

# Drinking Water System Financial Plan

**2020-2025**

**Mitchell Drinking Water System  
Financial Plan Number 060-301**





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## Memo

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**To:** Municipality of West Perth

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**Re:** Water Works Financial Plan – 2020 to 2025

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**File #:** 19135

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**Date:** October 1, 2019

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### 1.0 INTRODUCTION

#### 1.1 Purpose of Memo

On behalf of the Municipality of West Perth (West Perth), B.M Ross and Associates Limited (BMROSS) has prepared a Financial Plan for the Mitchell Drinking Water System. The Plan includes the following basic components:

1. A **full cost analysis** of the provision of water services.
2. A **cost recovery plan**, including options for revenue adjustments.

This memo summarizes the information used and assumptions made in developing the Financial Plan. The Plan complies with O. Reg 453/07.

#### 1.2 Key Legislated Requirements

As identified in the Ontario Ministry of the Environment, Conservation and Parks (MECP) Guidelines<sup>1</sup> for financial planning, achieving financial sustainability in Ontario's municipal water sector is a long term goal of the province.

In addition to related municipal operating and financing legislation, the Province has set out, in the Safe Drinking Water Act, 2002 (SDWA), detailed requirements for financial planning related to water works systems.

The key aspects are considered to be as follows:

1. The Financial Plan must apply to a period of at least six years. The first year to which the Financial Plan must apply must be the year in which the drinking water system's existing Municipal Drinking Water License (MDWL) would otherwise expire.
2. Amortization costs for existing infrastructure must be identified in the Financial Plan, but there is no requirement to recover those costs.

The current MDWL for West Perth expires on September 16, 2020.

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<sup>1</sup> Ministry of the Environment (MOE), "Toward Financially Sustainable Drinking Water and Wastewater Systems", August 2007.

### 1.3 Relationship to Previous Plans

The most recent Water Financial Plan for the Municipality was completed in March 2015 in accordance with O. Reg. 453/07. This plan was used to determine water pricing for 2015 to 2020. Following presentation of several different rate alternatives, council opted to target annual rate increases of 2.8 %. That report was reviewed and compared to the actual financial situation for 2018. This summary is provided in Section 5.1.

## 2.0 METHODOLOGY

### 2.1 Available Information

Information provided by West Perth includes;

1. 2016-2018 Capital and Operating Budgets and actual expenditures for the water system.
2. 2019 Capital and Operating Budgets for the water system.
3. Information concerning dedicated reserves for water supply.
4. Water Asset Inventory.
5. Number of customers.
6. 2018 water rates.
7. Other applicable information related to the water system.

### 2.2 Procedure

The available information listed in Section 2.1 was reviewed for inclusion in the Financial Plan. Existing water assets are listed in West Perth's asset inventory with historical financial details. The historical financial details were used to calculate the amortization expenses and net book value of the tangible capital assets and are recorded in the Financial Plan. Expenditures and revenues budgeted for 2020 were included with an inflation rate of 2%, with the exception of hydro at 5%, applied for future years. Forecasted capital projects and debenture principal and interest payments were included in the prediction. Revenue requirements and corresponding rate increases are suggested to West Perth to account for historic under investment and future capital projects.

The Memo concludes with a summary showing the consequences of a 0% rate increase and three annual rate increase scenarios:

- A 2% increase (i.e. matching inflation)
- A 2.8% increase (i.e. matching the previous financial plan)
- Full cost recovery as defined by the MECP

## 3.0 DESCRIPTION OF THE SYSTEMS

### 3.1 General

A very basic description of the existing system is as follows:

- Well Nos. 1, 2 and 3:
  - 3 groundwater wells (Well Nos. 1, 2 and 3) each well is located in a small pumphouse and water is pumped to Treatment 123
- Treatment 123:
  - Chlorine disinfection facilities
  - Iron sequestering using sodium silicate
  - In-ground reservoir
  - 3 Vertical Turbine High-lift Pumps
  - Diesel driven Standby Generator

- Well No. 4:
  - 1 groundwater well (Well No. 4) located within Treatment 4
- Treatment 4:
  - MIOX disinfection facilities
  - Iron sequestering using sodium silicate
  - In-ground reservoir
  - 1 Vertical Turbine High-lift Pump
  - Diesel driven Standby Generator
- Other:
  - Equipment for monitoring flow and water quality
  - A 3,900 m<sup>3</sup> standpipe reservoir combined with 1 Diesel powered Fire Pump
  - A 1,050 m<sup>3</sup> elevated water storage tank

The treatment and high lift pumphouse for Well Nos. 1, 2 and 3 (Treatment 123) is located at 123 St. George Street and the treatment and high lift pumphouse for Well No. 4 (Treatment 4) is at 50 Arthur Street. The Standpipe and Fire Pump system, constructed in 1980, are located at 87 Arthur Street. The Elevated Water Storage Tank was constructed in 2016 and is located at 125 Clarke St.

The Mitchell Water Distribution System consists of approximately 40 km of watermain ranging in size up to 350 mm diameter.

The current weighted (on cost) remaining life expectancy of the assets is 52 years.

### **3.2 Customer Information**

The Mitchell Drinking Water System has 2,024 residential, commercial and industrial customers. The largest water consumers are Sofina Foods Inc. and Parmalat Food Inc.

### **3.3 Growth Expectations**

At the time of the 2015 Water Financial Plan there were 1,915 customers. Currently there are 2,024 which indicates an average annual increase of 27 customers in the previous four years. This growth rate was used in the Financial Plan in projecting revenue in future years.

## **4.0 FULL COST OF SERVICE**

### **4.1 Cost Components**

The full cost of providing water services includes the following major categories<sup>2</sup>:

1. Operating expenses
2. Interest expense
3. Funding for Debt Principal Repayment
4. Amortization of Tangible Capital Assets
5. Funding for Inflation in Asset Costs
6. Funding for Historic Under-investment
7. Funding for Service Enhancements
8. Funding for System Growth

Items 2 and 3 would apply when debt has been, or will be, incurred for capital projects. Items 4 to 6 relate to asset maintenance and replacement. The final two items, 7 and 8, relate to planned capital projects for improvements or growth. In some cases, the improvements may be driven by changing regulations, in other cases the Municipality may initiate the project.

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<sup>2</sup> MOE, August 2007.

## 4.2 Operating Expenses

### 4.2.1 Review of 2019 Water Budget

Budgets and actual expenses for the water system were reviewed for 2017 and 2018. The 2019 Budget is believed to reflect the cost of operating the current system. The 2019 anticipated expenses for water works operations are summarized in Table 4.1.

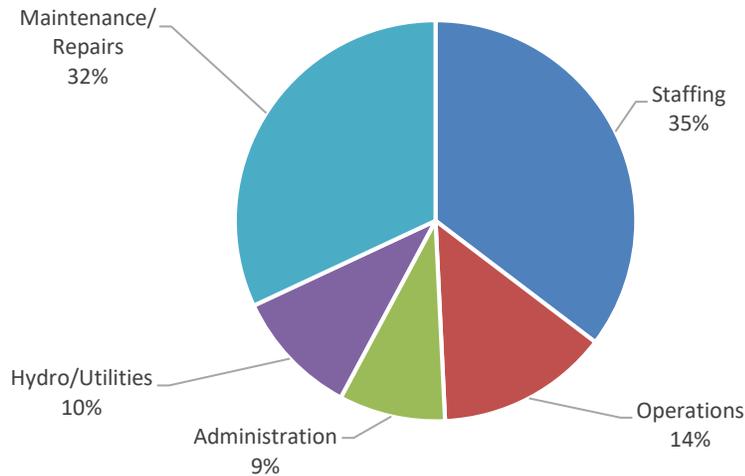
**Table 4.1**  
**ACW 2019 Water Operations Budget**

Item <sup>1</sup> .	2019	Category <sup>2</sup> .
Salaries & Wages	\$ 198,000	Staffing
Benefits	\$ 55,400	Staffing
Administration	\$ -	Administration
Continuing Education	\$ 4,500	Staffing
Health & Safety	\$ 1,500	Staffing
Billing & Collecting	\$ 34,875	Administration
Building - Maintenance	\$ 18,500	Maintenance
Building - Insurance	\$ 14,702	Administration
Building - Taxes	\$ 10,531	Administration
Legal, Consulting	\$ 2,000	Legal/Consulting
Memberships	\$ 400	Administration
Autodialer	\$ 11,000	Operations
Power Purchased	\$ 75,000	Hydro/Utilities
Chemical	\$ 50,000	Operations
Pump Plant Maintenance and Repair	\$ 120,000	Maintenance
Well Maintenance	\$ 3,000	Maintenance
Distribution System	\$ 38,000	Maintenance
Water Meter Maintenance	\$ 55,000	Maintenance
Sampling	\$ 15,000	Operations
Small Tools	\$ 3,000	Operations
Office, Misc	\$ 2,500	Administration
Annual Inspections & Calibrations	\$ 8,000	Operations
DWQMS/Audits & Licence	\$ 6,000	Operations
Vehicles	\$ 9,000	Operations
<b>TOTAL 2019</b>	<b>\$ 735,908</b>	-

Note: 1. Grouping provided by West Perth  
2. Category assignments by BMROSS

The above information is presented graphically in Figure 4.1.

**Figure 4.1  
West Perth Water Works Operational Expenses 2019**



Because West Perth operates their own Drinking Water System, a large component of “Staffing” could also be interpreted as belonging under “Operations”.

#### 4.3 Interest Expense and Debt Repayment

West Perth currently has no water related debt.

#### 4.4 Amortization of Tangible Capital Assets

Amortization is defined as “...the accounting process of allocating the cost less the residual value of a tangible capital asset to operating periods as an expense over its useful life in a rational and systematic manner appropriate to its nature and use.”<sup>3</sup>

The current value (sometimes referred to as “net book value”) of the asset is; its original cost less depreciation. It can be calculated as, original cost times current age divided by its life expectancy. This is a method traditionally called straight line depreciation.

Using the above approach, the annual Amortization Expense and Net Book Value for the water system, as of 2019, is as follows:

**Table 4.2  
2019 Net Book Value and Amortization Expense for Water Works <sup>1</sup>.**

System Component	Amortization Expense (2019)	Net Book Value (2019) <sup>2</sup> .
Distribution Systems	\$ 201,815	\$ 10,820,283
Facilities (wells, storage, pumping)	\$ 91,720	\$ 3,612,045
<b>Totals</b>	<b>\$ 293,535</b>	<b>\$ 14,432,328</b>

Note: 1. Values are from Municipal records

2. Start of year

#### 4.5 Reserve Funds

One reserve fund currently exists for the water works.

<sup>3</sup> MOE, August 2007

#### 4.6 Replacement Costs

The replacement cost of the Municipality's Water System, as of 2019, is considered to be approximately \$30.1M. This value increases annually as construction costs increase. The annual increment would be roughly \$0.6M, based on inflation in construction costs at 2% per year.

#### 5.0 ANALYSIS OF REVENUE

##### 5.1 2015 Financial Plan

Table 5.1 compares the 2018 predicted financial outcome with actual results.

**Table 5.1  
2015 Financial Plan – Predicted vs Actual for 2018**

Item	2018 Predicted	2018 Actual
Revenue	\$ 1,296,009	\$ 1,438,403
Operating Expenditures	\$ 568,390	\$ 709,155
Cash Reserves (end of year)	\$ 1,512,740	\$ 1,515,603
Financial Position	\$ 15,154,426	\$ 15,947,931

Revenues were 11% greater than predicted (including CWWF and one-time sale of vehicle) and operating expenditures were 22% greater than predicted in the 2015 Financial Plan. Cash reserves at the end of 2018 were within \$3,000 of the predicted value. The actual 2018 financial position was 5% greater than predicted.

##### 5.2 Current Rate Structure and Charges

Current rates (2016 – 2020) were established in conjunction with the consolidated 2015 financial plan and stated in By-Law 25-2019 Schedule H. A summary is shown in Table 5.2.

**Table 5.2  
Water Rate Structure**

Component	2019 Charge
<i>Monthly Meter Charge</i>	
Residential	\$26.92
Commercial	\$35.41
<i>Consumption Charge</i>	
Residential	\$0.80
Commercial < 135 m <sup>3</sup>	\$1.22
Commercial > 135 m <sup>3</sup>	\$0.45
<i>Monthly Water Meter Charge</i>	
5/8"	N/A
3/4"	\$2.63
1"	\$9.26
1.5"	\$33.50
2"	\$57.74
3"	\$81.74
4"	\$126.27
6"	\$196.21

### **5.3 Review of Revenue**

#### **5.3.1 Method of Charging**

As identified in the above rate structure, water works related revenue is principally generated in three parts as follows:

1. A flat rate per unit charge.
2. A volumetric (per m<sup>3</sup>) consumption charge based on type of customer.
3. A flat rate monthly water meter charge for services greater than 5/8".

There are other sources of consistent revenue (including connection fees and interest but excluding grants and dividends) but the total revenue generated from those sources is minor. In 2018 it was approximately 8% of the total revenue.

#### **5.3.2 Revenue Breakdown**

The 2019 budget anticipates approximately \$1,372,000 in water revenue. In 2019 the revenue is expected to be approximately 46% greater than operating costs excluding amortization, resulting in a net revenue exclusive of the amortization amount of approximately \$636,000. Out of this value capital replacement and improvement projects will be funded. When amortization is considered, the surplus declines to approximately \$407,000.

Average reserve transfers for 2016-2018 were \$62,066 annually, which is 21% of the actual amortization value (see Table 4.2). Reserve transfers occur after contributions to capital.

## **6.0 FULL COST PROJECTIONS**

### **6.1 General**

The purpose of this Section is to identify the expected cost of service.

### **6.2 Assumptions**

Assumptions regarding full cost of service for the Plan period (2020-2025) are as follows:

1. The starting point for operating expenses was the 2019 Budget.
2. Operating costs, other than those for electricity, will increase at the rate of 2% per year.
3. Electricity costs will increase 5% per year from 2020-2025
4. Growth of 27 household per year is expected based on the previous four years.

### **6.3 Funding for Historic Under-Investment**

In recent years there have been some infrastructure replacement projects funded from reserves. Historically neither the amortization expense nor the inflation of asset costs for tangible capital assets was completely funded each year. As well, maintenance and replacement may have been deferred. These two factors combined are the historic under-investment in the system. As with amortization and inflation of asset costs there is no legislated requirement to generate a surplus which funds historic under-investment. If this amount is recovered along with amortization and inflation of asset cost the full cost of ongoing system replacement could be funded through reserves.

Table 6.1 summarizes the various components of the full cost of replacement including funding for historic under-investment. The values shown in the following table are based on the assumption that items that are overdue for replacement, based on their theoretical useful life, are replaced in 2025. The annual full cost of replacement is calculated assuming \$0 in reserves and enough cash must be available in the asset replacement year to pay 100% of the costs of replacement. It should be noted there is currently a total water reserve balance of approximately \$1.5M, so part of this allowance has been covered.

**Table 6.1**  
**Annual Full Cost of Replacement for Water Works**

System Component	2019 Annual Funding Requirements Breakdown			
	Amortization Expense	Funding for Inflation of Asset Costs	Funding for Historic Under Investment	Annual Full Cost of Replacement <sup>1.</sup>
Distribution Systems	\$ 201,815	\$ 286,171	\$ 450,075	\$ 938,061
Supply and Storage Systems	\$ 91,720	\$ 91,117	\$ 211,909	\$ 394,746
<b>Total</b>	<b>\$ 293,535</b>	<b>\$ 377,288</b>	<b>\$ 661,984</b>	<b>\$ 1,332,807</b>

Notes: 1. Based on 2% per year inflation and 1.5% per year earned interest.

Amortization Expense is described in Section 4.4 and is calculated by dividing the original cost of the asset over the estimated useful life.

Funding for Inflation of Asset Costs is derived from its Annual Allowance, which is the annual amount set aside to replace the asset once it has reached its estimated useful life. It considers that the savings will earn interest and the cost of the asset is increasing due to compounding inflation over the life of the asset. The formula used to calculate the Annual Allowance is:

$$PMT = FV \left[ \frac{i}{((1+i)^n - 1)} \right]$$

Where:

- PMT = Annual Allowance
- FV = Future Value
- i = annual interest
- n = Estimated Useful Life

Then the Funding for Inflation of Asset Costs is the Annual Allowance less the Amortization Expense.

Annual Full Cost of Replacement is similar to the Annual Allowance calculation described above, however it assumes that the annual amount set aside was not started in year one. The value for n has been reduced to the Estimated Remaining Life of the asset.

Funding for Historical Under Investment is the Annual Full Cost of Replacement less the Annual Allowance.

In addition to the average amount being transferred to reserves (\$62,000), a total of approximately \$670,400 has, on average, been put towards replacing water infrastructure during each of the past three years. This is still less than the annual full cost of replacement.

The average total weighted life expectancy as expressed in the Water Asset Inventory database of all of the water assets is approximately 75 years. The remaining average life expectancy is 52 years.

The Rate of Replacement has been defined as the current replacement cost of the water assets (i.e. \$30.1M) divided by the sum of the average annual capital expenditure on replacement plus the contribution to reserves. Based on the 2016 to 2018 capital expenditures and reserve contributions the current Rate of Replacement is:

$$\begin{aligned}
 \text{Rate of Replacement} &= \frac{\text{2019 Replacement Cost}}{\text{Average Capital Investment + Transfer to Reserves}} \\
 \text{(2019)} &= \frac{\$30,116,189}{\$670,352 + \$62,066} \\
 &= 41 \text{ Years}
 \end{aligned}$$

It is strongly recommended to target a replacement rate that is lower than the remaining average life expectancy (i.e. lower than 52 years), which is what is currently being achieved here.

## 6.4 Proposed Capital Program

### 6.4.1 Asset Replacement/Upgrading

A detailed capital plan was not provided by the Municipality. The Financial Plan was completed using the average over the past three years, inflated by 2% for each year of the plan.

## 7.0 COST RECOVERY

### 7.1 General

Section 30(2) of the SDWA (2002) requires water system owners to develop a "Cost Recovery Plan". The intent is to create a long-term plan that will ensure adequate funding to operate, maintain and replace infrastructure. This section of the Memo identifies the revenue increase required to achieve the goals of the Plan.

### 7.2 Options for Cost Recovery

The required rate increase in the Plan period is dependent on what the Municipality wants to achieve. As discussed in Sections 1.2 and 6.3, the Province has advocated for full cost recovery (i.e. full funding of asset replacement) but there is no legislated requirement to do so.

Possible Options include:

1. A 0% rate increase (the base case).
2. A 2% annual rate increase (i.e. matching inflation).
3. A 2.8% increase (i.e. matching the increases from the previous financial plan)
4. Full Cost recovery (as per Section 6.3 of this Memo).

### 7.3 Basis of Comparison

When comparing the effect of each option on the required water rates it is assumed that there would be a series of uniform increases.

For each option we have considered the following:

- Annual % increase required
- Reserves at end of planning period (2025)
- Financial Position at 2025 (Asset value + Reserves)
- Financial Position change (\$ and %)
- Rate of Replacement

## 7.4 Summary of Results

Table 7.1 A to D, which are attached to this Memo provides year by year details of the water system financial position. Table 7.2 summarizes the effect of selecting each option.

**Table 7.2  
Summary of Outcomes for Rate Alternatives**

Option No.	Description	% Annual Increase Required	Reserves at 2025	Financial Position (2025)			Rate of Replacement <sup>2</sup> (Years)
				\$	Change <sup>1</sup> .		
					\$	%	
	2019 Position	-	\$1.5M	\$15.9M	-	-	41
1	0% Rate Increase (Status Quo)	0	\$1.3M	\$18.5M	\$2.6M	16	58
2	2% Annual Rate Increase (Matching Inflation)	2	\$1.9M	\$19.1M	\$3.2M	20	46
3	2.8% Annual Rate Increase (Matching Previous Financial Plan)	2.8	\$2.1M	\$19.3M	\$3.4M	21	42
4	Full Cost Recovery as per MECP Definition	6.7	\$3.4M	\$20.6M	\$4.7M	30	29

Notes: 1. Difference between 2019 and 2025.  
2. Rate of Replacement in year 2025 based on method described in Section 6.3.

## 7.5 Discussion of Results

A review of the outcomes of various rate increases presented in Table 7.2 indicates the following:

- With no increase in revenue, the current rate of reserve fund growth combined with the proposed capital replacement will result in a 16% increase in the financial position and an increase in the rate of replacement to 58 years.
- Increasing revenue by 2% per year (i.e. matching inflation) will further improve the financial position and result in a rate of replacement of 46 years.
- Continuing with 2.8% annual rate increases, as selected in the previous financial plan, would result in a 21% increase in the financial position and result in a rate of replacement of 42 years. (approximately matching the current rate of replacement)
- To achieve Full Cost Recovery by 2025 would require an annual rate increase of 6.7%. Theoretically, no increases would be required beyond 2025.

All of which is respectfully submitted.

B. M. ROSS AND ASSOCIATES LIMITED

Per \_\_\_\_\_  
Ryan DeVries, P. Eng.

Per \_\_\_\_\_  
Ann Gibson, MES, EIT

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**Table 7.1A  
MUNICIPALITY OF WEST PERTH  
2020-2025 Financial Plan for Waterworks  
FINANCIAL PLAN**

	2018	2019	2020	2021	2022	2023	2024	2025
1-Oct-19 Option 1: 0% Revenue Increase								
<b>FINANCIAL POSITION</b>								
<b>Financial assets</b>								
Cash and cash equivalents	1,515,603	1,530,436	1,531,789	1,518,742	1,490,338	1,445,586	1,383,458	1,302,889
Total FINANCIAL ASSETS	1,515,603	1,530,436	1,531,789	1,518,742	1,490,338	1,445,586	1,383,458	1,302,889
<b>Liabilities</b>								
Total LIABILITIES	-	-	-	-	-	-	-	-
<b>NET DEBT (Liabilities - Assets)</b>	<b>(1,515,603)</b>	<b>(1,530,436)</b>	<b>(1,531,789)</b>	<b>(1,518,742)</b>	<b>(1,490,338)</b>	<b>(1,445,586)</b>	<b>(1,383,458)</b>	<b>(1,302,889)</b>
<b>Non-financial assets (Tangible capital assets)</b>								
Existing water mains and facilities	14,563,014	14,432,328	14,809,193	15,190,527	15,576,420	15,966,963	16,362,249	16,762,373
Less: Amortization	(291,261)	(293,535)	(302,474)	(311,591)	(320,891)	(330,377)	(340,052)	(349,921)
Loss (gain) on disposal of tangible capital assets	-	-	-	-	-	-	-	-
New watermains and facilities - at cost	160,575	670,400	683,808	697,484	711,434	725,663	740,176	754,979
<b>Total NON-FINANCIAL ASSETS</b>	<b>14,432,328</b>	<b>14,809,193</b>	<b>15,190,527</b>	<b>15,576,420</b>	<b>15,966,963</b>	<b>16,362,249</b>	<b>16,762,373</b>	<b>17,167,431</b>
<b>Financial position (Non Finance assets - Net Debt)</b>	<b>15,947,931</b>	<b>16,339,629</b>	<b>16,722,317</b>	<b>17,095,163</b>	<b>17,457,301</b>	<b>17,807,835</b>	<b>18,145,830</b>	<b>18,470,320</b>
<b>Analysis of financial position</b>								
Equity in tangible capital assets	14,432,328	14,809,193	15,190,527	15,576,420	15,966,963	16,362,249	16,762,373	17,167,431
Reserves and reserve funds	1,515,603	1,530,436	1,531,789	1,518,742	1,490,338	1,445,586	1,383,458	1,302,889
General surplus (deficit)	-	-	-	-	-	-	-	-
<b>Financial position (from analysis)</b>	<b>15,947,931</b>	<b>16,339,629</b>	<b>16,722,317</b>	<b>17,095,163</b>	<b>17,457,301</b>	<b>17,807,835</b>	<b>18,145,830</b>	<b>18,470,320</b>
<b>FINANCIAL OPERATIONS</b>								
<b>Revenue</b>								
Water Sales - Domestic	1,270,714	1,250,000	1,266,675	1,283,350	1,300,025	1,316,700	1,333,375	1,350,049
Miscellaneous	2,825	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Hydrant Revenue	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
Promissory Note Interest Earned	85,796	85,796	85,796	85,796	85,796	85,796	85,796	85,796
Dividend (Vehicle Sales)	40,315	-	-	-	-	-	-	-
<b>Total REVENUE</b>	<b>1,429,650</b>	<b>1,368,296</b>	<b>1,384,971</b>	<b>1,401,646</b>	<b>1,418,321</b>	<b>1,434,995</b>	<b>1,451,670</b>	<b>1,468,345</b>
<b>Expenses</b>								
<b>Operating</b>								
Salaries & Wages	193,318	198,000	201,960	205,999	210,119	214,322	218,608	222,980
Benefits	55,191	55,400	56,508	57,638	58,791	59,967	61,166	62,389
Administration	-	-	-	-	-	-	-	-
Continuing Education	5,680	4,500	4,590	4,682	4,775	4,871	4,968	5,068
Health & Safety	1,380	1,500	1,530	1,561	1,592	1,624	1,656	1,689
Billing & Collecting	32,604	34,875	35,573	36,284	37,010	37,750	38,505	39,275
Building - Maintenance	39,406	18,500	18,870	19,247	19,632	20,025	20,425	20,834
Building - Insurance	15,331	14,702	14,996	15,296	15,602	15,914	16,232	16,557
Building - Taxes	10,532	10,531	10,742	10,956	11,176	11,399	11,627	11,860
Legal, Consulting	1,457	2,000	2,040	2,081	2,122	2,165	2,208	2,252
Memberships	209	400	408	416	424	433	442	450
Autodialer	13,003	11,000	11,220	11,444	11,673	11,907	12,145	12,388
Power Purchased	58,585	75,000	78,750	82,688	86,822	91,163	95,721	100,507
Chemical	50,680	50,000	51,000	52,020	53,060	54,122	55,204	56,308
Pump Plant Maintenance and Repair	75,435	120,000	122,400	124,848	127,345	129,892	132,490	135,139
Well Maintenance	37,656	3,000	3,060	3,121	3,184	3,247	3,312	3,378
Distribution System	25,001	38,000	38,760	39,535	40,326	41,132	41,955	42,794
Water Meter Maintenance	53,580	55,000	56,100	57,222	58,366	59,534	60,724	61,939
Sampling	15,248	15,000	15,300	15,606	15,918	16,236	16,561	16,892
Small Tools	451	3,000	3,060	3,121	3,184	3,247	3,312	3,378
Office, Misc	2,412	2,500	2,550	2,601	2,653	2,706	2,760	2,815
Annual Inspections & Calibrations	7,960	8,000	8,160	8,323	8,490	8,659	8,833	9,009
DWQMS/Audits & Licence	4,851	6,000	6,120	6,242	6,367	6,495	6,624	6,757
Vehicles	9,185	9,000	9,180	9,364	9,551	9,742	9,937	10,135
<b>Subtotal Operating Expense</b>	<b>709,155</b>	<b>735,908</b>	<b>752,876</b>	<b>770,296</b>	<b>788,183</b>	<b>806,551</b>	<b>825,417</b>	<b>844,797</b>
Loss (gain) on disposal of tangible capital assets	-	-	-	-	-	-	-	-
Amortization of capital assets	291,261	293,535	302,474	311,591	320,891	330,377	340,052	349,921
<b>Total EXPENSES</b>	<b>1,000,416</b>	<b>1,029,443</b>	<b>1,055,350</b>	<b>1,081,887</b>	<b>1,109,074</b>	<b>1,136,928</b>	<b>1,165,469</b>	<b>1,194,718</b>
<b>Net Revenue (Deficit) for the year</b>	<b>429,234</b>	<b>338,853</b>	<b>329,621</b>	<b>319,758</b>	<b>309,247</b>	<b>298,068</b>	<b>286,201</b>	<b>273,627</b>
<b>CASH FLOW</b>								
<b>Operating Transactions</b>								
Net revenue (deficit) for the year	429,234	338,853	329,621	319,758	309,247	298,068	286,201	273,627
Add-back (deduct) non-cash expense:								
Loss (gain) on disposal of tangible capital assets	-	-	-	-	-	-	-	-
Amortization of capital assets	291,261	293,535	302,474	311,591	320,891	330,377	340,052	349,921
<b>Total OPERATING TRANSACTIONS</b>	<b>720,495</b>	<b>632,388</b>	<b>632,095</b>	<b>631,349</b>	<b>630,138</b>	<b>628,444</b>	<b>626,253</b>	<b>623,548</b>
<b>Capital Transactions</b>								
PTTW	(750)	-	-	-	-	-	-	-
Source Water Protection	(9,720)	-	-	-	-	-	-	-
Standpipe	(1,298)	-	-	-	-	-	-	-
Construction	(148,807)	-	-	-	-	-	-	-
Capital Expenses	-	(670,400)	(683,808)	(697,484)	(711,434)	(725,663)	(740,176)	(754,979)
<b>Total CAPITAL TRANSACTIONS</b>	<b>(160,575)</b>	<b>(670,400)</b>	<b>(683,808)</b>	<b>(697,484)</b>	<b>(711,434)</b>	<b>(725,663)</b>	<b>(740,176)</b>	<b>(754,979)</b>
<b>Investing Transactions</b>								
Proceeds from portfolio investments	3,460	22,734	22,957	22,977	22,781	22,355	21,684	20,752
Purchase of portfolio investments	-	-	-	-	-	-	-	-
<b>Total INVESTING TRANSACTIONS</b>	<b>3,460</b>	<b>22,734</b>	<b>22,957</b>	<b>22,977</b>	<b>22,781</b>	<b>22,355</b>	<b>21,684</b>	<b>20,752</b>
<b>Financing Transactions</b>								
Development Charge Contributions	22,561	30,111	30,111	30,111	30,111	30,111	30,111	30,111
Federal/Provincial grants	4,633	-	-	-	-	-	-	-
<b>Total FINANCING TRANSACTIONS</b>	<b>27,194</b>	<b>30,111</b>						
<b>Net Cash Receipts (Payments) for the year</b>	<b>590,574</b>	<b>14,833</b>	<b>1,354</b>	<b>(13,047)</b>	<b>(28,404)</b>	<b>(44,752)</b>	<b>(62,128)</b>	<b>(80,568)</b>
<b>Cash at beginning of year</b>	<b>864,192</b>	<b>1,515,603</b>	<b>1,530,436</b>	<b>1,531,789</b>	<b>1,518,742</b>	<b>1,490,338</b>	<b>1,445,586</b>	<b>1,383,458</b>
<b>Cash at end of year</b>	<b>1,515,603</b>	<b>1,530,436</b>	<b>1,531,789</b>	<b>1,518,742</b>	<b>1,490,338</b>	<b>1,445,586</b>	<b>1,383,458</b>	<b>1,302,889</b>

**Table 7.1B  
MUNICIPALITY OF WEST PERTH  
2020-2025 Financial Plan for Waterworks  
FINANCIAL PLAN**

	2018	2019	2020	2021	2022	2023	2024	2025
1-Oct-19 Option 2: 2% Revenue Increase								
<b>FINANCIAL POSITION</b>								
<b>Financial assets</b>								
Cash and cash equivalents	1,515,603	1,530,436	1,557,773	1,597,936	1,651,246	1,718,029	1,798,609	1,893,313
Total FINANCIAL ASSETS	1,515,603	1,530,436	1,557,773	1,597,936	1,651,246	1,718,029	1,798,609	1,893,313
<b>Liabilities</b>								
Total LIABILITIES	-	-	-	-	-	-	-	-
<b>NET DEBT (Liabilities - Assets)</b>	<b>(1,515,603)</b>	<b>(1,530,436)</b>	<b>(1,557,773)</b>	<b>(1,597,936)</b>	<b>(1,651,246)</b>	<b>(1,718,029)</b>	<b>(1,798,609)</b>	<b>(1,893,313)</b>
<b>Non-financial assets (Tangible capital assets)</b>								
Existing water mains and facilities	14,563,014	14,432,328	14,809,193	15,190,527	15,576,420	15,966,963	16,362,249	16,762,373
Less: Amortization	(291,261)	(293,535)	(302,474)	(311,591)	(320,891)	(330,377)	(340,052)	(349,921)
Loss (gain) on disposal of tangible capital assets	-	-	-	-	-	-	-	-
New watermains and facilities - at cost	160,575	670,400	683,808	697,484	711,434	725,663	740,176	754,979
<b>Total NON-FINANCIAL ASSETS</b>	<b>14,432,328</b>	<b>14,809,193</b>	<b>15,190,527</b>	<b>15,576,420</b>	<b>15,966,963</b>	<b>16,362,249</b>	<b>16,762,373</b>	<b>17,167,431</b>
<b>Financial position (Non Finance assets - Net Debt)</b>	<b>15,947,931</b>	<b>16,339,629</b>	<b>16,748,300</b>	<b>17,174,356</b>	<b>17,618,210</b>	<b>18,080,278</b>	<b>18,560,982</b>	<b>19,060,744</b>
<b>Analysis of financial position</b>								
Equity in tangible capital assets	14,432,328	14,809,193	15,190,527	15,576,420	15,966,963	16,362,249	16,762,373	17,167,431
Reserves and reserve funds	1,515,603	1,530,436	1,557,773	1,597,936	1,651,246	1,718,029	1,798,609	1,893,313
General surplus (deficit)	-	-	-	-	-	-	-	-
<b>Financial position (from analysis)</b>	<b>15,947,931</b>	<b>16,339,629</b>	<b>16,748,300</b>	<b>17,174,356</b>	<b>17,618,210</b>	<b>18,080,278</b>	<b>18,560,982</b>	<b>19,060,744</b>
<b>FINANCIAL OPERATIONS</b>								
<b>Revenue</b>								
Water Sales - Domestic	1,270,714	1,250,000	1,292,008	1,334,857	1,378,563	1,423,142	1,468,613	1,514,994
Miscellaneous	2,825	2,500	2,550	2,601	2,653	2,706	2,760	2,815
Hydrant Revenue	30,000	30,000	30,600	31,212	31,836	32,473	33,122	33,785
Interest Earned	85,796	85,796	85,796	85,796	85,796	85,796	85,796	85,796
Dividend (Vehicle Sales)	40,315	-	-	-	-	-	-	-
<b>Total REVENUE</b>	<b>1,429,650</b>	<b>1,368,296</b>	<b>1,410,954</b>	<b>1,454,466</b>	<b>1,498,848</b>	<b>1,544,117</b>	<b>1,590,292</b>	<b>1,637,390</b>
<b>Expenses</b>								
<b>Operating</b>								
Salaries & Wages	193,318	198,000	201,960	205,999	210,119	214,322	218,608	222,980
Benefits	55,191	55,400	56,508	57,638	58,791	59,967	61,166	62,389
Administration	-	-	-	-	-	-	-	-
Continuing Education	5,680	4,500	4,590	4,682	4,775	4,871	4,968	5,068
Health & Safety	1,380	1,500	1,530	1,561	1,592	1,624	1,656	1,689
Billing & Collecting	32,604	34,875	35,573	36,284	37,010	37,750	38,505	39,275
Building - Maintenance	39,406	18,500	18,870	19,247	19,632	20,025	20,425	20,834
Building - Insurance	15,331	14,702	14,996	15,296	15,602	15,914	16,232	16,557
Building - Taxes	10,532	10,531	10,742	10,956	11,176	11,399	11,627	11,860
Legal, Consulting	1,457	2,000	2,040	2,081	2,122	2,165	2,208	2,252
Memberships	209	400	408	416	424	433	442	450
Autodialer	13,003	11,000	11,220	11,444	11,673	11,907	12,145	12,388
Power Purchased	58,585	75,000	78,750	82,688	86,822	91,163	95,721	100,507
Chemical	50,680	50,000	51,000	52,020	53,060	54,122	55,204	56,308
Pump Plant Maintenance and Repair	75,435	120,000	122,400	124,848	127,345	129,892	132,490	135,139
Well Maintenance	37,656	3,000	3,060	3,121	3,184	3,247	3,312	3,378
Distribution System	25,001	38,000	38,760	39,535	40,326	41,132	41,955	42,794
Water Meter Maintenance	53,580	55,000	56,100	57,222	58,366	59,534	60,724	61,939
Sampling	15,248	15,000	15,300	15,606	15,918	16,236	16,561	16,892
Small Tools	451	3,000	3,060	3,121	3,184	3,247	3,312	3,378
Office, Misc	2,412	2,500	2,550	2,601	2,653	2,706	2,760	2,815
Annual Inspections & Calibrations	7,960	8,000	8,160	8,323	8,490	8,659	8,833	9,009
DWQMS/Audits & Licence	4,851	6,000	6,120	6,242	6,367	6,495	6,624	6,757
Vehicles	9,185	9,000	9,180	9,364	9,551	9,742	9,937	10,135
<b>Subtotal Operating Expense</b>	<b>709,155</b>	<b>735,908</b>	<b>752,876</b>	<b>770,296</b>	<b>788,183</b>	<b>806,551</b>	<b>825,417</b>	<b>844,797</b>
Loss (gain) on disposal of tangible capital assets	-	-	-	-	-	-	-	-
Amortization of capital assets	291,261	293,535	302,474	311,591	320,891	330,377	340,052	349,921
<b>Total EXPENSES</b>	<b>1,000,416</b>	<b>1,029,443</b>	<b>1,055,350</b>	<b>1,081,887</b>	<b>1,109,074</b>	<b>1,136,928</b>	<b>1,165,469</b>	<b>1,194,718</b>
<b>Net Revenue (Deficit) for the year</b>	<b>429,234</b>	<b>338,853</b>	<b>355,604</b>	<b>372,579</b>	<b>389,774</b>	<b>407,189</b>	<b>424,823</b>	<b>442,672</b>
<b>CASH FLOW</b>								
<b>Operating Transactions</b>								
Net revenue (deficit) for the year	429,234	338,853	355,604	372,579	389,774	407,189	424,823	442,672
Add-back (deduct) non-cash expense:								
Loss (gain) on disposal of tangible capital assets	-	-	-	-	-	-	-	-
Amortization of capital assets	291,261	293,535	302,474	311,591	320,891	330,377	340,052	349,921
<b>Total OPERATING TRANSACTIONS</b>	<b>720,495</b>	<b>632,388</b>	<b>658,078</b>	<b>684,170</b>	<b>710,665</b>	<b>737,566</b>	<b>764,875</b>	<b>792,593</b>
<b>Capital Transactions</b>								
PTTW	(750)	-	-	-	-	-	-	-
Source Water Protection	(9,720)	-	-	-	-	-	-	-
Standpipe	(1,298)	-	-	-	-	-	-	-
Construction	(148,807)	-	-	-	-	-	-	-
Capital Expenses	-	(670,400)	(683,808)	(697,484)	(711,434)	(725,663)	(740,176)	(754,979)
<b>Total CAPITAL TRANSACTIONS</b>	<b>(160,575)</b>	<b>(670,400)</b>	<b>(683,808)</b>	<b>(697,484)</b>	<b>(711,434)</b>	<b>(725,663)</b>	<b>(740,176)</b>	<b>(754,979)</b>
<b>Investing Transactions</b>								
Proceeds from portfolio investments	3,460	22,734	22,957	23,367	23,969	24,769	25,770	26,979
Purchase of portfolio investments	-	-	-	-	-	-	-	-
<b>Total INVESTING TRANSACTIONS</b>	<b>3,460</b>	<b>22,734</b>	<b>22,957</b>	<b>23,367</b>	<b>23,969</b>	<b>24,769</b>	<b>25,770</b>	<b>26,979</b>
<b>Financing Transactions</b>								
Development Charge Contributions	22,561	30,111	30,111	30,111	30,111	30,111	30,111	30,111
Federal/Provincial grants	4,633	-	-	-	-	-	-	-
<b>Total FINANCING TRANSACTIONS</b>	<b>27,194</b>	<b>30,111</b>						
<b>Net Cash Receipts (Payments) for the year</b>	<b>590,574</b>	<b>14,833</b>	<b>27,337</b>	<b>40,163</b>	<b>53,311</b>	<b>66,783</b>	<b>80,580</b>	<b>94,704</b>
<b>Cash at beginning of year</b>	<b>864,192</b>	<b>1,515,603</b>	<b>1,530,436</b>	<b>1,557,773</b>	<b>1,597,936</b>	<b>1,651,246</b>	<b>1,718,029</b>	<b>1,798,609</b>
<b>Cash at end of year</b>	<b>1,515,603</b>	<b>1,530,436</b>	<b>1,557,773</b>	<b>1,597,936</b>	<b>1,651,246</b>	<b>1,718,029</b>	<b>1,798,609</b>	<b>1,893,313</b>

**Table 7.1C  
MUNICIPALITY OF WEST PERTH  
2020-2025 Financial Plan for Waterworks  
FINANCIAL PLAN**

1-Oct-19  
Option 3: 2.8% Revenue Increase

	2018	2019	2020	2021	2022	2023	2024	2025
<b>FINANCIAL POSITION</b>								
<b>Financial assets</b>								
Cash and cash equivalents	1,515,603	1,530,436	1,568,166	1,629,904	1,716,796	1,830,028	1,970,828	2,140,462
<b>Total FINANCIAL ASSETS</b>	<b>1,515,603</b>	<b>1,530,436</b>	<b>1,568,166</b>	<b>1,629,904</b>	<b>1,716,796</b>	<b>1,830,028</b>	<b>1,970,828</b>	<b>2,140,462</b>
<b>Liabilities</b>								
<b>Total LIABILITIES</b>	<b>-</b>							
<b>NET DEBT (Liabilities - Assets)</b>	<b>(1,515,603)</b>	<b>(1,530,436)</b>	<b>(1,568,166)</b>	<b>(1,629,904)</b>	<b>(1,716,796)</b>	<b>(1,830,028)</b>	<b>(1,970,828)</b>	<b>(2,140,462)</b>
<b>Non-financial assets (Tangible capital assets)</b>								
Existing water mains and facilities	14,563,014	14,432,328	14,809,193	15,190,527	15,576,420	15,966,963	16,362,249	16,762,373
Less: Amortization	(291,261)	(293,535)	(302,474)	(311,591)	(320,891)	(330,377)	(340,052)	(349,921)
Loss (gain) on disposal of tangible capital assets	-	-	-	-	-	-	-	-
New watermains and facilities - at cost	160,575	670,400	683,808	697,484	711,434	725,663	740,176	754,979
<b>Total NON-FINANCIAL ASSETS</b>	<b>14,432,328</b>	<b>14,809,193</b>	<b>15,190,527</b>	<b>15,576,420</b>	<b>15,966,963</b>	<b>16,362,249</b>	<b>16,762,373</b>	<b>17,167,431</b>
<b>Financial position (Non Finance assets - Net Debt)</b>	<b>15,947,931</b>	<b>16,339,629</b>	<b>16,758,694</b>	<b>17,206,324</b>	<b>17,683,759</b>	<b>18,192,277</b>	<b>18,733,200</b>	<b>19,307,893</b>
<b>Analysis of financial position</b>								
Equity in tangible capital assets	14,432,328	14,809,193	15,190,527	15,576,420	15,966,963	16,362,249	16,762,373	17,167,431
Reserves and reserve funds	1,515,603	1,530,436	1,568,166	1,629,904	1,716,796	1,830,028	1,970,828	2,140,462
General surplus (deficit)	-	-	-	-	-	-	-	-
<b>Financial position (from analysis)</b>	<b>15,947,931</b>	<b>16,339,629</b>	<b>16,758,694</b>	<b>17,206,324</b>	<b>17,683,759</b>	<b>18,192,277</b>	<b>18,733,200</b>	<b>19,307,893</b>
<b>FINANCIAL OPERATIONS</b>								
<b>Revenue</b>								
Water Sales - Domestic	1,270,714	1,250,000	1,302,142	1,355,744	1,410,846	1,467,492	1,525,723	1,585,585
Miscellaneous	2,825	2,500	2,570	2,642	2,716	2,792	2,870	2,951
Hydrant Revenue	30,000	30,000	30,840	31,704	32,591	33,504	34,442	35,406
Interest Earned	85,796	85,796	85,796	85,796	85,796	85,796	85,796	85,796
Dividend (Vehicle Sales)	40,315	-	-	-	-	-	-	-
<b>Total REVENUE</b>	<b>1,429,650</b>	<b>1,368,296</b>	<b>1,421,348</b>	<b>1,475,885</b>	<b>1,531,949</b>	<b>1,589,583</b>	<b>1,648,831</b>	<b>1,709,738</b>
<b>Expenses</b>								
<b>Operating</b>								
Salaries & Wages	193,318	198,000	201,960	205,999	210,119	214,322	218,608	222,980
Benefits	55,191	55,400	56,508	57,638	58,791	59,967	61,166	62,389
Administration	-	-	-	-	-	-	-	-
Continuing Education	5,680	4,500	4,590	4,682	4,775	4,871	4,968	5,068
Health & Safety	1,380	1,500	1,530	1,561	1,592	1,624	1,656	1,689
Billing & Collecting	32,604	34,875	35,573	36,284	37,010	37,750	38,505	39,275
Building - Maintenance	39,406	18,500	18,870	19,247	19,632	20,025	20,425	20,834
Building - Insurance	15,331	14,702	14,996	15,296	15,602	15,914	16,232	16,557
Building - Taxes	10,532	10,531	10,742	10,956	11,176	11,399	11,627	11,860
Legal, Consulting	1,457	2,000	2,040	2,081	2,122	2,165	2,208	2,252
Memberships	209	400	408	416	424	433	442	450
Autodialer	13,003	11,000	11,220	11,444	11,673	11,907	12,145	12,388
Power Purchased	58,585	75,000	78,750	82,688	86,822	91,163	95,721	100,507
Chemical	50,680	50,000	51,000	52,020	53,060	54,122	55,204	56,308
Pump Plant Maintenance and Repair	75,435	120,000	122,400	124,848	127,345	129,892	132,490	135,139
Well Maintenance	37,656	3,000	3,060	3,121	3,184	3,247	3,312	3,378
Distribution System	25,001	38,000	38,760	39,535	40,326	41,132	41,955	42,794
Water Meter Maintenance	53,580	55,000	56,100	57,222	58,366	59,534	60,724	61,939
Sampling	15,248	15,000	15,300	15,606	15,918	16,236	16,561	16,892
Small Tools	451	3,000	3,060	3,121	3,184	3,247	3,312	3,378
Office, Misc	2,412	2,500	2,550	2,601	2,653	2,706	2,760	2,815
Annual Inspections & Calibrations	7,960	8,000	8,160	8,323	8,490	8,659	8,833	9,009
DWQMS/Audits & Licence	4,851	6,000	6,120	6,242	6,367	6,495	6,624	6,757
Vehicles	9,185	9,000	9,180	9,364	9,551	9,742	9,937	10,135
<b>Subtotal Operating Expense</b>	<b>709,155</b>	<b>735,908</b>	<b>752,876</b>	<b>770,296</b>	<b>788,183</b>	<b>806,551</b>	<b>825,417</b>	<b>844,797</b>
Loss (gain) on disposal of tangible capital assets	-	-	-	-	-	-	-	-
Amortization of capital assets	291,261	293,535	302,474	311,591	320,891	330,377	340,052	349,921
<b>Total EXPENSES</b>	<b>1,000,416</b>	<b>1,029,443</b>	<b>1,055,350</b>	<b>1,081,887</b>	<b>1,109,074</b>	<b>1,136,928</b>	<b>1,165,469</b>	<b>1,194,718</b>
<b>Net Revenue (Deficit) for the year</b>	<b>429,234</b>	<b>338,853</b>	<b>365,998</b>	<b>393,998</b>	<b>422,876</b>	<b>452,656</b>	<b>483,362</b>	<b>515,020</b>
<b>CASH FLOW</b>								
<b>Operating Transactions</b>								
Net revenue (deficit) for the year	429,234	338,853	365,998	393,998	422,876	452,656	483,362	515,020
Add-back (deduct) non-cash expense:								
Loss (gain) on disposal of tangible capital assets	-	-	-	-	-	-	-	-
Amortization of capital assets	291,261	293,535	302,474	311,591	320,891	330,377	340,052	349,921
<b>Total OPERATING TRANSACTIONS</b>	<b>720,495</b>	<b>632,388</b>	<b>668,471</b>	<b>705,589</b>	<b>743,766</b>	<b>783,032</b>	<b>823,414</b>	<b>864,941</b>
<b>Capital Transactions</b>								
PTTW	(750)	-	-	-	-	-	-	-
Source Water Protection	(9,720)	-	-	-	-	-	-	-
Standpipe	(1,298)	-	-	-	-	-	-	-
Construction	(148,807)	-	-	-	-	-	-	-
Capital Expenses	-	(670,400)	(683,808)	(697,484)	(711,434)	(725,663)	(740,176)	(754,979)
<b>Total CAPITAL TRANSACTIONS</b>	<b>(160,575)</b>	<b>(670,400)</b>	<b>(683,808)</b>	<b>(697,484)</b>	<b>(711,434)</b>	<b>(725,663)</b>	<b>(740,176)</b>	<b>(754,979)</b>
<b>Investing Transactions</b>								
Proceeds from portfolio investments	3,460	22,734	22,957	23,522	24,449	25,752	27,450	29,562
Purchase of portfolio investments	-	-	-	-	-	-	-	-
<b>Total INVESTING TRANSACTIONS</b>	<b>3,460</b>	<b>22,734</b>	<b>22,957</b>	<b>23,522</b>	<b>24,449</b>	<b>25,752</b>	<b>27,450</b>	<b>29,562</b>
<b>Financing Transactions</b>								
Development Charge Contributions	22,561	30,111	30,111	30,111	30,111	30,111	30,111	30,111
Federal/Provincial grants	4,633	-	-	-	-	-	-	-
<b>Total FINANCING TRANSACTIONS</b>	<b>27,194</b>	<b>30,111</b>						
<b>Net Cash Receipts (Payments) for the year</b>	<b>590,574</b>	<b>14,833</b>	<b>37,731</b>	<b>61,738</b>	<b>86,892</b>	<b>113,232</b>	<b>140,799</b>	<b>169,635</b>
<b>Cash at beginning of year</b>	<b>864,192</b>	<b>1,515,603</b>	<b>1,530,436</b>	<b>1,568,166</b>	<b>1,629,904</b>	<b>1,716,796</b>	<b>1,830,028</b>	<b>1,970,828</b>
<b>Cash at end of year</b>	<b>1,515,603</b>	<b>1,530,436</b>	<b>1,568,166</b>	<b>1,629,904</b>	<b>1,716,796</b>	<b>1,830,028</b>	<b>1,970,828</b>	<b>2,140,462</b>

**Table 7.1C  
MUNICIPALITY OF WEST PERTH  
2020-2025 Financial Plan for Waterworks  
FINANCIAL PLAN**

1-Oct-19  
Option 4: 6.7% Revenue Increase

	2018	2019	2020	2021	2022	2023	2024	2025
<b>FINANCIAL POSITION</b>								
<b>Financial assets</b>								
Cash and cash equivalents	1,515,603	1,530,436	1,618,834	1,788,131	2,046,215	2,401,569	2,863,310	3,441,239
<b>Total FINANCIAL ASSETS</b>	<b>1,515,603</b>	<b>1,530,436</b>	<b>1,618,834</b>	<b>1,788,131</b>	<b>2,046,215</b>	<b>2,401,569</b>	<b>2,863,310</b>	<b>3,441,239</b>
<b>Liabilities</b>								
<b>Total LIABILITIES</b>	<b>-</b>							
<b>NET DEBT (Liabilities - Assets)</b>	<b>(1,515,603)</b>	<b>(1,530,436)</b>	<b>(1,618,834)</b>	<b>(1,788,131)</b>	<b>(2,046,215)</b>	<b>(2,401,569)</b>	<b>(2,863,310)</b>	<b>(3,441,239)</b>
<b>Non-financial assets (Tangible capital assets)</b>								
Existing water mains and facilities	14,563,014	14,432,328	14,809,193	15,190,527	15,576,420	15,966,963	16,362,249	16,762,373
Less: Amortization	(291,261)	(293,535)	(302,474)	(311,591)	(320,891)	(330,377)	(340,052)	(349,921)
Loss (gain) on disposal of tangible capital assets	-	-	-	-	-	-	-	-
New watermains and facilities - at cost	160,575	670,400	683,808	697,484	711,434	725,663	740,176	754,979
<b>Total NON-FINANCIAL ASSETS</b>	<b>14,432,328</b>	<b>14,809,193</b>	<b>15,190,527</b>	<b>15,576,420</b>	<b>15,966,963</b>	<b>16,362,249</b>	<b>16,762,373</b>	<b>17,167,431</b>
<b>Financial position (Non Finance assets - Net Debt)</b>	<b>15,947,931</b>	<b>16,339,629</b>	<b>16,809,361</b>	<b>17,364,552</b>	<b>18,013,179</b>	<b>18,763,818</b>	<b>19,625,683</b>	<b>20,608,670</b>
<b>Analysis of financial position</b>								
Equity in tangible capital assets	14,432,328	14,809,193	15,190,527	15,576,420	15,966,963	16,362,249	16,762,373	17,167,431
Reserves and reserve funds	1,515,603	1,530,436	1,618,834	1,788,131	2,046,215	2,401,569	2,863,310	3,441,239
General surplus (deficit)	-	-	-	-	-	-	-	-
<b>Financial position (from analysis)</b>	<b>15,947,931</b>	<b>16,339,629</b>	<b>16,809,361</b>	<b>17,364,552</b>	<b>18,013,179</b>	<b>18,763,818</b>	<b>19,625,683</b>	<b>20,608,670</b>
<b>FINANCIAL OPERATIONS</b>								
<b>Revenue</b>								
Water Sales - Domestic	1,270,714	1,250,000	1,351,542	1,459,888	1,575,492	1,698,842	1,830,457	1,970,890
Miscellaneous	2,825	2,500	2,668	2,846	3,037	3,240	3,457	3,689
Hydrant Revenue	30,000	30,000	32,010	34,155	36,443	38,885	41,490	44,270
Interest Earned	85,796	85,796	85,796	85,796	85,796	85,796	85,796	85,796
Dividend (Vehicle Sales)	40,315	-	-	-	-	-	-	-
<b>Total REVENUE</b>	<b>1,429,650</b>	<b>1,368,296</b>	<b>1,472,015</b>	<b>1,582,684</b>	<b>1,700,768</b>	<b>1,826,763</b>	<b>1,961,200</b>	<b>2,104,644</b>
<b>Expenses</b>								
<b>Operating</b>								
Salaries & Wages	193,318	198,000	201,960	205,999	210,119	214,322	218,608	222,980
Benefits	55,191	55,400	56,508	57,638	58,791	59,967	61,166	62,389
Administration	-	-	-	-	-	-	-	-
Continuing Education	5,680	4,500	4,590	4,682	4,775	4,871	4,968	5,068
Health & Safety	1,380	1,500	1,530	1,561	1,592	1,624	1,656	1,689
Billing & Collecting	32,604	34,875	35,573	36,284	37,010	37,750	38,505	39,275
Building - Maintenance	39,406	18,500	18,870	19,247	19,632	20,025	20,425	20,834
Building - Insurance	15,331	14,702	14,996	15,296	15,602	15,914	16,232	16,557
Building - Taxes	10,532	10,531	10,742	10,956	11,176	11,399	11,627	11,860
Legal, Consulting	1,457	2,000	2,040	2,081	2,122	2,165	2,208	2,252
Memberships	209	400	408	416	424	433	442	450
Autodialer	13,003	11,000	11,220	11,444	11,673	11,907	12,145	12,388
Power Purchased	58,585	75,000	78,750	82,688	86,822	91,163	95,721	100,507
Chemical	50,680	50,000	51,000	52,020	53,060	54,122	55,204	56,308
Pump Plant Maintenance and Repair	75,435	120,000	122,400	124,848	127,345	129,892	132,490	135,139
Well Maintenance	37,656	3,000	3,060	3,121	3,184	3,247	3,312	3,378
Distribution System	25,001	38,000	38,760	39,535	40,326	41,132	41,955	42,794
Water Meter Maintenance	53,580	55,000	56,100	57,222	58,366	59,534	60,724	61,939
Sampling	15,248	15,000	15,300	15,606	15,918	16,236	16,561	16,892
Small Tools	451	3,000	3,060	3,121	3,184	3,247	3,312	3,378
Office, Misc	2,412	2,500	2,550	2,601	2,653	2,706	2,760	2,815
Annual Inspections & Calibrations	7,960	8,000	8,160	8,323	8,490	8,659	8,833	9,009
DWQMS/Audits & Licence	4,851	6,000	6,120	6,242	6,367	6,495	6,624	6,757
Vehicles	9,185	9,000	9,180	9,364	9,551	9,742	9,937	10,135
<b>Subtotal Operating Expense</b>	<b>709,155</b>	<b>735,908</b>	<b>752,876</b>	<b>770,296</b>	<b>788,183</b>	<b>806,551</b>	<b>825,417</b>	<b>844,797</b>
Loss (gain) on disposal of tangible capital assets	-	-	-	-	-	-	-	-
Amortization of capital assets	291,261	293,535	302,474	311,591	320,891	330,377	340,052	349,921
<b>Total EXPENSES</b>	<b>1,000,416</b>	<b>1,029,443</b>	<b>1,055,350</b>	<b>1,081,887</b>	<b>1,109,074</b>	<b>1,136,928</b>	<b>1,165,469</b>	<b>1,194,718</b>
<b>Net Revenue (Deficit) for the year</b>	<b>429,234</b>	<b>338,853</b>	<b>416,666</b>	<b>500,797</b>	<b>591,694</b>	<b>689,835</b>	<b>795,731</b>	<b>909,926</b>
<b>CASH FLOW</b>								
<b>Operating Transactions</b>								
Net revenue (deficit) for the year	429,234	338,853	416,666	500,797	591,694	689,835	795,731	909,926
Add-back (deduct) non-cash expense:								
Loss (gain) on disposal of tangible capital assets	-	-	-	-	-	-	-	-
Amortization of capital assets	291,261	293,535	302,474	311,591	320,891	330,377	340,052	349,921
<b>Total OPERATING TRANSACTIONS</b>	<b>720,495</b>	<b>632,388</b>	<b>719,139</b>	<b>812,388</b>	<b>912,585</b>	<b>1,020,212</b>	<b>1,135,783</b>	<b>1,259,847</b>
<b>Capital Transactions</b>								
PTTW	(750)	-	-	-	-	-	-	-
Source Water Protection	(9,720)	-	-	-	-	-	-	-
Standpipe	(1,298)	-	-	-	-	-	-	-
Construction	(148,807)	-	-	-	-	-	-	-
Capital Expenses	-	(670,400)	(683,808)	(697,484)	(711,434)	(725,663)	(740,176)	(754,979)
<b>Total CAPITAL TRANSACTIONS</b>	<b>(160,575)</b>	<b>(670,400)</b>	<b>(683,808)</b>	<b>(697,484)</b>	<b>(711,434)</b>	<b>(725,663)</b>	<b>(740,176)</b>	<b>(754,979)</b>
<b>Investing Transactions</b>								
Proceeds from portfolio investments	3,460	22,734	22,957	24,283	26,822	30,693	36,024	42,950
Purchase of portfolio investments	-	-	-	-	-	-	-	-
<b>Total INVESTING TRANSACTIONS</b>	<b>3,460</b>	<b>22,734</b>	<b>22,957</b>	<b>24,283</b>	<b>26,822</b>	<b>30,693</b>	<b>36,024</b>	<b>42,950</b>
<b>Financing Transactions</b>								
Development Charge Contributions	22,561	30,111	30,111	30,111	30,111	30,111	30,111	30,111
Federal/Provincial grants	4,633	-	-	-	-	-	-	-
<b>Total FINANCING TRANSACTIONS</b>	<b>27,194</b>	<b>30,111</b>						
<b>Net Cash Receipts (Payments) for the year</b>	<b>590,574</b>	<b>14,833</b>	<b>88,399</b>	<b>169,297</b>	<b>258,084</b>	<b>355,354</b>	<b>461,742</b>	<b>577,928</b>
<b>Cash at beginning of year</b>	<b>864,192</b>	<b>1,515,603</b>	<b>1,530,436</b>	<b>1,618,834</b>	<b>1,788,131</b>	<b>2,046,215</b>	<b>2,401,569</b>	<b>2,863,310</b>
<b>Cash at end of year</b>	<b>1,515,603</b>	<b>1,530,436</b>	<b>1,618,834</b>	<b>1,788,131</b>	<b>2,046,215</b>	<b>2,401,569</b>	<b>2,863,310</b>	<b>3,441,239</b>