors using models that are market-based and corroborated by observable market data including: quoted prices; nominal yield spreads; benchmark yield curves; and other corroborated inputs.
- Level 3 – Level 3 inputs are unobservable inputs for the asset or liability and should only be used when relevant Level 1 or Level 2 inputs are unavailable.

The fair value evaluations are provided by Interactive Data.

Cash and cash equivalents include highly liquid investments including short-term investment funds. Cash and cash equivalents are valued at cost and, therefore, excluded from the fair value schedule.

Data regarding the City's investments, valued and categorized according to the above outlined levels, is below:

	As of 12/31/2019	Level 1	Level 2	Level 3
Debt Securities				
U.S. Treasury Securities	\$ 394,034,439	\$ -	\$ 394,034,439	\$ -
U.S. Agency Securities	449,502,580	-	449,502,580	-
Supranational Securities	20,035,790	-	20,035,790	-
Municipal Bonds	17,764,606	-	17,764,606	-
Corporate Securities	63,736,264	-	63,736,264	-
	<u>\$ 945,073,679</u>	<u>\$ -</u>	<u>\$ 945,073,679</u>	<u>\$ -</u>

	As of 12/31/2018	Level 1	Level 2	Level 3
Debt Securities				
U.S. Treasury Securities	\$ 282,822,308	\$ -	\$ 282,822,308	\$ -
U.S. Agency Securities	447,015,280	-	447,015,280	-
Supranational Securities	19,814,100	-	19,814,100	-
Municipal Bonds	35,748,647	-	35,748,647	-
Corporate Securities	24,607,491	-	24,607,491	-
	<u>\$ 810,007,826</u>	<u>\$ -</u>	<u>\$ 810,007,826</u>	<u>\$ -</u>

Tacoma Water's share of the City Investments shown in the table above is 20.69% and 20.94% for 2019 and 2018.

**NOTE 4 UTILITY PLANT**

A summary of the balances and changes in utility plant for 2019 and 2018 follows:

	Balance December 31, 2018	Additions	Retirements	Transfers & Adjustments	Balance December 31, 2019
Intangible Plant	\$ 37,357,980	\$ 78,736	\$ (176,932)	\$ 328,844	\$ 37,588,628
Source of Supply Plant	86,166,545	-	-	1,095,048	87,261,593
Pumping Plant	10,073,433	-	-	91,713	10,165,146
Water Treatment Plant	243,091,625	-	-	102,405	243,194,030
Transmission Facilities	231,077,028	-	-	1,565,694	232,642,722
Distribution Facilities	475,282,310	5,747,850	(1,963,873)	14,967,764	494,034,051
General Plant	39,142,806	-	-	575,482	39,718,288
Total Water Plant in Service	1,122,191,727	5,826,586	(2,140,805)	18,726,950	1,144,604,458
Less Accumulated Depreciation	(258,706,369)	(25,295,078)	1,963,873	634,648	(281,402,926)
	863,485,358	(19,468,492)	(176,932)	19,361,598	863,201,532
Construction Work in Progress	7,523,075	24,772,917	-	(20,837,843)	11,458,149
Net Utility Plant	\$ 871,008,433	\$ 5,304,425	\$ (176,932)	\$ (1,476,245)	\$ 874,659,681

	Balance December 31, 2017	Additions	Retirements	Transfers & Adjustments	Balance December 31, 2018
Intangible Plant	\$ 36,922,339	\$ 266,766	\$ (226,071)	\$ 394,946	\$ 37,357,980
Source of Supply Plant	85,952,371	-	-	214,174	86,166,545
Pumping Plant	9,702,016	-	-	371,417	10,073,433
Water Treatment Plant	242,847,739	-	-	243,886	243,091,625
Transmission Facilities	229,573,258	-	-	1,503,770	231,077,028
Distribution Facilities	456,556,957	5,059,261	(1,278,794)	14,944,886	475,282,310
General Plant	36,881,532	-	(144,687)	2,405,961	39,142,806
Total Water Plant in Service	1,098,436,212	5,326,027	(1,649,552)	20,079,040	1,122,191,727
Less Accumulated Depreciation	(236,819,423)	(26,117,843)	1,423,481	2,807,416	(258,706,369)
	861,616,789	(20,791,816)	(226,071)	22,886,456	863,485,358
Construction Work in Progress	11,901,984	23,367,912	-	(27,746,821)	7,523,075
Net Utility Plant	\$ 873,518,773	\$ 2,576,096	\$ (226,071)	\$ (4,860,365)	\$ 871,008,433

Total Water Plant in Service includes non-depreciable assets of \$60,169,624 for 2019 and \$60,017,820 for 2018. The total amount of interest incurred and capitalized is \$468,833 for 2018. Starting in 2019, interest cost incurred was no longer included in the historical cost of a capital asset in compliance with GASB 89.

**NOTE 5 LONG-TERM DEBT**

The Division's Long-term Liabilities are primarily for the purpose of capital improvements. Long-term debt activities for 2019 and 2018 were as follows:

	Balance December 31, 2018	Additions	Reductions	Balance December 31, 2019	Due Within One Year
Revenue Bonds	\$ 365,950,000	\$ -	\$ (7,610,000)	\$ 358,340,000	\$ 7,950,000
Plus: Unamortized Premium	10,526,796	-	(1,414,928)	9,111,868	-
Net Revenue Bonds	376,476,796	-	(9,024,928)	367,451,868	7,950,000
Public Works Trust Fund Loans	20,011,236	-	(2,696,771)	17,314,465	2,696,771
Drinking Water State Revolving Fund Loans	65,612,800	-	(4,231,246)	61,381,554	4,231,246
Total Long-Term Debt	<u>\$ 462,100,832</u>	<u>\$ -</u>	<u>\$ (15,952,945)</u>	<u>\$ 446,147,887</u>	<u>\$ 14,878,017</u>

	Balance December 31, 2017	Additions	Reductions	Balance December 31, 2018	Due Within One Year
Revenue Bonds	\$ 372,400,000	\$ -	\$ (6,450,000)	\$ 365,950,000	\$ 7,610,000
Plus: Unamortized Premium	12,045,249	-	(1,518,453)	10,526,796	-
Net Revenue Bonds	384,445,249	-	(7,968,453)	376,476,796	7,610,000
Public Works Trust Fund Loans	22,708,007	-	(2,696,771)	20,011,236	2,696,771
Drinking Water State Revolving Fund Loans	69,844,046	-	(4,231,246)	65,612,800	4,231,246
Total Long-Term Debt	<u>\$ 476,997,302</u>	<u>\$ -</u>	<u>\$ (14,896,470)</u>	<u>\$ 462,100,832</u>	<u>\$ 14,538,017</u>

Tacoma Water's long-term debt at December 31 consists of the following payable from revenues of Tacoma Water:

**SENIOR LIEN BONDS**

	2019	2018
2005 Water System Revenue and Refunding Bonds, with interest rate of 5.0%, due in 2025. Original Issue: \$46,550,000 Current Portion: \$0	\$ 5,000	\$ 5,000
2009 Water System Revenue Bonds, with interest rate at 5.751%, with Build America Bond (BAB) rebate ranging from 32.45% to 32.62%, due in yearly installments starting in 2033 ranging from \$9,800,000 to \$12,210,000 through 2039. Original Issue: \$76,775,000 Current Portion: \$0	76,775,000	76,775,000
2010A Water System Revenue Refunding Bonds, with interest rates ranging from 4.0% to 5.0%, due in yearly installments ranging from \$3,935,000 to \$4,655,000 through 2023. Original Issue: \$29,100,000 Current Portion: \$4,260,000	17,790,000	21,890,000
2010B Water System Revenue Bonds, with interest rates ranging from 4.581% to 5.621%, with Build America Bond (BAB) Rebate ranging from 32.45% to 32.62% of interest, due in yearly installments starting in 2024 ranging from \$2,115,000 to \$15,390,000 through 2040. Original Issue: \$74,985,000 Current Portion: \$0	74,985,000	74,985,000
2010A Regional Water Supply System Revenue Bonds, with interest rates ranging from 3.0% to 4.0%, due in yearly installments ranging from \$290,000 to \$355,000 through 2024. (See Note 6) Original Issue: \$3,595,000 Current Portion: \$310,000	1,655,000	1,955,000

**SENIOR LIEN BONDS**

	2019	2018
2010B Regional Water Supply System Revenue Bonds, with interest rates ranging from 5.371% to 5.621%, with Build America Bond (BAB) rebate ranging from 32.45% to 32.62% of interest, due in yearly installments starting in 2025 ranging from \$370,000 to \$5,775,000 through 2040. (See Note 6)		
Original Issue: \$44,245,000	44,245,000	44,245,000
Current Portion: \$0		
2013 Water System Revenue and Refunding Bonds, with interest rates of 4.0%, due in yearly installments starting in 2041 ranging from \$23,820,000 to \$25,765,000 through 2043.		
Original Issue: \$78,305,000	74,355,000	74,355,000
Current Portion: \$0		
2013 Regional Water Supply System Revenue and Refunding Bonds, with interest rates ranging from 4.0% to 5.0%, due in yearly installments ranging from \$765,000 to \$6,425,000 through 2032. (See Note 6)		
Original Issue: \$64,795,000	57,710,000	59,400,000
Current Portion: \$1,790,000		
2015A Water System Refunding Bonds with interest rates ranging from 4.0% to 5.0%, due in yearly installments ranging from \$1,460,000 to \$2,025,000 through 2025.		
Original Issue: \$16,645,000	10,820,000	12,340,000
Current Portion: \$1,590,000		
Subtotal Sr. Lien Debt	\$ 358,340,000	\$ 365,950,000
Unamortized Premium	9,111,868	10,526,796
Less Current Portion of Revenue Bond Debt	(7,950,000)	(7,610,000)
Long-term Portion of Revenue Bond Debt	<u>\$ 359,501,868</u>	<u>\$ 368,866,796</u>

Scheduled principal maturities on the bonds and interest payments are as follows:

Year	Principal	Interest
2020	\$ 7,950,000	\$ 18,094,669
2021	8,355,000	17,703,369
2022	8,725,000	17,333,569
2023	8,695,000	16,900,619
2024	9,230,000	16,469,319
2025-2029	53,770,000	74,959,783
2030-2034	71,085,000	60,116,118
2035-2039	95,010,000	37,455,215
2040-2043	95,520,000	10,190,085
	<u>\$ 358,340,000</u>	<u>\$ 269,222,746</u>

Tacoma Water's revenue bonds are secured by the net revenue of Tacoma Water and all cash and investments held in the bond funds and construction funds. The bonds are also subject to certain financial and non-financial covenants. The Division was in compliance with all debt covenants at December 31, 2019.

The carrying amounts of the Washington State Public Works Board Loans and Drinking Water State Revolving Fund Loans approximate the fair value since such loans are exclusive and have no market.

#### JUNIOR LIEN DEBT

	2019	2018
<b>Public Works Trust Fund Loans</b>		
2001 Public Works Trust Fund pre-construction loan for the Second Supply Project (SSP) Howard Hanson Dam Additional Storage Project, with interest of .5% per annum, due in yearly installments of \$52,632 through 2021.	\$ 105,263	\$ 157,894
2001 Public Works Trust Fund construction loan for the SSP, with interest of .5% per annum, due in yearly installments of \$533,333 through 2021.	1,066,667	1,600,000
2002 Public Works Trust Fund pre-construction loan for Middle and Headworks section of the SSP, with interest of .5% per annum, due in yearly installments of \$54,180 through 2021.	108,359	162,538
2002 Public Works Trust Fund construction loan for the Middle and Headworks section of the SSP, with interest of .5% per annum, due in yearly installments of \$531,250 through 2022.	1,593,750	2,125,000
2004 Public Works Trust Fund pre-construction loan for the design of the Green River Ozone Facility with interest of .5% per annum, due in yearly installments of \$53,363 through 2024.	266,812	320,175

**JUNIOR LIEN DEBT**

	2019	2018
2006 Public Works Trust Fund construction loan for the Green River Ozone Treatment Plant, with interest of .5% per annum, due in yearly installments of \$370,588 through 2026.	2,594,118	2,964,706
2008 Public Works Trust Fund construction loan for the McMillin Reservoir Reconstruction, with interest of .5% per annum, due in yearly installments of \$545,870 through 2028.	4,912,829	5,458,699
2012 Public Works Trust Fund construction loan for the Green River Filtration Facility, with interest of .5% per annum, due in yearly installments of \$555,555 through 2031.	6,666,667	7,222,222
<b>Drinking Water State Revolving Fund Loans</b>		
2002 construction loan for the Portland Avenue Reservoir, with interest of 2.5% per annum, due in yearly installments of \$161,052 through 2021.	322,105	483,158
2008 construction loan for the McMillin Reservoir Reconstruction, with interest of 1.5% per annum, due in yearly installments of \$215,108 through 2028.	1,935,975	2,151,084
2009 construction loan for the McMillin Reservoir Reconstruction, with interest of 1.0% per annum, due in yearly installments of \$367,088 through 2032.	4,772,143	5,139,231
2010 construction loan for the McMillin Reservoir Reconstruction, with interest of 1.5% per annum, due in yearly installments of \$303,000 through 2032.	3,939,000	4,242,000
2010 construction loan for the Green River Water Treatment Plant Filtration Facility, with interest of 1.5% per annum, due in yearly installments of \$304,579 through 2034.	4,568,684	4,873,263
2011 construction loan for the McMillin Reservoir Reconstruction, with interest of 1.5% per annum, due in yearly installments of \$121,524 through 2033.	1,701,331	1,822,855

**JUNIOR LIEN DEBT**

	2019	2018
2011 construction loan for the Green River Water Treatment Plant Filtration Facility, with interest of 1.5% per annum, due in yearly installments of \$303,000 through 2035.	4,848,000	5,151,000
2012 construction loan for the Green River Water Treatment Plant Filtration Facility, with interest of 1.5% per annum, due in yearly installments of \$606,000 through 2035.	9,696,000	10,302,000
2013 construction loan for the Green River Water Treatment Plant Filtration Facility, with interest of 1.5% per annum, due in yearly installments of \$606,000 through 2035.	9,696,000	10,302,000
2013F construction loan for the Green River Water Treatment Plant Filtration Facility, with interest of 1.5% per annum, due in yearly installments of \$606,000 through 2035.	9,696,000	10,302,000
2015 construction loan for the Green River Water Treatment Plant Filtration Facility, with interest of 1.5% per annum, due in yearly installments of \$637,895 through 2035.	10,206,316	10,844,211
Subtotal Junior Lien Debt	78,696,019	85,624,036
Less Current Portion of Debt	(6,928,017)	(6,928,017)
Long-term Portion of Junior Lien Debt	<u>\$ 71,768,002</u>	<u>\$ 78,696,019</u>

As of December 31, 2019, scheduled principal maturities of junior lien debt and interest payments are as follows:

Year	Principal	Interest
2020	\$ 6,928,017	\$ 935,624
2021	6,928,017	862,087
2022	6,126,820	788,548
2023	5,595,570	722,236
2024	5,595,570	658,582
2025-2029	25,838,294	2,346,315
2030-2034	18,924,836	908,266
2035-2035	2,758,895	38,194
	<u>\$ 78,696,019</u>	<u>\$ 7,259,852</u>



**NOTE 6 SECOND SUPPLY PROJECT AGREEMENT**

Four Washington municipalities are the Participants in the Second Supply Project under the terms of the Second Supply Project Agreement, which defines their rights and obligations with regard to the Second Supply Project. Tacoma Water has a 15/36 Participant Share and each of the City of Kent, Covington Water District and Lakehaven Utility District has a 7/36 Participant Share in the Second Supply Project. Each Participant has contractual rights under the Second Supply Project Agreement (i) to use an undivided share of the Project equal to its project capacity share and to use available excess project capacity; (ii) to schedule for delivery and receive its Participant Share of Second Diversion Water at its points of delivery; (iii) to schedule for delivery and receive additional water at its points of delivery; and (iv) to its Participant Share of storage. Each Participant has a contractual obligation (i) to receive Second Diversion Water and additional water scheduled for delivery and delivered to it, and (ii) to pay its Participant Share of Project Costs, including but not limited to Fixed and Variable O & M Costs, Initial Project Construction Costs and Capital Expenditures. Kent and Covington, in the "Repayment Agreement", pledge to pay Tacoma Water a defined share of the principal and interest debt service on the Regional Water Supply System Bonds. The term of the Second Supply Project Agreement extends through the operating life of the Second Supply Project including all renewals and replacements thereof and additions thereto. The Second Supply Project Agreement provides that all obligations incurred during its term will survive its termination or expiration and will survive until satisfied.

**NOTE 7 SIGNIFICANT CUSTOMER**

Contracted sales to WestRock CP LLC accounted for 8.0% of Tacoma Water's total water sales in 2019 and 2018, respectively. There were no outstanding accounts receivables from WestRock at year-end 2019 or 2018.

Tacoma Water has contracted with WestRock to supply certain quantities of water at a specified rate through July 31, 2020.

**NOTE 8 FLEET SERVICES FUND**

Tacoma Water pays the Fleet Services Fund for the use of the vehicles and equipment to cover fleet operating expenses. Payments made by Tacoma Water in 2019 and 2018 were \$3,164,306 and \$3,585,220, respectively.

Fleet Services' management makes an annual assessment of the capital replacement reserve balance for appropriate funding levels. It is the Fund's policy to maintain the Fund's maximum balance at a level that will provide adequate purchasing power for a three-year cycle. The solvency of the Replacement Fund allowed Fleet Services to return a portion of interest earned on Fund investments for the year to their customers. In 2019 and 2018, Fleet Services returned 75% of the interest earned on the capital replacement reserve to Tacoma Water's replacement fund.

The amounts refunded in 2019 and 2018 were \$62,807 and \$50,160, respectively, which was used to offset the corresponding year's fleet expenses.

**NOTE 9 SELF-INSURANCE FUND**

The Department of Public Utilities maintains a self-insurance program and insurance policies. The Department has established a self-insurance fund to insure Tacoma Water and other divisions within the Department for certain losses arising from personal and property damage claims by third parties. The major risks to Tacoma Water are flooding, wind damage, chemical spills and earthquakes. Mitigating controls and emergency and business resumption plans are in place. To the extent damage or claims exceed insured values, rates may be impacted.

Tacoma Water is required to make payments to the Self-Insurance Fund to cover claims incurred by Tacoma Water and administrative expenses of the Fund. Tacoma Water's premium payments were \$240,000 in 2019 and 2018. Assets in the Self-Insurance Fund total \$9.1 million which exceeds accrued and incurred but not reported liabilities. Equity in the Self-Insurance Fund is transferred to the appropriate operating divisions in accordance with GASB 10. Management believes Tacoma Water's investment in the Self-Insurance Fund is more than adequate to settle all its known or estimated claims.

The City purchased a Fiduciary Liability policy with a limit of \$15.0 million and a \$100,000 deductible. This coverage provides for wrongful acts related to the fiduciary duty of the City, trustees, or committee members arising out of the administration of the City's employee retirement plans. The coverage also provides a Government Crime policy with a \$1.0 million limit and \$75,000 deductible for employee dishonesty and for fraudulent or dishonest act by employees against the City for loss of money, securities, and property. Coverage also includes an Excess Worker's Compensation policy with a statutory limit and a self-insured retention of \$1 million per occurrence and an additional \$250,000 aggregate for all claims for each 12-month policy period and a Cybersecurity policy with a limit of \$5.0 million.

Separate from General Government, the Department of Public Utilities maintains Property insurance and Excess Liability insurance. The Property insurance policy has a deductible of \$250,000 per occurrence applies to the buildings and contents while a deductible of \$10,000 per vehicle applies to motor vehicles. Coverage also provides a Wrongful Acts Liability policy with a limit of \$1.25 million for each wrongful act and a \$2.5 million aggregate. Excess Liability policies provide coverage in excess of the previously noted Wrongful Acts liability policy and include General liability and Automobile liability coverage with a \$1.5 million retention. Coverage also includes Aviation Liability - Unmanned aircraft liability for drones with a limit of \$1.0 million.

#### **NOTE 10 TACOMA EMPLOYEES' RETIREMENT SYSTEM FUND (TERS)**

The Tacoma Employees' Retirement System (TERS or System), a pension trust fund of the City of Tacoma, issues a publicly available CAFR that includes financial statements and required supplementary information may be obtained by writing to:

Tacoma Employee's Retirement System  
3628 South 35th Street  
Tacoma, WA 98409

Or the TERS CAFR may be downloaded from the TERS website at [www.cityoftacoma.org/retirement](http://www.cityoftacoma.org/retirement).

**Administration of The System** - The "Tacoma Employees' Retirement System" is a cost-sharing, multiple-employer, defined benefit retirement plan covering substantially all employees of the City of Tacoma, with the exception of police officers, firefighters, and Tacoma Rail employees who are covered by state and federal retirement plans. Employees of the Tacoma-Pierce County Health Department, as well as, certain employees of the Pierce Transit and South Sound 911 (formerly known as Law Enforcement Support Agency) who established membership in the System when these agencies were still City of Tacoma departments, are also members.

The Board of Administration of the Tacoma Employees' Retirement System administers the plan and derives its authority in accordance with Chapter 41.28 RCW and Chapter 1.30 of the Tacoma City Code.

At the direction of the City Council, the System is administered by the Board of Administration (the Board) consisting of nine regular members and one alternate member. The members of the Board are: the Mayor, who serves as Chair; the Director of Finance; the City Manager (or designee); the Public Utilities Director (or designee); three elected employee representatives; one elected retired representative; and one City resident (not employed by the City) elected by the other eight members. The nine Board members appoint a TERS member, either active or retired, as an alternate Board member. The Board is required by the Tacoma Municipal Code to make annual reports to the City Council on the financial condition of the Retirement System. The Board, subject to City Council approval, appoints the Director who is responsible for managing the daily operations of the System.

The breakdown of membership as of December 31, 2018 (measurement date) is as follows:

Retirees and beneficiaries currently receiving benefits	2,474
Terminated vested and other terminated participants	747
Active members:	
City of Tacoma	2,706
Pierce Transit	7
South Sound 911	2
Tacoma-Pierce County Health Department	274
Total active members	<u>2,989</u>
Total membership	<u><u>6,210</u></u>

**Membership** - Substantially all employees of the City of Tacoma are members of the System, with the exception of police officers, firefighters, and Tacoma Rail employees, who are covered by state or federal retirement plans. Other members include employees of the Tacoma-Pierce County Health Department, and certain employees of the Pierce Transit and the South Sound 911 who established membership in the System when these agencies were still City of Tacoma departments.

**Benefits** - There are two formulas to calculate the retirement benefits. The benefit paid will be issued on the formula which provides the higher benefit. The most commonly applied formula, "service retirement", is a product of the member's average monthly salary for the highest, consecutive 24-month period, the number of years of membership credit, and a percentage factor (2% maximum) that is based on the member's age and years of service. The other formula is an annuity based on member contributions. There are several options available for the retiree to provide for their beneficiaries. The System also provides death, disability and deferred retirement. Additionally, the System provides cost of living adjustment (COLA) increases up to 2.125% as of July 1st of each year; the actual COLA granted is dependent on the Consumer Price Index (Seattle Area – all items) over the preceding calendar year.

Any active member who has not retired, and has five or more years of service as a member may purchase up to five additional years of service at the time of retirement. Total service including service purchased cannot exceed 30 years.

The System participates in the portability of public retirement benefits in Washington State public retirement. As provided under Chapter 4154 of the RCW, this allows a member to use all years of service with qualified Washington systems to determine retirement eligibility and percentage factor for benefits under the System.

**Contributions** - The participating employers are responsible for funding the System at a level sufficient to pay obligations and ensure the actuarial and financial soundness of the System. Contribution rates for the employer and the employee are recommended by the Board of Administration and final approval rests with the Tacoma City Council.

The total contribution rate continues to be 21%, divided as 54% for the employer and 46% for the employee, for a new total of 11.34% from the employer and 9.66% from the employee. Changes to the contribution rate are subject to Sections 1.30.340 and 1.30.360 of the Tacoma Municipal Code.

**Significant Assumptions** - The following actuarial methods were used in the funding valuation.

Measurement Date	December 31, 2018
Valuation Date	January 1, 2019
Actuarial Cost Method	Entry Age Normal
Amortization Method	Funding is based on statutory contributions rate. This amount is compared to a 25-year amortization for the purposes of calculating the Actuarially Determined Contribution. The amortization method for the ADC is as follows*: <ul style="list-style-type: none"> <li>• Level percent</li> <li>• Open periods</li> <li>• 25 year amortization period*</li> <li>• 3.75% amortization growth rate</li> </ul>
Asset Valuation Method	4 year smoothing period; Corridor - None
Inflation	2.75%
Salary Increases	Varies by service
Investment Rate of Return	7.00%
Cost of Living Adjustment	2.125%
Retirement Age	Varies by age, gender, and eligibility
Turnover	Varies by service, and gender
Mortality	RP-2014 Mortality for Employees, Healthy and Disabled Annuitants. Generational improvements with projection scale based on Social Security Administration Data.

*\*The actual contribution is used if that rate is greater than the rate necessary to amortize the UAAL. Note that the UAAL amortization period is 30 years for years 2017 and earlier and 25 for years beginning January 1, 2018 and later.*

**Benefit and Assumption Changes** - The comparability of the data from year to year can be affected by changes in actuarial assumptions, benefit provisions, accounting policies, and other factors. There have been no significant changes between the January 1, 2019 valuation date and December 31, 2018 the measurement date. Therefore, no adjustments were needed from the January 1, 2019 actuarial valuation date to the calculated liabilities as of December 31, 2018, measurement date for reporting date of December 31, 2019. There were no changes between the January 1, 2018 and January 1, 2019 valuation dates.

At its June 8, 2017 meeting, the TERS Board approved updates to the service purchase factors and optional form factors effective January 1, 2018. The Board also approved updated factors for use in converting member contributions with interest into the unmodified benefit form for comparison to the service retirement benefit. This change will be effective January 1, 2020.

**Target Allocations** - The long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. The capital market assumptions are per Milliman's (the System's actuary) investment consulting practice as of December 31, 2018. The target asset allocation is based on the Tacoma Employees' Retirement System Investment Policy Statement dated March 2016.

Asset Class	Target Allocation	Long-term Expected Arithmetic Real Rate of Return
Investment Grade Fixed Income	15.0%	2.03%
US Inflation-Indexed Bonds	5.0%	1.14%
High Yield Bonds	9.0%	3.90%
Emerging Market Debt	5.0%	3.75%
Global Equity	41.5%	5.41%
Public Real Estate	2.0%	5.76%
Private Real Estate	2.5%	3.83%
Private Equity	10.0%	9.37%
Master Limited Partnerships	4.0%	4.06%
Timber	2.0%	4.05%
Infrastructure	2.0%	5.04%
Agriculture	2.0%	4.54%
Assumed Inflation - Mean		2.75%
Assumed Inflation - Standard Deviation		1.65%
Portfolio Arithmetic Real Mean Return		4.73%
Portfolio Median Nominal Geometric Return		6.93%
Portfolio Standard Deviation		11.01%
Long-Term Expected Rate of Return, net of investment expenses		7.00%

**Sensitivity Analysis** - The following presents the net pension liability (asset) of the System, calculated using the discount rate of 7%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower 6% or 1 percentage point higher 8% than the current rate.

	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
Net pension liability (asset)	\$28,480,847	\$ 10,264,957	\$ (4,958,686)

As of December 31, 2019, the deferred inflows and outflows of resources are as follows:

	Deferred Inflows of Resources	Deferred of Outflows Resources
Difference Between Expected and Actual Experience	\$ (1,347,068)	\$ 320,649
Changes of assumptions	-	1,502,049
Net Difference Between Projected and Actual Earnings	-	7,874,342
Changes in Employer Proportion	(1,739)	918
Contributions Made Subsequent to the Measurement Date	-	2,451,307
Total	\$ (1,348,807)	\$ 12,149,265

The net amount of deferred inflows and outflows, other than contributions made subsequent to the measurement date, will be recognized as pension expense in each of the next five years.

Amounts will be recognized in pension expense as follows:

2020	\$ 2,902,427
2021	1,166,613
2022	1,376,912
2023	2,861,398
2024	41,801
Thereafter	-
	<u>\$ 8,349,151</u>

The proportionate share of the Water Division is 8.77% of total System's pension liability as of December 31, 2019 and 8.74% as of December 31, 2018. The proportionate share was based on the actual contributions for the year as of December 31, 2019 and 2018.

#### NOTE 11 OTHER POST EMPLOYMENT BENEFITS (OPEB)

**Plan Description** – The City provides the opportunity to receive medical benefits to most of its retirees until age 65. Eligibility and the amount of benefits paid by the City vary by group (TERS, LEOFF 1, LEOFF 2, or Rail employees). The City charges some early retirees not yet eligible for Medicare a health premium based on the claims experience of both actives and retirees. Since health claims costs generally increase with age, retiree health premiums would be significantly higher if they were determined without regard to active claims experience. Therefore, the employer effectively subsidizes the costs of the participating retirees' healthcare through payment of the employer's portion of the premiums for active employees.

Benefit payments are recognized when due and payable in accordance with benefit terms. Pre-Medicare Retiree Healthcare is a single-employer defined benefit OPEB plan that is treated like a cost-sharing plan for financial reporting purposes, and is administered by the City of Tacoma Human Resources Department. The membership as of January 1, 2018 for LEOFF 1 members includes 1 active participant and 406 retirees. The membership as of January 1, 2019 for non-LEOFF 1 members includes 3,526 active participants, 529 deferred retirees, 577 retirees, and 139 spouses of current retirees.

This plan is funded on a pay-as-you-go basis and there are no assets accumulated in a qualifying trust.

**Actuarial Assumptions and Other Inputs** - The Valuation Date is January 1, 2019 for non-LEOFF 1 members and January 1, 2018 for LEOFF 1 members. This is the date as of which the census data is gathered and the actuarial valuation is performed. The Measurement Date is December 31, 2018. This is the date as of which the total OPEB liability is determined. No adjustment is required between the measurement date and the reporting date. The reporting Date is December 31, 2019. This is the Division's fiscal year ending date.

There have been no significant changes between the valuation date and fiscal year ends. If there were significant changes, an additional analysis or valuation might be required.

In preparing the valuation, the actuary relied, without audit, on information as of January 1, 2018 and January 1, 2019 furnished by the City. This information includes, but is not limited to, statutory provisions, member census data, and financial information.

Valuation Date: January 1, 2019  
 Census Date: January 1, 2019  
 Actuarial Cost Method: Individual Entry Age Normal Cost Method  
 Demographic Assumptions: Demographic assumptions regarding retirements, disability, and turnover are based upon pension valuations for the various pension plans.

Actuarial Assumptions:

Discount Rate: 4.10% for pay-as-you-go funding

Medical Cost Trend:

2019	9.10%
2020	6.00%
2021	5.50%
2030	5.00%
2040	5.10%
2050	5.10%
2060	5.00%

Note that the trend for year 2019 reflects the percent by which 2020 medical costs are expected to exceed 2019 medical costs. The medical cost rate is assumed to continue grading downward until achieving the ultimate rate of 4.30% in 2073 and beyond. These trend rates assume that, over time, deductibles and out-of-pocket maximums will be periodically increased as medical trends increase. The trends above do not reflect increases in costs due to the excise tax.

Economic Assumptions -

Discount Rate (Liabilities): 4.10%

Demographic Assumptions:

Eligibility:

Disability - Five years of service are required for non-service connected disability.

Retirement - TERS members are eligible for retiree medical benefits after becoming eligible for service retirement pension benefits (either reduced or full pension benefits).

- 30 years of service
- 60 years of age
- Age + Service = 80 years
- Age 55 with 10 years of service
- Age 40 with 20 years of service

Former members who are entitled to a deferred vested pension benefit are also eligible to receive medical benefits after pension benefit commencement.

Survivors of members who die prior to retirement are eligible for medical benefits.

The discount rate was based on the yield or index rate for 20-year, tax-exempt general obligation municipal bonds with an average rating of AA/Aa or higher.

**Changes of Assumptions:** The discount rate was updated to 4.10% from 3.44%. The actuarial cost method is the individual entry age actuarial cost method to be in compliance with GASB 75.



**OPEB Liabilities, OPEB Expense, and Deferred Outflow of Resources and Deferred Inflows of Resources**

At December 31, 2019 the Division reported a liability of \$3,565,886 for its proportionate share of the collective total OPEB liability of \$204.1 million. The OPEB liability was measured as of December 31, 2018 and was determined by an actuarial valuation as of January 1, 2019. At December 31, 2018 the participating Division's proportion was 1.71227% as compared to 1.74701% at December 31, 2019. For the year ended December 31, 2019 the participating Division recognized an OPEB credit of \$73,090.

At December 31, 2019, the Division reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Inflows of Resources	Deferred Outflows of Resources
Difference Between Expected and Actual Experience	\$ -	\$ 785
Changes of assumptions	(276,720)	106,389
Changes in Employer Proportion	-	122,745
Differences in Contributions	(93,834)	-
Contributions Made Subsequent to the Measurement Date	-	241,258
Total	\$ (370,554)	\$ 471,177

The Division reported \$241,258 as deferred outflows of resources related to the amounts associated with contributions subsequent to the measurement date and will be recognized as a reduction of the total OPEB Liability in the fiscal year ending December 31, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

2020	\$ (21,622)
2021	(21,622)
2022	(21,622)
2023	(21,622)
2024	(49,383)
Thereafter	(4,764)
	<u>\$ (140,635)</u>

**Sensitivity of the Division's Proportionate Share of the OPEB Liability to Changes in the Discount Rate**

The following presents the Division's proportionate share of the OPEB liability, calculated using the discount rate of 4.10%, as well as what the Division's proportionate share of the OPEB liability would be if it were calculated using a discount rate that is one percentage point lower 3.10% or one percentage point higher 5.10% than the current rate.

	1% Decrease 3.10%	Current Discount Rate 4.10%	1% Increase 5.10%
Net OPEB liability	\$ 4,024,806	\$ 3,565,886	\$ 3,182,338



**Sensitivity of the Division's Proportionate Share of the OPEB Liability to Changes in the Healthcare Cost Trend Rates**

The following presents the Division's proportionate share of the OPEB liability using the healthcare cost trend rate as well as what the Division's proportionate share of the OPEB liability would be if it were calculated using a healthcare cost trend rate that is one percentage point lower or one percentage point higher than the current rate:

	1% Decrease 8.10%	Current Trend Rates 9.10%	1% Increase 10.10%
Net OPEB liability	\$ 3,146,236	\$ 3,565,886	\$ 4,065,392

**Excise Tax for High Cost or "Cadillac" Health Plans in 2020 and Beyond** – An excise tax for high cost health coverage, or "Cadillac" health plans was included in the Affordable Care Act (ACA) passed into law in March 2010. The provision levied a 40% tax on the value of health plan costs that exceed certain thresholds for single coverage or family coverage. The Consolidated Appropriations Act (CAA), which was signed into law in December 2015, delayed the tax for two years, until 2020. The President signed a continuing resolution (CR) on January 22, 2018. The CR delayed the excise tax by two additional years, so that the first effective year is 2022. Separately, the excise tax indexing basis was changed from Consumer Price Index (CPI-U) to Chained CPI-U. In addition, the CR provided for an additional one-year moratorium on the Health Insurer Fee for calendar year 2019.

Subsequent to the December 31, 2018 measurement date, H.R. 1865 Further Consolidated Appropriations Act of 2020 was passed into law on December 20, 2019. This law repealed the excise tax completely and removes the Health Insurer Fee permanently beginning in 2021. The next GASB 75 disclosure with a measurement date of December 31, 2019 will completely exclude the excise tax and remove the Health Insurer Fee beginning in 2021.

**NOTE 12 COMMITMENTS AND CONTINGENCIES**

**Capital Improvements** - The financial requirement for Tacoma Water's 2019-2020 biennial Capital Improvement program is approximately \$61.4 million and Tacoma Water has substantial contractual commitments relating to the program. At December 31, 2019 the remaining financial requirement for Capital Improvement Programs relating to all prior biennia is approximately \$42.9 million.

**Muckleshoot Indian Tribe Settlement** - A mutually beneficial settlement agreement was reached with the Muckleshoot Indian Tribe in 1995. The settlement package has a cost of approximately \$30 million and includes five basic elements: 1) building a fish restoration facility and annual operation and maintenance of that facility, or in the alternative, providing \$12 million (indexed at 1995 dollars) into a fish restoration fund; 2) providing for enhanced flows in the Green River; 3) transferring certain lands; 4) establishing a trust fund payable over 40 years which is intended to provide for the general welfare, educational and other needs of the Tribe; and 5) limited access into the Green River Watershed. The settlement resolved past damage claims by the Tribe for Tacoma Water's historical operations on the river, gain the Tribe's support for the Second Supply Project and provide the basis for a long-term, cooperative working relationship on the Green River. Tacoma Water has been implementing this agreement.

**General Legal Matters** - The Water Division has received several other miscellaneous claims or litigation that either do not allege material amounts or that the Legal Department has determined do not pose a risk of liability to the Utility.

**NOTE 13 SUBSEQUENT EVENTS**

On March 11, 2020, the World Health Organization officially declared COVID-19, the disease caused by the novel coronavirus, a pandemic. Management is closely monitoring the evolution of this pandemic, including how it may affect the economy and the general population. Given the dynamic nature of these circumstances and potential business disruption, the City and the Division could experience a significant short-term impact to operations. Management will continue to monitor the situation closely, but given the uncertainty about the situation, it is unable to estimate the impact to the financial statements

On May 14, 2020, Tacoma Water, issued the Water System Subordinate Revenue Refunding Bond, Series 2020 Direct Purchase Option with Key Government Finance, Inc. in an amount of \$18.3 million in order to refund the 2010 Series A Water System Revenue Refunding Bonds.

# Required Supplementary Information

Proportionate Share of the Net Pension Liability Last 10 Years\*

	As of Measurement Date December 31,				
	2018	2017	2016	2015	2014
Employer's proportion of the net pension liability (asset) as a percentage	8.77%	8.74%	8.91%	8.99%	9.17%
Employer's proportion share of net pension liability (asset)	\$10,264,957	(\$3,438,481)	\$8,278,522	\$7,788,151	(\$881,279)
Employer's covered payroll	\$21,819,996	\$20,914,658	\$20,220,795	\$21,148,347	\$20,099,527
Employer's proportionate share of net pension liability (asset) as a percentage of its covered employee payroll	47.04%	-16.44%	40.94%	36.83%	-4.17%
Plan fiduciary net position as a percentage the total pension liability	92.81%	102.53%	93.91%	93.94%	100.71%

Schedule of Contributions Last 10 Fiscal Years\*

	Fiscal Year Ended December 31,				
	2019	2018	2017	2016	2015
Contractually required employer contribution	\$2,451,307	\$2,309,710	\$2,150,205	\$2,124,252	\$2,086,719
Contributions in relation to the contractually required employer contribution	(2,451,307)	(2,309,710)	(2,150,205)	(2,124,252)	(2,086,719)
Employer contribution deficiency (excess)	-	-	-	-	-
Employer's covered employee payroll	\$23,537,115	\$21,819,996	\$20,914,658	\$20,220,795	\$21,148,347
Employer contribution as a percentage of covered-employee payroll	10.41%	10.59%	10.28%	10.51%	9.87%

\* The above schedules are presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, the Division will present information for available years.

Proportionate Share of the Collective OPEB Liability Last 10 Years\*

	As of Measurement Date December 31,		
	2018	2017	2016
Employer's proportion of the collective OPEB liability as a percentage	1.75%	1.71%	1.67%
Employer's proportion share of collective OPEB liability	\$3,565,886	\$3,780,897	\$3,492,067
Employer's covered-employee payroll**	\$21,819,996	\$20,914,658	\$20,432,705
Employer's proportionate share of collective OPEB liability as a percentage of its covered-employee payroll	16.34%	18.08%	17.09%

*\* The above schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, the Division will present information for available years.*

*\*\* The Division's covered employee payroll has been restated for the measurement date ended December 31, 2017.*

**Notes to Required Supplementary Information  
For the Fiscal Year Ended December 31, 2019**

There are no assets accumulated in a trust to pay related benefits.

**Changes of benefit terms:** There have been no changes to the benefit provisions since the prior actuarial valuation.

**Changes of Assumptions:** The discount rate was updated to 4.10% from 3.44%. The actuarial cost method is the individual entry age normal actuarial cost method to be in compliance with GASB 75.

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# Statistical Data (Unaudited)

City of Tacoma, Washington  
Department of Public Utilities  
Tacoma Water

Ten-Year Financial Review

	2019	2018	2017 (As Restated)	2016
<b>STATEMENTS OF NET POSITION</b>				
<b>ASSETS</b>				
Utility Plant - Net	\$874,659,681	\$871,008,433	\$873,518,773	\$879,547,650
Special Funds & Non-Util Prop	155,495,682	160,497,908	154,455,341	157,320,446
Current Assets	84,942,679	79,459,959	73,857,244	68,927,643
Other Assets	2,058,552	4,669,297	1,810,430	2,866,478
Total Assets	1,117,156,594	1,115,635,597	1,103,641,788	1,108,662,217
Deferred Outflows	13,609,381	5,881,479	10,113,888	10,623,174
<b>TOTAL ASSETS AND DEFERRED OUTFLOWS</b>	<b>1,130,765,975</b>	<b>1,121,517,076</b>	<b>1,113,755,676</b>	<b>1,119,285,391</b>
<b>NET POSITION</b>	<b>602,816,562</b>	<b>581,738,357</b>	<b>556,846,481</b>	<b>549,652,226</b>
<b>LIABILITIES AND EQUITY</b>				
Long-Term Debt	431,269,870	447,562,815	463,619,285	478,617,199
Current Liabilities	21,087,589	23,031,002	20,524,364	20,986,727
Long-Term Liabilities	38,297,146	27,703,192	35,406,357	33,932,418
Total Liabilities	490,654,605	498,297,009	519,550,006	533,536,344
Deferred Inflows	37,294,808	41,481,710	37,359,189	36,096,821
<b>TOTAL NET POSITION, LIABILITIES, AND DEFERRED INFLOWS</b>	<b>\$1,130,765,975</b>	<b>\$1,121,517,076</b>	<b>\$1,113,755,676</b>	<b>\$1,119,285,391</b>
<b>STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION</b>				
<b>OPERATING REVENUES</b>				
Residential and Domestic	\$60,847,540	\$59,624,491	\$52,539,643	\$50,742,135
Commercial and Industrial	19,836,364	19,225,528	17,408,529	17,558,905
Special Rate-WestRock/Other	6,883,021	6,873,675	6,322,195	5,845,719
Municipal	-	-	-	-
Wholesale	2,787,239	3,253,029	3,069,448	3,971,839
Unbilled	(111,782)	472,999	660,078	(137,857)
Total Water Sales	90,242,382	89,449,722	79,999,893	77,980,741
Other Operating Revenues	12,302,372	12,491,739	14,644,528	14,820,869
<b>Total Operating Revenues</b>	<b>102,544,754</b>	<b>101,941,461</b>	<b>94,644,421</b>	<b>92,801,610</b>
<b>OPERATING EXPENSES</b>				
Operation and Maintenance	50,339,168	45,892,214	48,921,970	46,894,363
Taxes	5,188,882	5,273,751	4,776,164	4,639,031
Depreciation	25,295,078	26,117,843	24,038,103	23,822,527
Total Operating Expenses	80,823,128	77,283,808	77,736,237	75,355,921
<b>NET OPERATING INCOME (LOSS)</b>	<b>21,721,626</b>	<b>24,657,653</b>	<b>16,908,184</b>	<b>17,445,689</b>
<b>NON-OPERATING REVENUES (EXPENSES)</b>				
Other Income	1,802,296	3,215,049	1,216,295	(221,125)
Interest Income	7,370,377	3,876,762	1,762,813	1,826,299
Interest Charges (Net)	(18,181,445)	(19,269,514)	(18,321,085)	(19,000,536)
<b>Net Income (Loss) Before Contributions &amp; Transfers</b>	<b>12,712,854</b>	<b>12,479,950</b>	<b>1,566,207</b>	<b>50,327</b>
Total Capital Contributions	12,775,630	16,440,749	9,138,434	10,274,030
Grants & Federal BAB Subsidies	3,609,359	3,596,241	3,582,475	3,579,107
Transfers Out	(8,019,638)	(7,625,062)	(7,092,861)	(6,753,061)
<b>CHANGE IN NET POSITION</b>	<b>\$21,078,205</b>	<b>\$24,891,878</b>	<b>\$7,194,255</b>	<b>\$7,150,403</b>

In accordance with Governmental Accounting Standards Board Statement No. 65 both 2012 and 2011 were restated for comparative purposes. Years prior to 2011 are shown as originally reported.



2015	2014	2013	2012	2011	2010
\$884,721,107	\$872,083,357	\$813,050,518	\$722,852,270	\$661,153,297	\$636,592,771
143,802,732	146,933,170	157,311,979	161,863,075	214,619,106	240,132,895
64,476,112	58,737,269	63,568,675	56,407,560	31,403,521	30,200,303
4,689,200	3,769,208	4,679,599	5,300,185	4,664,090	4,654,608
1,097,689,151	1,081,523,004	1,038,610,771	946,423,090	911,840,014	911,580,577
4,002,699	1,587,851	1,813,858	1,764,332	2,056,555	-
1,101,691,850	1,083,110,855	1,040,424,629	948,187,422	913,896,569	911,580,577
542,501,823	516,673,245	480,288,973	449,858,136	425,932,810	417,695,083
478,400,742	483,542,005	455,876,975	401,465,338	419,800,757	421,228,553
18,261,548	20,767,576	42,478,805	35,106,590	18,201,697	20,548,451
26,021,937	26,552,582	26,204,429	26,181,911	19,385,858	52,108,490
522,684,227	530,862,163	524,560,209	462,753,839	457,388,312	493,885,494
36,505,800	35,575,447	35,575,447	35,575,447	30,575,447	-
\$1,101,691,850	\$1,083,110,855	\$1,040,424,629	\$948,187,422	\$913,896,569	\$911,580,577
\$48,263,128	\$44,655,076	\$40,928,355	\$38,737,505	\$36,730,275	\$35,503,069
17,233,617	15,406,078	13,507,899	12,478,932	11,868,976	11,703,099
5,951,348	5,801,842	5,242,359	5,031,760	4,774,237	3,798,922
-	-	445,844	383,385	400,322	364,357
5,192,149	3,718,315	3,519,409	2,090,430	1,625,163	1,530,116
318,945	121,346	468,030	416,986	478,594	(648,438)
76,959,187	69,702,657	64,111,896	59,138,998	55,877,567	52,251,125
21,179,637	28,617,297	32,007,524	21,541,733	9,526,467	10,735,630
98,138,824	98,319,954	96,119,420	80,680,731	65,404,034	62,986,755
41,804,233	37,993,563	35,906,356	32,602,452	32,821,611	34,453,742
4,681,114	3,779,373	3,918,944	3,485,243	3,106,516	3,142,772
17,102,664	16,783,698	16,072,243	15,262,686	14,389,681	14,474,964
63,588,011	58,556,634	55,897,543	51,350,381	50,317,808	52,071,478
34,550,813	39,763,320	40,221,877	29,330,350	15,086,226	10,915,277
(30,042)	537,052	(1,246,053)	288,182	(12,371)	33,795
1,112,850	1,718,226	807,466	2,320,753	3,141,374	2,370,993
(16,677,645)	(11,911,850)	(14,141,036)	(14,462,441)	(14,867,263)	(15,175,660)
18,955,976	30,106,748	25,642,254	17,476,844	3,347,966	(1,855,595)
9,052,674	8,670,639	7,175,575	7,834,345	9,250,677	9,713,596
3,609,706	3,959,446	3,535,426	3,840,767	4,006,209	2,355,132
(6,873,467)	(6,352,561)	(5,922,418)	(5,226,630)	(4,960,736)	(5,110,721)
\$24,744,889	\$36,384,272	\$30,430,837	\$23,925,326	\$11,644,116	\$5,102,412

City of Tacoma, Washington  
Department of Public Utilities  
Regional Water Supply System

Ten-Year Financial Review (RWSS)

STATEMENTS OF NET POSITION	2019	2018	2017	2016
ASSETS				
Utility Plant - Net	\$261,815,181	\$270,292,252	\$279,190,310	\$287,187,547
Current Assets	10,493,887	10,420,340	10,442,765	10,395,435
Total Assets	272,309,068	280,712,592	289,633,075	297,582,982
Deferred Outflows	208,004	224,106	240,210	256,313
TOTAL ASSETS AND DEFERRED OUTFLOWS	272,517,072	280,936,698	289,873,285	297,839,295
NET POSITION	161,888,944	167,469,986	174,701,516	180,852,158
LIABILITIES AND EQUITY				
Long-Term Debt	107,104,701	109,899,314	112,594,314	114,364,416
Current Liabilities	2,544,840	2,558,764	1,564,360	1,601,549
Total Liabilities	109,649,541	112,458,078	114,158,674	115,965,965
Deferred Inflows	978,587	1,008,634	1,013,095	1,021,172
TOTAL NET POSITION, LIABILITIES, AND DEFERRED INFLOWS	272,517,072	280,936,698	289,873,285	297,839,295
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION				
OPERATING REVENUES				
CRO - Debt Service	\$6,365,634	\$5,610,671	\$5,554,208	\$5,582,030
CRO - O&M	3,869,205	3,764,605	3,858,622	3,858,714
CRO - Capital	266,010	93,191	202,255	483,498
Other Operating Revenue	-	-	-	-
Total Operating Revenues	10,500,849	9,468,467	9,615,085	9,924,242
OPERATING EXPENSES				
Operation and Maintenance	3,928,423	3,718,890	3,881,686	3,871,737
Depreciation	8,507,090	9,199,706	8,266,685	8,263,267
Total Operating Expenses	12,435,513	12,918,596	12,148,371	12,135,004
NET OPERATING INCOME (LOSS)	(1,934,664)	(3,450,129)	(2,533,286)	(2,210,762)
NON-OPERATING REVENUES (EXPENSES)				
Other Income	-	-	-	-
Interest Income	346,329	182,850	91,554	87,696
Interest Charges (Net)	(4,645,692)	(4,907,255)	(4,697,999)	(4,715,565)
Net Income (Loss) Before Contributions & Transfers	(6,234,027)	(8,174,534)	(7,139,731)	(6,838,631)
Total Capital Contributions	(163,022)	129,958	179,156	456,685
Grants & Federal BAB Subsidies	816,007	813,046	809,933	808,775
Transfers Out	-	-	-	(287,119)
CHANGE IN NET POSITION	(\$5,581,042)	(\$7,231,530)	(\$6,150,642)	(\$5,860,290)

In accordance with Governmental Accounting Standards Board Statement No. 65 both 2012 and 2011 were restated for comparative purposes. Years prior to 2011 are shown as originally reported.

2015	2014	2013	2012	2011	2010
\$295,780,351	\$293,110,553	\$264,883,717	\$223,896,711	\$203,938,358	\$207,242,527
9,274,080	11,321,557	20,473,681	41,256,611	55,640,447	59,811,400
305,054,431	304,432,110	285,357,398	265,153,322	259,578,805	267,053,927
272,417	288,520	304,624	-	-	1,194,533
305,326,848	304,720,630	285,662,022	265,153,322	259,578,805	268,248,460
186,712,448	183,898,541	154,285,209	136,200,206	132,830,089	138,246,799
116,113,730	117,798,157	120,006,348	122,882,652	124,045,739	124,890,764
1,496,773	1,993,880	10,436,851	5,253,742	1,931,325	5,110,897
117,610,503	119,792,037	130,443,199	128,136,394	125,977,064	130,001,661
1,003,897	1,030,052	933,614	816,722	771,652	-
305,326,848	304,720,630	285,662,022	265,153,322	259,578,805	268,248,460
\$6,047,314	\$6,008,599	\$6,208,432	\$6,272,476	\$6,239,797	\$5,119,047
2,840,435	2,706,023	2,740,645	2,478,238	1,778,186	2,732,956
7,621,901	15,132,508	18,535,695	5,665,557	274,081	1,301,346
1,675	-	-	-	-	-
16,511,325	23,847,130	27,484,772	14,416,271	8,292,064	9,153,349
2,864,326	2,735,246	2,895,385	2,510,085	2,485,977	2,458,379
4,582,300	4,542,912	4,505,158	4,495,971	4,482,820	4,426,113
7,446,626	7,278,158	7,400,543	7,006,056	6,968,797	6,884,492
9,064,699	16,568,972	20,084,229	7,410,215	1,323,267	2,268,857
(120,564)	(18,732)	(373,899)	-	-	-
64,497	114,387	51,743	407,622	396,391	861,775
(4,072,780)	(880,966)	(2,665,310)	(4,901,784)	(7,574,948)	(4,833,300)
4,935,852	15,783,661	17,096,763	2,916,053	(5,855,290)	(1,702,668)
(2,924,135)	13,024,297	148,865	(414,376)	(508,791)	(4,593,787)
802,190	805,374	799,296	868,328	868,328	306,327
-	-	40,079	112	79,043	1,435,898
\$2,813,907	\$29,613,332	\$18,085,003	\$3,370,117	(\$5,416,710)	(\$4,554,230)

City of Tacoma, Washington  
Department of Public Utilities  
Tacoma Water

Statements of Net Position (RWSS)

ASSETS AND DEFERRED OUTFLOWS	WATER W/O RWSS	RWSS	ADJUSTMENTS	TACOMA WATER STATEMENTS
<b>UTILITY PLANT</b>				
In Service, at Original Cost	\$800,079,630	\$344,524,828	\$ -	\$ 1,144,604,458
Less - Accumulated Depreciation	(197,957,963)	(83,444,963)	-	(281,402,926)
Total	602,121,667	261,079,865	-	863,201,532
Construction Work In Progress	10,722,833	735,316	-	11,458,149
Net Utility Plant	612,844,500	261,815,181	-	874,659,681
<b>NET UTILITY PROPERTY</b>	492,963	-	-	492,963
<b>SPECIAL FUNDS</b>				
Construction Funds	11,631,800	-	-	11,631,800
Debt Service Funds	4,036,299	373,985	-	4,410,284
Bond Reserve Funds	13,658,289	8,458,900	-	22,117,189
System Development Charge Fund	73,294,466	-	-	73,294,466
Other Cash & Equity in Pooled Investments	42,568,082	-	980,898	43,548,980
Total Special Funds	145,188,936	8,832,885	980,898	155,002,719
<b>CURRENT ASSETS</b>				
Operating Funds Cash & Equity in				
Pooled Investments	68,315,838	980,898	(980,898)	68,315,838
Accounts Receivable	5,024,308	524,441	-	5,548,749
(Net of Allowance for Doubtful Accounts of \$401,319 in 2019)				
BABs Interest Subsidies Receivable	233,089	68,091	-	301,180
Accrued Unbilled Revenues	5,818,438	-	-	5,818,438
Materials and Supplies	2,780,929	-	-	2,780,929
Prepayments	2,089,973	87,572	-	2,177,545
	84,262,575	1,661,002	(980,898)	84,942,679
<b>OTHER ASSETS</b>				
Regulatory Asset - Surcharges	2,058,552	-	-	2,058,552
Total Other Assets	2,058,552	-	-	2,058,552
<b>DEFERRED OUTFLOWS OF RESOURCES</b>				
Unamortized Losses on Refunding Bonds	780,935	208,004	-	988,939
Pension Contributions	12,149,265	-	-	12,149,265
OPEB	471,177	-	-	471,177
Total Deferred Outflows	13,401,377	208,004	-	13,609,381
<b>TOTAL ASSETS AND DEFERRED OUTFLOWS</b>	<u>\$ 858,248,903</u>	<u>\$ 272,517,072</u>	<u>\$ -</u>	<u>\$ 1,130,765,975</u>

<b>NET POSITION, LIABILITIES AND DEFERRED INFLOWS</b>	<b>WATER W/O RWSS</b>	<b>RWSS</b>	<b>ADJUSTMENTS</b>	<b>WATER STATEMENTS</b>
<b>NET POSITION</b>				
Invested in Capital Assets, Net of Related Debt	\$ 295,879,781	\$ 161,277,384	\$ -	\$ 457,157,165
Restricted for:				
Water Capital and System Development Charge	71,828,854	-	-	71,828,854
Debt Service Funds	2,706,903	(62,836)	-	2,644,067
Unrestricted	70,512,080	674,396	-	71,186,476
Total Net Position	440,927,618	161,888,944	-	602,816,562
<b>LONG-TERM DEBT</b>				
Revenue Bonds	252,397,167	107,104,701	-	359,501,868
Public Works Trust Fund Loans	14,617,694	-	-	14,617,694
Drinking Water State Revolving Fund Loan	57,150,308	-	-	57,150,308
Total Long-Term Debt	324,165,169	107,104,701	-	431,269,870
<b>CURRENT LIABILITIES</b>				
Current Maturities of Long-Term Debt	12,778,017	2,100,000	-	14,878,017
Current Maturities of Long-Term Liabilities	172,616	-	-	172,616
Accrued Taxes	1,675,031	-	-	1,675,031
Accrued Expenses and Contracts Payable	1,325,727	8,020	-	1,333,747
Salaries, Wages and Fringe Benefits Payable	909,860	-	-	909,860
Interest Payable	1,329,397	436,820	-	1,766,217
Customers' Deposits	352,101	-	-	352,101
Total Current Liabilities	18,542,749	2,544,840	-	21,087,589
<b>LONG-TERM LIABILITIES</b>				
Muckleshoot Agreements	6,412,903	-	-	6,412,903
Customer Advances for Construction	7,307,036	-	-	7,307,036
Unearned Revenue	6,536,538	978,587	-	7,515,125
Long-Term Accrued Compensated Absences	2,136,217	-	-	2,136,217
Pension Liability	10,264,957	-	-	10,264,957
OPEB Liability	3,565,886	-	-	3,565,886
Other Long-Term Liabilities	1,095,022	-	-	1,095,022
Total Long-Term Liabilities	37,318,559	978,587	-	38,297,146
<b>DEFERRED INFLOWS OF RESOURCES</b>				
Rate Stabilization	35,575,447	-	-	35,575,447
Pension Contribution	1,348,807	-	-	1,348,807
OPEB Contribution	370,554	-	-	370,554
Total Inflows of Resources	37,294,808	-	-	37,294,808
<b>TOTAL NET POSITION, LIABILITIES, AND DEFERRED INFLOWS</b>	<b>\$ 858,248,903</b>	<b>\$ 272,517,072</b>	<b>\$ -</b>	<b>\$ 1,130,765,975</b>

City of Tacoma, Washington  
Department of Public Utilities  
Tacoma Water

Statements of Revenues, Expenses, and Changes in Net Position (RWSS)

	WATER W/O RWSS	RWSS	ADJUSTMENTS	TACOMA WATER STATEMENTS
<b>OPERATING REVENUES</b>				
Sale of Water	\$ 83,876,748	\$ 6,365,634	\$ -	\$ 90,242,382
Other Operating Revenues	3,526,232	3,869,205	-	7,395,437
Contract Resource Obligation Revenues	10,234,839	266,010	(5,593,914)	4,906,935
Total Operating Revenues	97,637,819	10,500,849	(5,593,914)	102,544,754
<b>OPERATING EXPENSES</b>				
Operations	18,250,394	167,214	-	18,417,608
Production	11,267,532	3,556,326	-	14,823,858
Administrative and General	22,486,733	204,883	(5,593,914)	17,097,702
Depreciation	16,787,988	8,507,090	-	25,295,078
Taxes	5,188,882	-	-	5,188,882
Total Operating Expenses	73,981,529	12,435,513	(5,593,914)	80,823,128
Net Operating Income	23,656,290	(1,934,664)	-	21,721,626
<b>NON-OPERATING REVENUES (EXPENSES)</b>				
Interest Income	7,024,048	346,329	-	7,370,377
Other	1,802,296	-	-	1,802,296
Interest on Long-Term Debt	(14,108,047)	(5,301,081)	-	(19,409,128)
Amortization of Premium and Loss on Refunding	549,172	678,511	-	1,227,683
Interest Charged to Construction	23,122	(23,122)	-	-
Total Non-Operating Expenses	(4,709,409)	(4,299,363)	-	(9,008,772)
Net Income Before Capital Contributions and Transfers	18,946,881	(6,234,027)	-	12,712,854
Capital Contributions				
Cash	7,112,066	(163,022)	-	6,949,044
Donated Fixed Assets	5,826,586	-	-	5,826,586
Federal BABs Subsidies	2,793,352	816,007	-	3,609,359
Transfers				
City of Tacoma Gross Earnings Tax	(8,019,638)	-	-	(8,019,638)
<b>CHANGE IN NET POSITION</b>	26,659,247	(5,581,042)	-	21,078,205
<b>TOTAL NET POSITION - BEGINNING OF YEAR</b>	414,268,371	167,469,986	-	581,738,357
<b>TOTAL NET POSITION - END OF YEAR</b>	\$ 440,927,618	\$ 161,888,944	\$ -	\$ 602,816,562

City of Tacoma, Washington  
Department of Public Utilities  
Tacoma Water

Bond Debt Service Requirements  
December 31, 2019

YEAR	WATER W/O RWSS		RWSS		TOTAL
	PRINCIPAL	INTEREST	PRINCIPAL	INTEREST	
2020	5,850,000	12,852,833	2,100,000	5,241,836	26,044,669
2021	6,150,000	12,560,333	2,205,000	5,143,036	26,058,369
2022	6,410,000	12,297,633	2,315,000	5,035,935	26,058,568
2023	6,240,000	11,977,133	2,455,000	4,923,486	25,595,619
2024	4,300,000	11,665,133	4,930,000	4,804,186	25,699,319
2025	4,465,000	11,460,042	5,190,000	4,561,236	25,676,278
2026	4,930,000	11,244,560	5,420,000	4,300,364	25,894,924
2027	5,085,000	11,003,926	5,700,000	4,027,936	25,816,862
2028	5,265,000	10,730,811	5,970,000	3,741,451	25,707,262
2029	5,445,000	10,448,028	6,300,000	3,441,430	25,634,458
2030	5,640,000	10,155,577	6,595,000	3,124,854	25,515,431
2031	5,835,000	9,852,652	6,880,000	2,855,021	25,422,673
2032	6,050,000	9,524,667	6,660,000	2,572,446	24,807,113
2033	11,915,000	9,184,597	4,495,000	2,298,427	27,893,024
2034	12,360,000	8,502,115	4,655,000	2,045,763	27,562,878
2035	12,820,000	7,794,144	4,830,000	1,784,105	27,228,249
2036	13,295,000	7,059,824	5,005,000	1,512,611	26,872,435
2037	13,790,000	6,298,290	5,185,000	1,231,280	26,504,570
2038	14,305,000	5,508,406	5,375,000	939,831	26,128,237
2039	14,835,000	4,689,020	5,570,000	637,703	25,731,723
2040	15,390,000	3,839,272	5,775,000	324,613	25,328,885
2041	23,820,000	2,974,200	-	-	26,794,200
2042	24,770,000	2,021,400	-	-	26,791,400
2043	25,765,000	1,030,600	-	-	26,795,600
	<u>\$254,730,000</u>	<u>\$204,675,196</u>	<u>\$103,610,000</u>	<u>\$64,547,550</u>	<u>\$627,562,746</u>

City of Tacoma, Washington  
Department of Public Utilities  
Tacoma Water  
Without RWSS

Funds Available for Debt Service

	2019	2018	2017 (As Restated)	2016	2015	2014
Total Income	\$111,675,882	\$113,090,167	\$98,305,474	\$94,688,383	\$92,203,086	\$86,134,608
Less: Operating Exp	<u>57,193,541</u>	<u>52,488,595</u>	<u>54,846,779</u>	<u>52,762,243</u>	<u>48,438,968</u>	<u>43,722,021</u>
Income Available for Debt Service	<u>\$54,482,341</u>	<u>\$60,601,572</u>	<u>\$43,458,695</u>	<u>\$41,926,140</u>	<u>\$43,764,118</u>	<u>\$42,412,587</u>
Bond Redemption	5,639,167	5,413,750	5,216,251	5,140,416	4,873,754	5,551,250
Bond Interest	<u>13,072,833</u>	<u>13,290,645</u>	<u>13,447,439</u>	<u>13,156,254</u>	<u>13,913,407</u>	<u>14,303,864</u>
Debt Service Payable	<u>\$18,712,000</u>	<u>\$18,704,395</u>	<u>\$18,663,690</u>	<u>\$18,296,670</u>	<u>\$18,787,161</u>	<u>\$19,855,114</u>
Times Debt Service Covered	2.91	3.24	2.33	2.29	2.33	2.14



City of Tacoma, Washington  
Department of Public Utilities  
Tacoma Water

Summary of Water Sales – 2019

	AVERAGE MONTHS BILLED	CONSUMPTION (CCF)	REVENUE	% of TOTAL REVENUE	MGD	% of TOTAL MGD
<b>RESIDENTIAL AND DOMESTIC SERVICE</b>						
<b>Inside City</b>						
Single and Multiple House	56,780	4,460,559	\$ 25,631,493	28.5%	9.14	18.5%
Multiple Unit Dwellings	3,313	1,643,756	\$ 6,543,834	7.3%	3.37	6.7%
Parks & Irrigation Services	195	94,084	\$ 441,889	0.5%	0.19	0.4%
Private Fire Services	111	83	\$ 91,388	0.1%	0.00	0.0%
	<b>60,399</b>	<b>6,198,482</b>	<b>\$ 32,708,604</b>	<b>36.4%</b>	<b>12.70</b>	<b>25.6%</b>
<b>Outside City</b>						
Single and Multiple Houses	36,184	3,609,515	\$ 22,059,834	24.4%	7.40	14.8%
Multiple Unit Dwellings	1,934	1,063,968	\$ 5,190,211	5.8%	2.18	4.4%
Parks & Irrigation Services	291	156,791	\$ 842,979	0.9%	0.32	0.6%
Private Fire Services	81	9	\$ 45,912	0.1%	0.00	0.0%
	<b>38,490</b>	<b>4,830,283</b>	<b>\$ 28,138,936</b>	<b>31.2%</b>	<b>9.90</b>	<b>19.8%</b>
<b>COMMERCIAL AND INDUSTRIAL SERVICE</b>						
<b>Inside City</b>						
Large Volume Service	2	317,475	\$ 583,658	0.6%	0.65	1.3%
General Service	3,833	2,271,355	\$ 9,039,803	10.0%	4.66	9.3%
Parks & Irrigation Services	402	372,452	\$ 1,658,743	1.8%	0.76	1.5%
Private Fire Services	1,115	7,053	\$ 2,766,018	3.1%	0.01	0.0%
	<b>5,352</b>	<b>2,968,335</b>	<b>\$ 14,048,222</b>	<b>15.5%</b>	<b>6.08</b>	<b>12.1%</b>
<b>Outside City</b>						
Large Volume Service	4	732,400	\$ 1,668,300	1.8%	1.50	3.0%
General Service	1,054	595,212	\$ 2,570,775	2.8%	1.22	2.4%
Parks & Irrigation Services	109	105,237	\$ 545,944	0.6%	0.22	0.4%
Private Fire Services	238	791	\$ 1,003,123	1.1%	0.00	0.0%
	<b>1,405</b>	<b>1,433,640</b>	<b>\$ 5,788,142</b>	<b>6.3%</b>	<b>2.94</b>	<b>5.8%</b>
<b>WESTROCK</b>	<b>1</b>	<b>7,735,140</b>	<b>\$ 6,883,021</b>	<b>7.6%</b>	<b>15.85</b>	<b>31.8%</b>
<b>WHOLESALE</b>	<b>16</b>	<b>1,188,982</b>	<b>\$ 2,787,239</b>	<b>3.1%</b>	<b>2.44</b>	<b>4.9%</b>
Unbilled Revenue			\$ (111,782)	-0.1%		
<b>TOTAL WATER SALES</b>	<b>105,663</b>	<b>24,354,862</b>	<b>\$ 90,242,382</b>	<b>100.0%</b>	<b>49.92</b>	<b>100.0%</b>

MGD defined as Millions of Gallons Per Day

City of Tacoma, Washington  
Department of Public Utilities  
Tacoma Water

2019 Statistical Information  
As of December 31, 2019

Tacoma Water System:		
Average daily delivery exclusive of pulp mill	37.55	MG
Average daily delivery of pulp mill	15.77	MG
Total average daily delivery	<hr/> 53.32	MG
Maximum daily production	8/5/2019	79.54 MG
Minimum daily production	1/29/2019	31.24 MG
Total water produced in 2019*	19,462	MG
Regional Water Supply System (RWSS):		
Total average daily delivery	11.19	MG
Average daily consumption per single family residential service (Inside City)	161.7	GPD
Miles of transmission and wells supply mains - 28" to 96" diameter (includes North Fork wells system)	150	mi
Miles of distribution mains - 2" to 24" in diameter	1,286.74	mi
Fire Hydrants (Inside)	6,134	
Fire Hydrants (Outside)	4,904	

The primary source of Tacoma's water supply is the Green River. Additionally the North Fork well field provides blending options during periods of excessive river turbidity. The Green River source consists of a 73 million gallons per day (MGD) water right. Tacoma is also partner in the Regional Water Supply System (RWSS) and holds a 27 MGD average share of that 64.6 MGD interruptible, junior water right on the Green River. Tacoma also has ground water rights totaling 87 MGD with an installed pumping capacity of 55 MGD.

Tacoma's water supply is robust and of very high quality, benefiting from decades of source protection and substantial investment in treatment. City of Tacoma business and residents continued to receive extraordinary service reliability while meeting or exceeding all regulatory requirements of the United States Environmental Protection Agency and the Washington Department of Health.

Storage facilities are provided at 15 locations. These facilities consist of 10 concrete tanks and 12 steel standpipes. The combined storage capacity is equal to approximately 140.7 million gallons. Of this storage capacity 67.6 million gallons are located at the McMillin Reservoir approximately 14 miles southeast of Tacoma.

*\*Includes losses and water for self-consumption excludes RWSS*

*MG equals million gallons*

*GPD equals gallons per day*

*mi equals miles*

City of Tacoma, Washington  
Department of Public Utilities  
Tacoma Water

Taxes and Employee Welfare Contributions  
For the Year 2019

**FEDERAL**

Social Security (FICA)		<u>\$1,754,753</u>
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**STATE OF WASHINGTON**

Retail Sales Tax	1,049,520	
Utilities and Business Activities Tax	<u>4,448,105</u>	
Total		5,497,625

**COUNTY**

Real Property	<u>74,856</u>	
Total		74,856

**MUNICIPALITIES**

City of Tacoma Gross Earnings Tax	8,019,638	
City of Fircrest Administrative Fee	7,225	
City of Lakewood Administrative Fee	5,887	
City of Puyallup Administrative Fee	22,956	
City of University Place Administrative Fee	<u>669,393</u>	
		<u>8,725,099</u>

TOTAL TAXES		<u>\$16,052,333</u>
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Taxes as a % of Non-CRO Revenues of \$97,637,819		16.44%
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**EMPLOYEE WELFARE CONTRIBUTIONS**

Industrial Insurance and Medical Aid	486,449	
Pensions	2,437,415	
Medical Insurance	3,824,026	
Dental Insurance	<u>359,254</u>	

TOTAL EMPLOYEE WELFARE CONTRIBUTIONS		<u>\$7,107,144</u>
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City of Tacoma, Washington  
Department of Public Utilities  
Tacoma Water

2019 Water Rates

METER SIZE	READY TO SERVE CHARGE PER MONTH	
	INSIDE TACOMA	OUTSIDE TACOMA
5/8 inch	\$24.76	\$29.94
3/4 inch	\$35.79	\$43.18
1 inch	\$57.84	\$69.64
1-1/2 inch	\$112.96	\$135.78
2 inch	\$179.11	\$215.16
3 inch	\$333.46	\$400.38
4 inch	\$553.96	\$664.98
6 inch	\$1,105.21	\$1,326.48
8 inch	\$1,766.71	\$2,120.28
10 inch	\$2,538.46	\$3,046.38
12 inch	\$3,723.65	\$4,468.61

	CHARGE FOR WATER USED PER MONTH PER 100 CUBIC FEET	
	INSIDE TACOMA	OUTSIDE TACOMA
<u>Residential Service</u>		
Each 100 cubic ft of water consumption during the winter months of October through May	\$2.011	\$2.413
First 500 cubic ft of water consumption per month during the summer months of June through September	\$2.011	\$2.413
Each 100 cubic ft of water consumption over 500 cubic ft during the summer months of June through September	\$2.514	\$3.016
<u>Commercial and Industrial</u>		
General Service	\$2.209	\$2.651
Large Volume Service (over 65,000 cubic feet annually)	\$1.784	\$2.141
<u>Parks and Irrigation Service</u>		
Each 100 cubic feet of water consumption	\$3.739	\$4.487

City of Tacoma water services are 100% metered.

Where service conditions are considered extraordinary, the Water Division may, with City Council approval, enter into contracts for periods up to 20 years.

Water rates were established by Ordinance No. 28554 and were effective January 1, 2019.

Residential service rate for outside Tacoma does not include Fircrest, Puyallup, University Place, and Lakewood.

City of Tacoma, Washington  
Department of Public Utilities  
Tacoma Water

2019 Fire Protection Rates

RATES FOR PRIVATE FIRE PROTECTION SERVICE ON A SEPARATE METER INSIDE THE CITY OF TACOMA ARE AS FOLLOWS:

METER SIZE	MONTHLY CHARGE	WATER INCLUDED FOR MONTHLY LEAKAGE AND TESTING PURPOSES (100 Cubic Feet)
2 inch	\$27.37	2.99
3 inch	\$39.85	2.99
4 inch	\$66.58	2.99
6 inch	\$149.35	2.99
8 inch	\$265.87	2.99
10 inch	\$415.86	2.99
12 inch	\$665.16	2.99

No charge is made for water used through a fire service in extinguishing fires of incendiary or accidental origin if the customer, at the location where the use occurs, gives written notice to the Division within ten days from the time of such fire. Use of water through a fire service for purposes other than extinguishing fires of incendiary or accidental origin is charged as follows:

MONTHLY CHARGE

12 times the monthly service charge (minimum).

CONSUMPTION

Rates per 100 cubic feet per month \$3.960

The above rates for fire service shall apply where City water is used for all purposes on such premises exclusive of that amount allowed for testing and leakage.

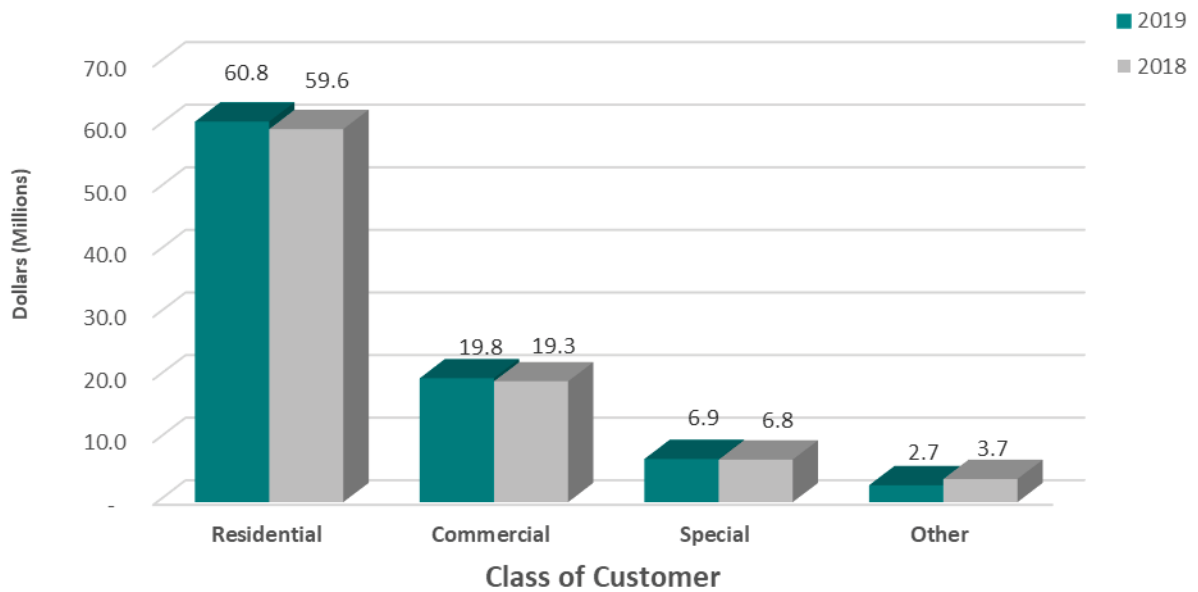
Costs associated with fire hydrant services are currently recovered from customers in two different ways, depending on their location in the service area. Customers outside the City of Tacoma with residential and commercial accounts pay a flat monthly franchise "Franchise Hydrant Service Fee" as shown below:

Outside City, other contract	\$4.752
Fircrest Franchise	\$4.752
Lakewood, Puyallup, and University Place Franchises	\$4.752

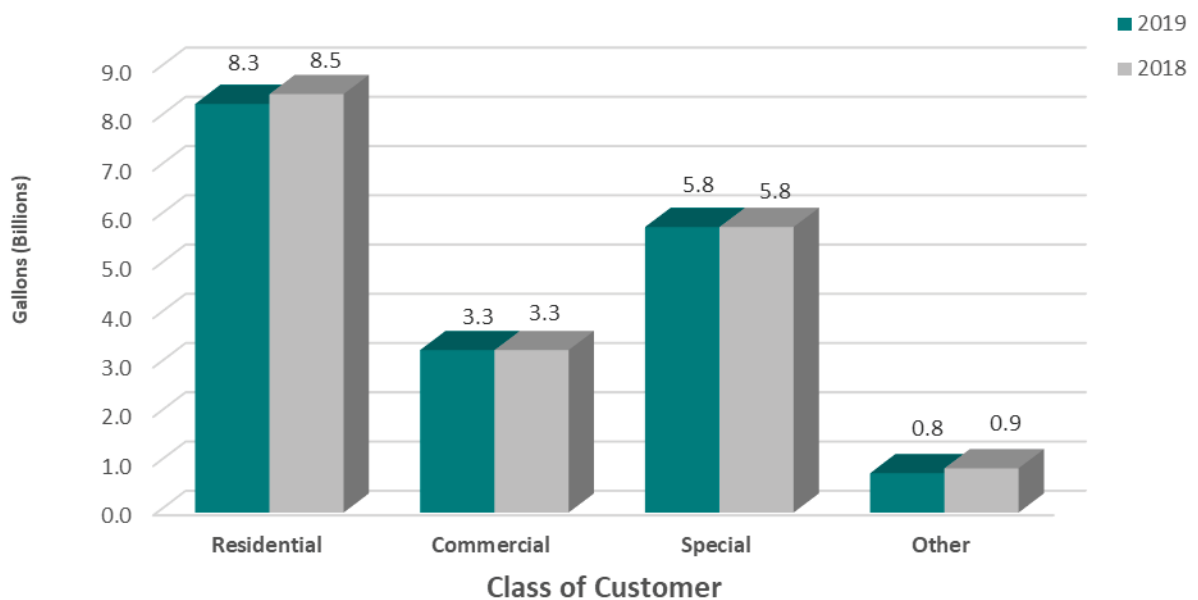
The Fire Protection Rates were established by Ordinance No. 28554 and were effective January 1, 2019.

# Graphs

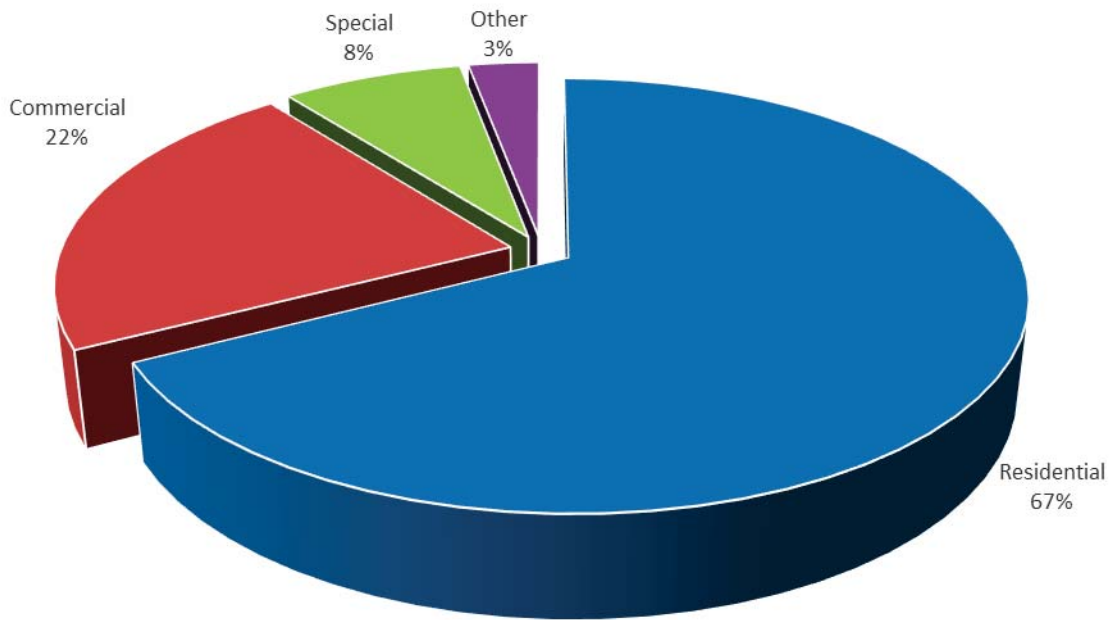
## WATER SALES Year to Date - December 2019 & 2018



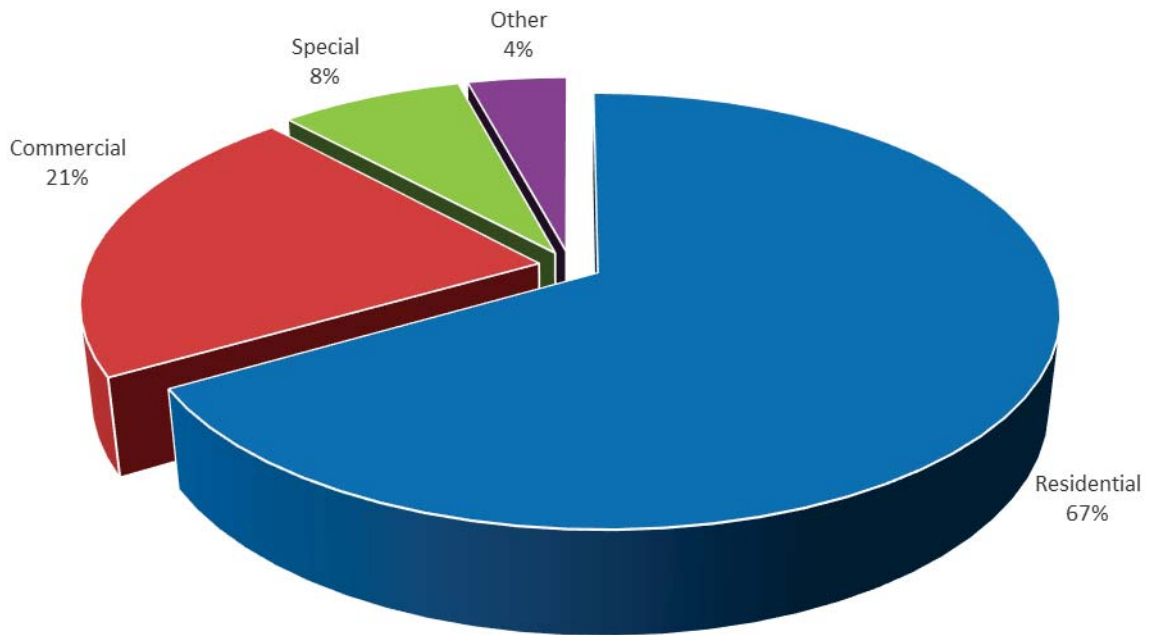
## WATER CONSUMPTION Year to Date - December 2019 & 2018



**WATER SALES**  
**Year to Date - December 2019**  
**(\$90,242,382)**

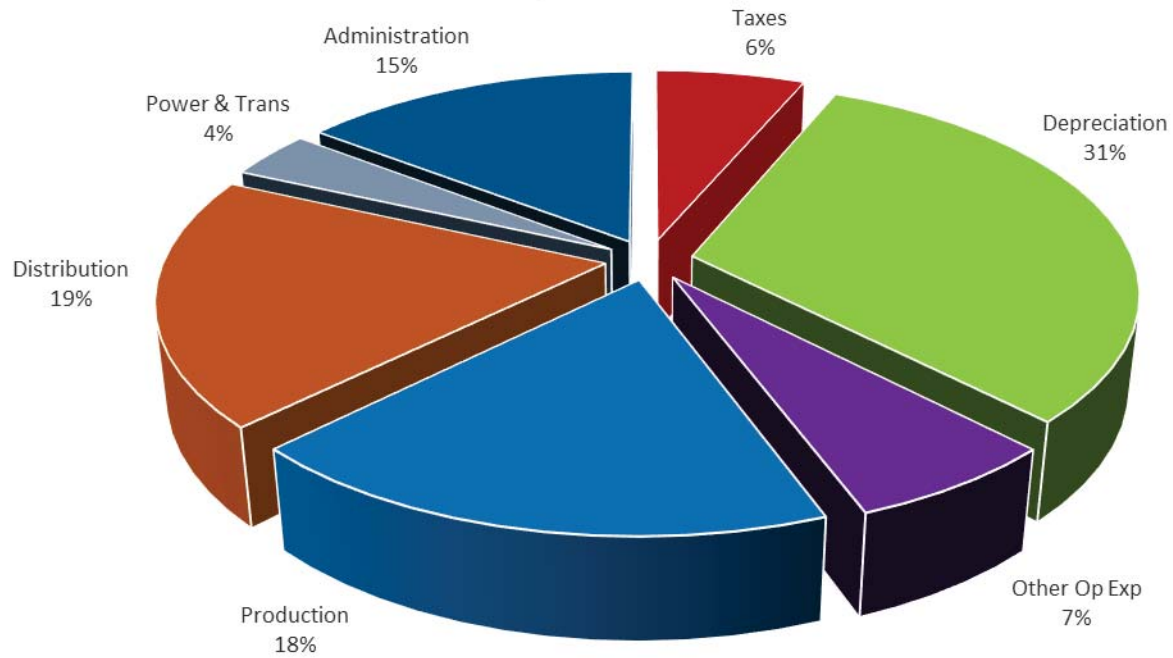


**WATER SALES**  
**Year to Date - December 2018**  
**(\$89,449,720)**

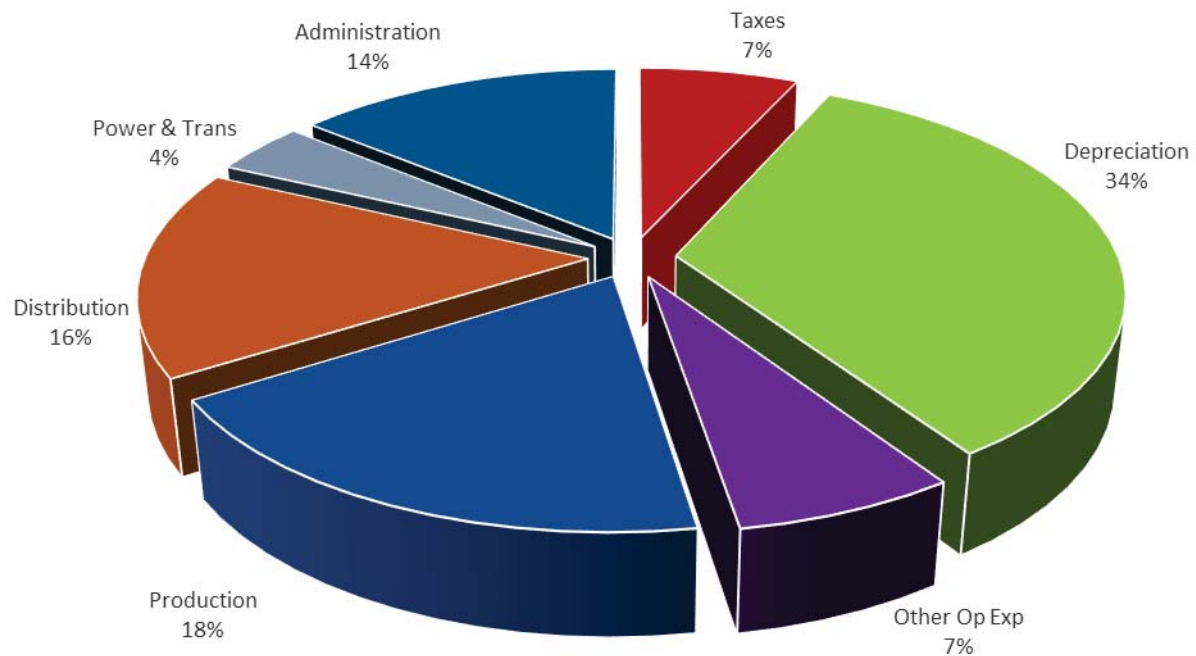




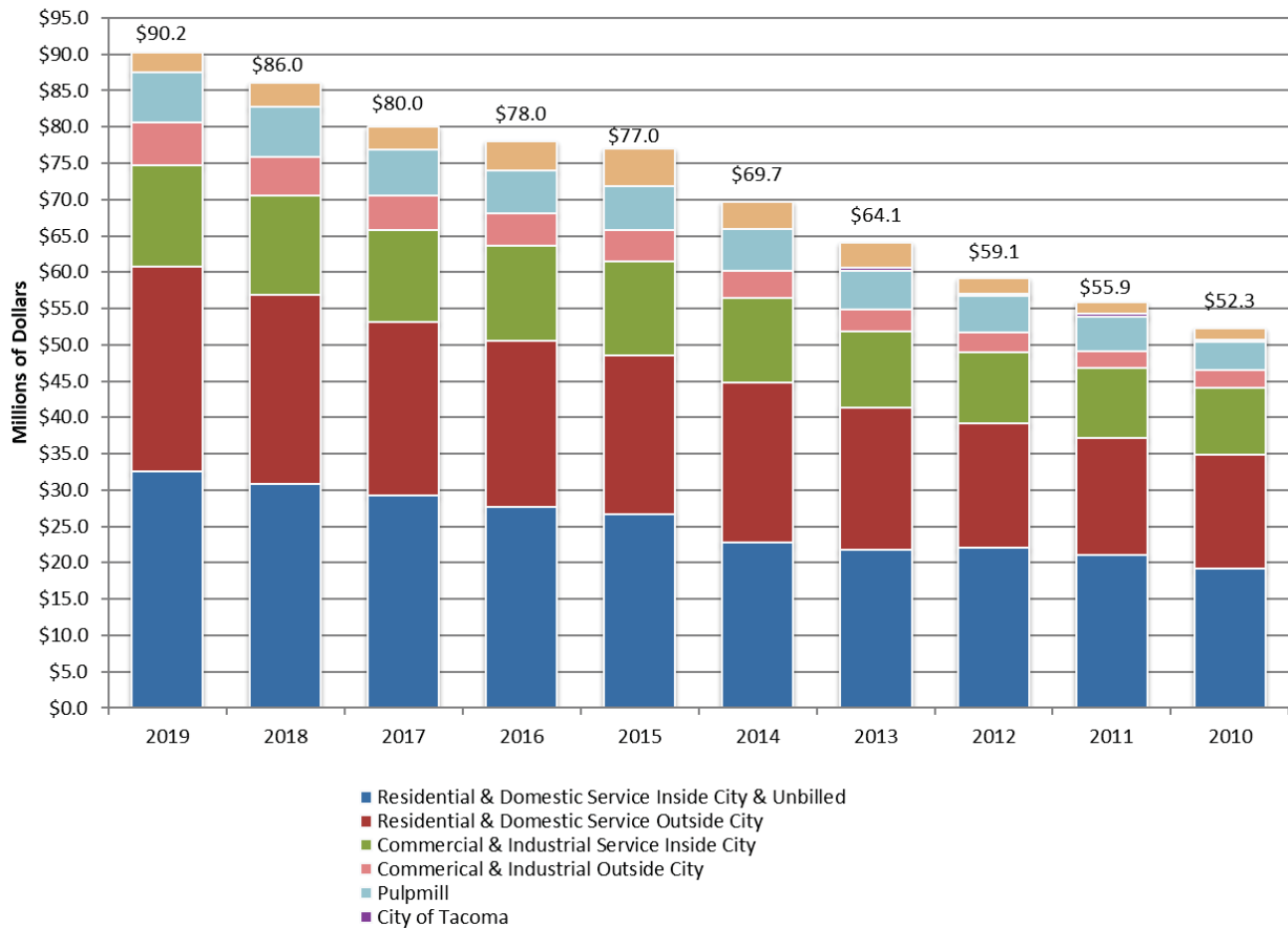
**TOTAL OPERATING EXPENSES**  
**Year to Date - December 2019**  
**(\$80,823,128)**



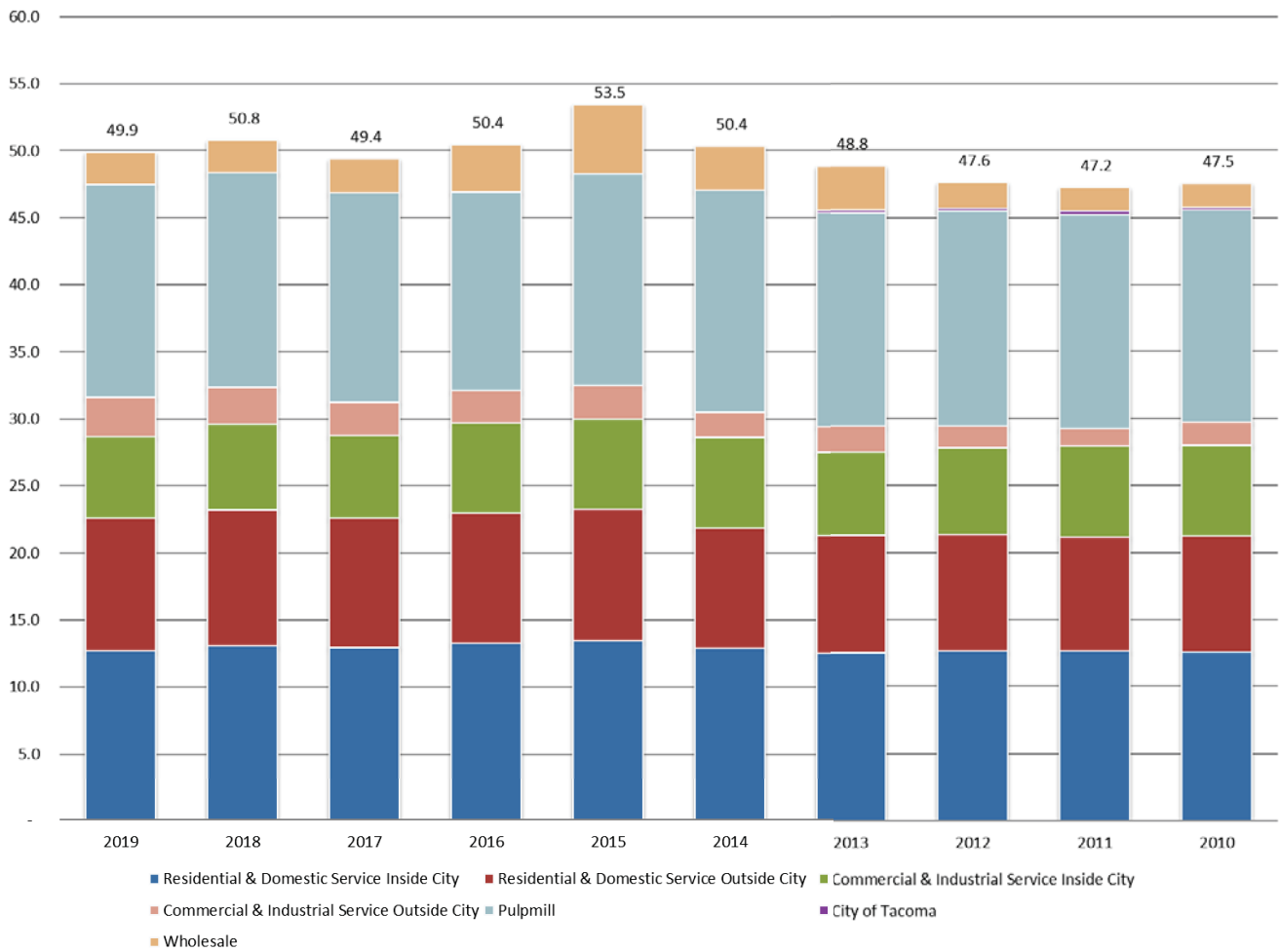
**TOTAL OPERATING EXPENSES**  
**Year to Date - December 2018**  
**(\$77,283,808)**



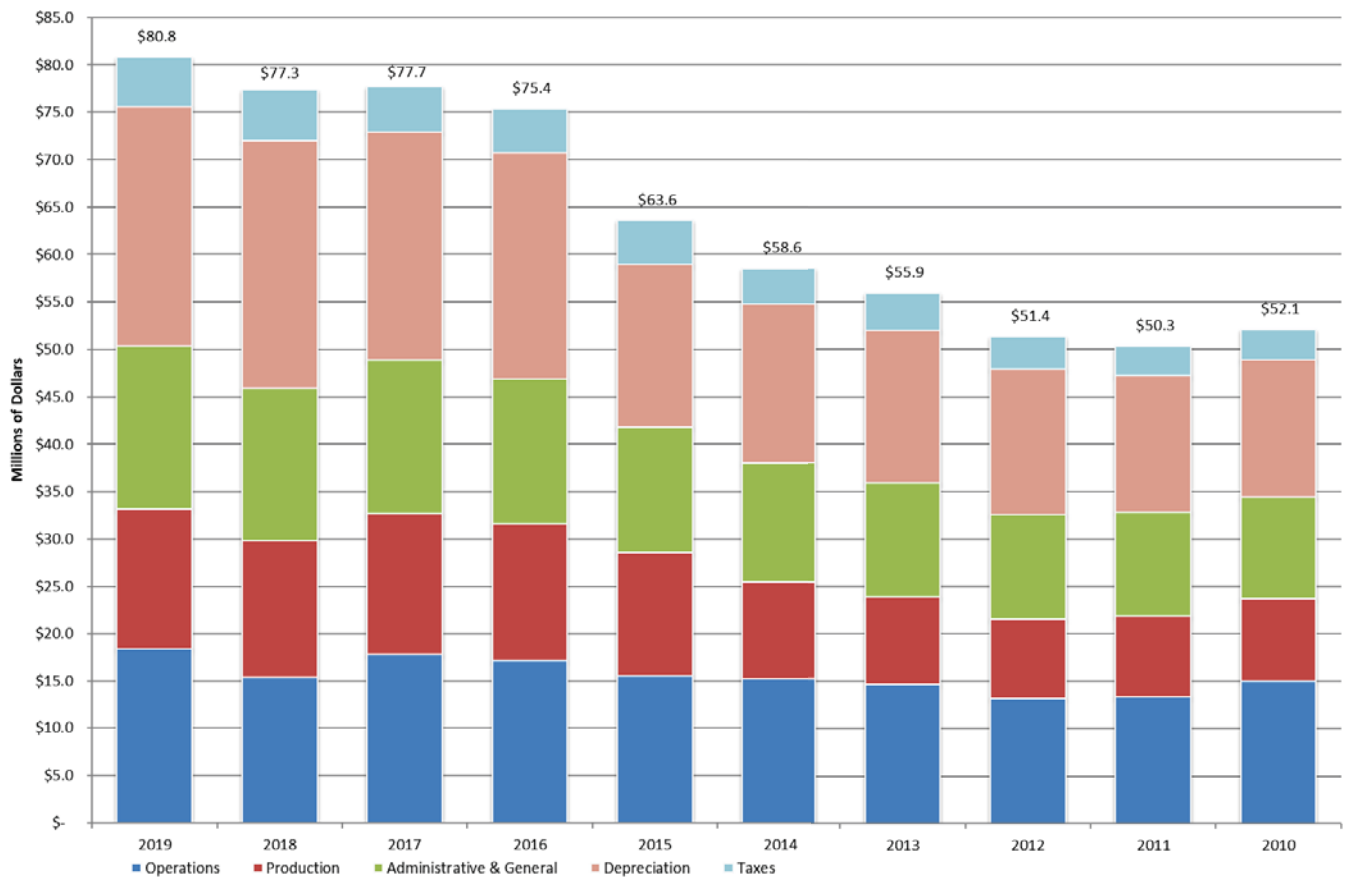
## TEN-YEAR SUMMARY OF WATER SALES (MILLIONS OF \$)



## TEN-YEAR SUMMARY OF WATER DEMAND (MGD)



### TEN-YEAR SUMMARY OF O&M EXPENSE (MILLIONS OF \$)



# Superintendent's Report (Unaudited)



## **2019 SUPERINTENDENT'S REPORT**

It has been a very busy year defining where we want to be as an organization and how to structure ourselves to get there. We identified two large projects at the beginning of the year including the development of our 2020-2025 strategic plan and an enterprise-wide restructure of Tacoma Water.

A strategic plan provides clear alignment and direction for an organization. At the beginning of 2019, leadership created two teams representing every section of the utility to help develop our strategic plan. These teams engaged the organization to determine the areas of focus to fulfill our vision to be an “exceptional community resource empowering employees to deliver life-sustaining value.” Key objectives and initiatives outlined in the plan contribute to providing customers increased value, preparing our workforce, and improving operational efficiency.

Throughout the 125 years of serving our customers, Tacoma Water has upheld the mission of providing clean, reliable water. While our mission has not changed, our business has become more complex and our current organizational model does not support this future landscape. Our organizational restructure project combines groups by functions and seeks to meet our strategic objectives, increase capabilities in our workforce, increase our efficiency, and empower staff to make decisions.

We will begin to implement our strategic plan and restructure project at the beginning of 2020. Highlights of some of the great work accomplished by staff in each section of the organization follows.

### **ASSET & INFORMATION MANAGEMENT**

#### **Strategy Management**

The one-year 2019 strategic plan continued three initiatives already in process – Workforce Connect, TPU Advanced Meter project, and Phase 2 of the Pricing & Policy Revision. The Functional Location Improvement Project (FLIP) and SCADA Data Replication effort initiated in 2019 will continue into 2020.

#### **Water System Plan**

In 2019, Tacoma Water’s updated 10-year Water System Plan was approved by the Public Utility Board, Tacoma City Council, and King County Council. Tacoma Water is now awaiting final approval from the Department of Health.

#### **Work Management Standardization**

Asset Management initiated a project to standardize the usage of Notifications and Work Orders for corrective maintenance. The goal was to eliminate software customization, which limits the built-in functionality available within SAP. Creation of a new notification type (W6) standardizes corrective maintenance data collection and improves asset management practices. Building a data history of asset problems, malfunctions, damages, and causes will improve root-cause analysis of unexpected failures. Repeated patterns and causes of asset failures allow the Utility to predictively plan preventative maintenance activities and reduce expensive corrective maintenance work.

The new W6 notification was designed to mimic standard functionality in SAP and utilizes ISO 14224 reliability and maintenance data for equipment. The new notification underwent thorough user acceptance testing in SAP prior to implementation.

The Green River Filtration Facility was selected as the pilot group for field-testing, because they perform a variety of maintenance activities and their workflow does not impact the MDSI mobile tool. To date, field testing is progressing smoothly, and an in-depth analysis of the pilot test is planned in early 2020. Upon success of the pilot test, the W6 notification will be made available for implementation across the Water Utility.

### **Wells Condition Assessment**

A thorough inspection of all well sites was performed in early 2019 to determine the condition of all assets necessary to extract and treat groundwater. The condition assessments were compared to the age and expected performance of each component. An acceptable level of service was determined to be 90% availability (less than 10% maintenance downtime for each well) in order to provide sufficient groundwater when needed. Capital costs were calculated to restore each well to the 90% service level, and well sites were ranked by return on investment (ROI), expressed as capital cost (in dollars) per million gallons of available production (per MGD).

### **Groundwater Prioritization Project**

The results of the Wells Condition Assessment led directly to a project to study the most economical options to ensure adequate groundwater is available when needed. Wells were evaluated by production capacity, operating costs, cost to provide water treatment, and any capital investments necessary restore 90% reliability. A wells master plan was drafted to describe the groundwater supply system, status, and future goals. The plan predicts future groundwater needs based on historic demand during drought conditions, and modeling of system expansion and demand. It also establishes the acceptable levels of service for wells in order to maintain groundwater availability. A business case evaluation was performed separately to compare capital improvement options for all well sites in terms of cost per well production. The result prioritized the capital improvement options in order of highest return on investment. This allows the identified work to be planned as multiple capital improvement projects, which can be implemented in series to meet expected groundwater demands, with the most cost-effective work performed first. This project was performed jointly with Water Supply so you can read more about it there.

### **UAIM**

Tacoma Water made the decision in 2019 to participate in a Utility Analysis and Improvement Methodology (UAIM) project with the Water Research Foundation and 17 other utilities across the US and UK. This project is a group effort to develop best practices for the following areas: business process models, metrics and decision support.

There were four focus areas based on group feedback: Capital Improvement Project (CIP) Execution, Enterprise Risk, Asset Management Plans, Business Case Evaluation (BCE) and CIP Prioritization. Tacoma Water has chosen to participate on the Asset Management Plans, BCE and CIP Prioritization. The teams so far have identified our “as is” state at a high level and have been diligently working on the “to be” model and metrics that may tie with that model.

### **Knowledge Management**

Knowledge Management is used within an organization to improve people and processes in an organized structure; from understanding gained through experience, analysis and sharing. The value in this for you is simple: you get access to the knowledge you need to do your job effectively, the opportunity to share your knowledge with others and learn more about what others are doing.

Tacoma Water will be focusing on four main functions to move us to a better place in the near term: documentation standards, document storage and accessibility, records management, and SharePoint. In 2019, templates for capturing policy, process and procedures were created to ensure that we are all capturing the same information when we capture new information.

Document storage and accessibility actually tie with SharePoint because that has been the recommended storage place for documentation for collaboration and accessibility for staff.

Records management has been the key focus for Tacoma Water and knowledge management. The goal is to create understanding for staff on what needs to be kept and how long it needs to be kept. To do this, a newsletter was sent out to all Tacoma Water employees sharing the City's keep and delete guidelines. The Knowledge Management Administrator has also been working with the TPU Records Manager to update the Tacoma Water retention schedule so employees have a better understanding of the requirements for the items that they do need to keep. This schedule will be done by the end of the year and shared with staff. In an effort to clean up what we have to narrow us down to one source of truth, 19,654 electronic documents have been deleted which were found to be duplicates or transitory records.

### **Leverage Technology**

We have invested a great deal of effort and focus on enhancing our existing technologies that will drive greater efficiency and improve access and quality of our data.

### **SAP Work Management Backbone**

Tacoma Water defines the work management backbone as the core process of how we maintain our assets using SAP. The connection between the notification and the work order tell the complete story of what the issue was with an asset, how much time was spent fixing the asset and the cost of that time spent restoring the asset to its previously functioning condition. In support of this effort, Asset Management held two SAP Plant Maintenance training sessions, which 23 Water staff attended to learn more about how to navigate and best utilize SAP PM.

### **Workforce Connect**

Workforce Connect is a new technology to replatform Mobile Work Management which will enable greater access to data in the field as well as enhance information collection that will support our broader asset management program. This effort, started in 2018, will continue into 2020 and beyond.

### **Meter survey**

Tacoma Water initially planned to contract out a comprehensive survey of all 102,000 residential meters in preparation for the Advanced Meter (AM) project. When the bids received were significantly more expensive than expected, the Information Services group was able to develop a survey in house using GIS. The survey was completed by crews in the field on their mobile device, capturing data and photos of all residential meters. The end of the year target of surveying 80% of all meters has already been met, and the survey team is on track to complete 100% by the end of the year. The data collected in the survey will inform planning strategy for deployment of AM.

### **PL1/GIS**

LIDAR Imagery for the Watershed and our Tacoma Water service area is now available for use. Work in 2019 consisted of using the LIDAR data in our ESRI BlueWave GIS to facilitate analysis of Pipeline 1.

## **WATER QUALITY**

### **Lead and Copper Monitoring**

As required by the federal Lead and Copper Rule, Tacoma Water collects lead and copper samples from customer homes every three years. In 2019, the 90th percentile values for these samples (upon which compliance is based) were below detection levels for both lead and copper. All of the 51 homes sampled were less than 5 parts per billion for lead, which is well below the Environmental Protection Agency's Action Level of 15 parts per billion. These results were the lowest that Tacoma Water has ever had for Lead and Copper Rule sampling.



The low levels are attributed to recent treatment improvements, including filtration of the Green River supply, corrosion control treatment for the South Tacoma Wellfield, and revised corrosion control treatment set-points for all sources. With current treatment practices and the lead gooseneck replacement program, Tacoma Water is well-positioned to meet the proposed revisions to the Lead and Copper Rule, which are anticipated to go into effect in the near future.

### **Department of Health Sanitary Survey Inspection of Green River Facilities**

In August 2019, the Washington Department of Health (WDOH) completed a sanitary survey to review, inspect and assess the Green River Source and Treatment of our water system, including the Green River Filtration Facility (GRFF). WDOH conducts sanitary survey inspections of public water system treatment facilities every 3 years, with the most recent inspection of the Green River facilities completed in 2016. For distribution, transmission, and storage facilities, WDOH performs sanitary survey inspections every 5 years, with the most recent inspection of those facilities completed in 2018.

The sanitary survey examined our watershed, treatment facilities, pump stations, finished water storage, monitoring, reporting, management and operations of our facilities located on the Green River. The two-day inspection identified no significant issues to be addressed. John Ryding the Assistant Regional Manager, NW Drinking Water Operations for WDOH said in the report letter “The GRFF appears to be in exceptionally good shape and I did not observe any deficiencies or regulatory exceedances. I have been impressed by the dedication, conscientiousness, public health commitment, and professional spirit of all your staff at the plant and in the watershed.”

### **Pacific Northwest Watershed Managers Meeting**

The 2019 Pacific Northwest Watershed Managers (PNWM) Meeting was held June 19-21 at the Tacoma Convention Center and was hosted by Tacoma Water with an entertaining kickoff welcome provided by Utilities Director Jackie Flowers and Water Superintendent Scott Dewhirst. This annual meeting rotates location, bringing together managers and key staff from six medium to large west coast water utilities to discuss emerging issues and operational improvements related to the management of watersheds supplying surface water to municipal diversions. The first day included a tour of the Green River Watershed and an optional tour of the Green River Filtration Facility. The second and third days were spent discussing watershed education programs, wildfire prevention and management, a landscape-level water yield model, and a presentation from Glen George of Water Supply on Tacoma Water’s Integrated Resource Plan. A presentation by Annie Pantzke from the TPU Communications team on the use of social media to demonstrate watershed stewardship received rave reviews. There were 49 participants from Tacoma, Seattle, Portland, San Francisco, Vancouver B.C, Victoria B.C., and New York City in attendance. Tacoma Public Utility Board member Christine Cooley attended the tour and some presentations. The Watershed Operations and Environmental Stewardship teams did an excellent job of putting this meeting together and managing all of the logistics.

### **Watershed Landowner Cooperative Agreements**

Various government and private landowners, including Tacoma Water, own and control the forestlands in the Green River Watershed. Tacoma Water has sought cooperative agreements with landowners as a way to ensure high quality water production. In December of 2018, BTG Pactual (a Brazilian based timber investment company) became a new landowner in the watershed. Early in 2019, we began discussions with them to implement a cooperative agreement. After several months of discussion and negotiation, both parties signed an agreement that protects water quality to benefit our customers while still providing for the forest management objectives of the landowner.

## **Watershed Safety / Onboarding Checklist**

In an effort to strengthen our safety culture, the Watershed Programs group teamed up to create an onboarding safety guide. The project began by seeking input from all the employees on areas of concern, or tasks that have high risk for employee safety. What came out of all the discussion was an employee-driven booklet that informs staff of potential hazards while working in the watershed and some of the personal protective equipment they may need. It also included a list of best practices to follow to help keep employees safe. This project was very rewarding for staff because it engaged the whole team and sparked a lot of conversation around safety and preparedness. It also provides a tool for orientation of new employees working in the watershed.

## **Sawmill Creek Fire Reforestation**

A wildfire broke out in the Sawmill Creek sub-watershed within the Green River Watershed on September 4, 2017. The fire burned approximately 1,061 acres within upper Sawmill Creek mostly on property owned and managed by the USDA – Forest Service and the Weyerhaeuser Company. However, roughly two acres of forestland owned by Tacoma Water also burned and required replanting. On June 11, 2019, Tacoma Water Forester, Brian Ballard, led a team of watershed employees to plant 620 conifer saplings on the site. Supervisors and employees from two work groups pitched in and used the event as a team building exercise while at the same time helping to restore a portion of the watershed to better protect water quality.

## **Fish Passage Barrier Removal**

An existing culvert crossing along the northern mainline forest road at Bobcat Creek in the Green River Watershed was found to be impassable to resident fish. Washington's Forest Practices Rules and the Tacoma Water Habitat Conservation Plan require correction of fish passage barriers with crossings capable of passing 100-year flood flows. Our Watershed Forester, Brian Ballard, worked with a forest engineering contractor to design the bridge. After securing permits, the old 42-inch diameter culvert was replaced by the new 50-foot long bridge on September 15, 2019 that allows for passage of fish and flood flows. Tacoma Water and the Regional Water Supply System shared the costs for this project.

## **Pipeline Trail Project**

Staff from Tacoma Water and City of Tacoma Public Works continued development of the Pipeline Trail along Tacoma Water's Pipeline 4 right-of-way in 2019. The section between the Tacoma Dome and E. 48th Street (Phase 2) was completed in early 2019. A ribbon-cutting ceremony celebrating the opening of the Phase 2 trail was held on June 8, 2019. The ceremony was hosted by District 4 City Councilmember Catherine Ushka and was attended by citizens and various dignitaries, including Tacoma Mayor Victoria Woodards. Work on Phase 3 of the Pipeline Trail from E. 56th Street to E. 72nd Street began in 2019 and is scheduled for completion in early 2020. Finishing the Phase 3 project will result in completion of the trail throughout the City of Tacoma. Construction of the Pipeline Trail is expected to continue south along the Pipeline 4 right-of-way to 94th Avenue E. in Pierce County. Tacoma Water and Real Property Services staff continued meeting with County staff in 2019 to negotiate an easement for Pierce County to construct and operate the trail and for planning. Construction of this portion of the trail is scheduled to begin in 2022.

## **WATER SUPPLY**

### **Day Island Pressure Reducing Valve Replacement**

Following a long period of evaluation and planning, our Supply Crews replaced a pressure reducing valve system that was at the end of its life. This was a challenging project from both an operational and construction viewpoint. The work included a temporary bypass, coordination with local fire, the BNSF railroad, and internal workgroups.

## **Seismic Improvements**

Several seismic improvement projects to fortify structures important to our groundwater system (Hood St. reservoir, Hood St. chlorination building & the South Tacoma Pump Station), as well as our Water Operations Building got underway. The Operations building houses our Water Control Center (WCC), warehouse, shops (pipe and meter) and field crew supervisors and staff, dispatch functions, and certain business function personnel. We are finalizing the contract to provide engineering design services based on the improvements identified in previous studies of these facilities.

### **Swan Creek Bridge for Pipeline 4**

Staff oversaw the replacement of an existing transmission main crossing (Pipeline 4) of a creek with a bridge. This is a multi-beneficial project that will:

- Improve pipeline reliability and resiliency by reducing the risk of washout,
- Enhance fisheries by removing a fish blockage, as part of an ultimate plan to restore fish migration,
- Provide a public trail resource to be part of a new trail system (extension of Pipeline Trail previously discussed) to be enjoyed by the community, while maintaining the highest levels of safety and operational preparedness.

### **Indian Hill Reservoir isolation valve installation**

Our Supply Crews installed a new isolation valve on the inlet line to the 1.0 million gallon concrete reservoir at Indian Hill in Northeast Tacoma. The project was a recommendation in the 2015 All-Hazards Vulnerability Assessment. The new valve allows us to be able to isolate the larger reservoirs from Indian Hill Pump Station No. 2. In a major seismic event, it is expected that Indian Hill Pump Station No. 2 may be operational while the two larger reservoirs may not. In this event, the ability to isolate Indian Hill Pump Station No. 2 from both reservoirs is highly beneficial.

### **Tehaleh Projects**

In an effort to keep pace with the Tehaleh development (a large master planned community in east Pierce County), several milestones were met over the past year. First, a pressure reducing valve station of the North Corridor was design and constructed. In addition a consultant was selected to design the new storage tank and pump station that will be located in the Pinnacle Ridge neighborhood.

### **Groundwater Prioritization Project**

A cost effective methodology for determining the disposition of Tacoma's 25 wells was developed in conjunction with Asset Management to help Tacoma keep wells available to:

- Maintain water rights,
- Provide resilience,
- Address reduced availability of surface water due to climate change,
- In addition, accommodate growth.

### **Pipeline 1 (P1) Investigation**

Staff conducted several investigation efforts to help better understand Pipeline 1 pressure, flow conditions along the pipeline route (fluming), identify possible areas of leaks, and possible air entrapment.

## **P1 Pressurization**

Based on a request from the Washington State Department of Health and the findings from the P1 Investigation work, we have moved forward with efforts to begin the process to pressurize P1. A consultant was selected and a contract was awarded to help us develop a plan to pressurize the pipeline. Design work will begin in early 2020.

## **Leak Repairs to Major Transmission mains**

We repaired two large leaks on transmission pipelines in 2020. The leaks were on Pipelines 2 & 4. Teams of employees contributed to fixing this leaks, and they balanced the demands for a leak response with other duties that they had to perform concurrently.

## **Finalized Planning Documents**

Completed the approval process for some very important planning documents, including

- The Water System Plan,
- Integrated Resource Plan,
- Water Shortage Response Plan,
- Conservation Plan
- Watershed Management Plan

These documents will helps us understand and communicate with customers and stakeholders.

## **SCADA Server Room**

A dedicated server room at Headworks was designed and built to house the SCADA control system, along with new servers. This room has decreased risk and increased resilience of the Headworks operation. At the same time, network segmentation and separation was carried out to comply with best practices and align with NIST 82 (National Institute of Technology and Standards) as applied to Industrial Control Systems Security.

## **Communication Upgrade**

Ground work has been performed to allow the full migration of control system communication circuits from multiple carriers to the Verizon Network. This began with 94th Street and South Tacoma Pump Station in Q3. Included in this effort is a feasibility study to identify critical facilities that may benefit from redundant high capacity communication paths using fiber optic networks. Both of these projects require UTS resources and thus will standardized processes that come with sharing knowledge across divisions of TPU.

## **Improved Security of Reservoirs/Standpipes**

Non-licensed Spread Spectrum Radios for the monitoring of standpipe intrusion alarms were designed and installed. These were installed at seven different facilities and the use of this technology represents a significant cost saving over traditional installation methods.

## **Pressure Reducing Valve (PRV) Trainer**

In January, we finished work on our new PRV trainer located at South Tacoma Pump Station. The completion of this project greatly enhances our ability to train and develop employees as they promote into positions that require advanced skills that are not taught in our apprenticeship program. Our investment in training aligns with the increased focus on workforce development, something that will also be listed as a strategic objective for the upcoming 2020-2025 period.

## **Homeless Encampment Response**

Staff collaborated with Neighborhood and Community Services in order to improve our ability to respond to homeless encampments located on Tacoma Water property. While we continue to do our best to address this challenging issue, establishing a contract with Cascadia Clean-up has provided us a direct method for cleaning up encampments that often contain drug paraphernalia and biological waste. In March of this year, we completed a clean-up of the Gallagher Gulch area below the Hood Street Reservoir. Over a five-day period, a crew of five workers removed fourteen trailer loads of debris from this area, allowing Tacoma Water employees to continue do their jobs in a safe environment.

## **DISTRIBUTION OPERATIONS AND ENGINEERING**

### **Meter Box Survey**

As noted previously, in preparation for the Advanced Meter (AM) Project a survey of the entire meter box population was planned and executed this year. The work was managed and executed by Water staff, which lead to a 40% cost savings compared to bids received from vendors. A team of eight staff surveyed more than 90,000 service points in four months, two months ahead of schedule.

The meter box survey leveraged new technology using the ESRI-based GIS platform and smart phones. Data collected updated dashboards in real-time. The GIS team provided excellent training and support throughout the process.

### **Lead Gooseneck Replacement Plan**

Distribution Engineering and Distribution Operations collaborated to execute the 2019 portion of the Lead Gooseneck Replacement Plan. The work has been completed in a geographically equitable manner, provided relevant regular communication to staff and public, and involved a coordinated effort with area partners in an effort to minimize disruptions to staffing levels and planned work.

Through 2019, the gooseneck project remains on schedule resolving on average 34 per month and will reach the 2019 target of 405, totaling more than 1,000 resolved to date. Lead goosenecks are resolved by being removed or verified not to have had a lead gooseneck.

Tacoma Water continues to coordinate pavement restoration work required because of the Lead Gooseneck Replacement Plan with the Public Works Department. Through collaborating with Public Works Streets Initiative Package #26, Tacoma Water is able take advantage of reduced unit pricing for concrete restoration, and consolidate disturbances to the community.

### **Operations**

In 2019, the system experienced 43 main breaks to date and estimated to finish the year at 58

(4.6 breaks/100 miles of pipe/year). This is more than last year's below average 28 main breaks (2.2 breaks/100 miles of pipe/year), and is well below the industry recommended target of 15 breaks/100 miles of pipe/year and reflects a highly reliable water system.

### **Sound Transit**

Construction for the Sound Transit Hilltop Tacoma Link Extension began in late 2018 and continued through 2019. The project involves relocating more than 11,000 feet of water main and transferring 170 customer water services. More than 80% of the water main relocation work and approximately 60% of the water service transfers will be completed by Tacoma Water staff by the end of 2019. We anticipate the project continuing with water main work through 2020.

## **Conservation and Efficiency Programs**

In 2019, our conservation program attended more than 20 community events, reaching every Tacoma neighborhood. We launched our new conservation giveaway program that now includes outdoor items such as spray nozzles and hose timers, while continuing to distribute indoor items such as showerheads and faucet aerators. More than 1,800 households have received customized water conservation kits this year, each receiving only the items they request for their home. In November, Tacoma Water launched a new incentive for residential customers, offering a rebate on smart irrigation controllers through an entirely paperless, semi-automated process.

## **Elevate the Customer Experience**

In collaboration with Marketing and Communications, Tacoma Water significantly elevated our social media presence and completed a remodel of the TPU website. TPU signed a two-year contract with Tacoma Rainiers to continue outreach with the community about the available customer programs like conservation and customer bill pay assistance. Staff meet regularly to optimize the execution of the communication plan and established deliberate communication channels with customer segments. Public communication about the Advanced Meter program has begun this year and will continue at frequent intervals to educate customers of the benefits of the new technology. In 2019, permit counter hours of operation were adjusted to optimize customer needs and team performance. Next year, customer touch points will continue to be evaluated for ways to improve operations and the customer experience of the development community.

## **TPU Academy**

In the 2nd annual TPU Academy, the Tacoma Water team of instructors developed all kinds of new learning activities for elementary school students this year, including a budget game, hands-on with meters and tools, and operating the water system; in addition to the GIS/mapping and water quality testing lessons from last year. The instructors put hours of heart in to developing this curriculum, and it shows. Comments from the kids included, "Wow!" Science is fun! In addition, comments from the staff included, "I have never seen (X child) so engaged in a task like this before!" The Boys and Girls Club is asking TPU if we have interest in expanding this program to middle school!

## **Main Replacement Program**

We continue to use and refine our distribution mains economic model to prioritize projects. During 2019, Tacoma Water replaced approximately 6.4 miles of distribution main.

## **Private Contract Program**

Nearly 9.6 miles of new distribution main were added to the system from 24 Private Contracts. There were 38 new design plans initiated for new developments such as Tehaleh, Sunrise, and Frederickson 38th and 200th.

## **New Services**

New Services. The Customer Support Group continued to execute at a high level to meet the developer demand for the construction of schools, short plats, shopping centers, restaurants, residential homes and apartments. The workload production statistics match the sentiment around the Puget Sound region regarding economic development for new business and real estate. In 2019, we created approximately 906 fixed fee orders, which approached the average from 2004-2008, and is triple the amount from the low of 297 in 2010. The number of time and material orders continued at record pace of 368 which is dramatically increased over 50% of the year's past. While we pulled back from the recording breaking 250 water availability letters from 2017, we did issue 222 beating previous years' performance. We commented on an impressive 1,684 permits, which topped last year and is 30% more than 2017. Private development work in the City and County remains strong.



## **Flushing**

The unidirectional flush teams cleaned 249.1 miles of main in 2019, approximately 20% of the distribution system. Additionally, 2,016 dead-end mains were flushed.

## **FINANCE AND ANALYTICS**

### **Fixed Fee and System Development Charge Update**

The Financial Stewardship team conducted a comprehensive review of Tacoma Water's fixed fee schedule and System Development Charge, all of which are one-time fees paid by developers in order to connect to Tacoma Water's system. This work included a complete analysis of the cost basis for each of these fees and charges, extensive outreach with the development community and wholesale customers, communication with the entire customer base through various channels, and a review of Tacoma Water's service levels. It culminated in the adoption of revised fees and charges by the City Council on December 17th.

### **Wholesale Market Development**

The Financial Stewardship team completed an important strategic initiative to refresh wholesale rates and advance Tacoma Water's overarching wholesale strategy. This included extensive work with wholesale customers in individual and group settings to gather feedback, communicate the impact of the changes, and assist wholesale customers as they work to determine their best forward path with our regional wholesale water service. With the adoption of the rate changes on December 17th, we improved equity within the wholesale customer class, and advanced our competitive position in the regional wholesale market.

### **Enterprise Advanced Analytics**

The Programs and Analytics group worked with both of our technology groups to adopt Tableau as the standard visualization tool for the City of Tacoma after licensing the tool locally for Tacoma Water, and worked with the IT department to establish Tableau Server to support analysts across the City. This group led an engagement with cross-functional leaders across TPU to develop an enterprise analytics strategy that will guide targeted future investments in people, tools, process development, and use case deployment.

### **Organizational restructure project**

The Programs and Analytics group managed the organizational restructure project for Tacoma Water, providing project structure, communication support, documentation, and the facilitation of various leadership team meetings to establish a concrete implementation plan by the end of the year. The Finance and Analytics leadership team worked with leadership from the information management group to plan and communicate the next steps for integrating these capabilities and taking advantage of the synergies that it will afford.

### **Financial and Project Reporting**

The Financial Stewardship group continued to improve the functionality and reporting of the Adaptive Insights platform to improve enterprise visibility into enterprise financial performance and capital project status. The group worked with Tacoma Power to demonstrate the tool's capability, which led to their adoption of the same tool. This will improve our ability to work across functions to provide more unified reporting to staff, executive leadership, and policymakers. The group also configured the tool to provide support to staff in 2021-2022 budget development.

### **2021-2022 Budget Development**

The Financial Stewardship group kicked off the development of the 2021-2022 biennial budget in November, and updated its SharePoint site, tools, and timeline for the budget development process that will continue into 2020.

2019 is a wrap! We look forward to sharing our accomplishments from 2020 next year!



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