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**City of Brantford**  
**Wastewater Services**  
**Wastewater Rate Forecast**

	Inflated \$										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	
<b>Description</b>											
Total Wastewater Billing Recovery	15,449,400	16,365,962	16,879,140	17,534,125	18,110,146	18,793,520	19,396,744	20,084,589	20,663,210	21,253,001	
Total Consumption (m <sup>3</sup> ) (Adjusted for Min. Bill)	8,982,209	9,041,968	9,123,859	9,228,487	9,335,127	9,443,980	9,555,046	9,656,052	9,746,797	9,839,352	
Constant Rate	1.72	1.81	1.85	1.90	1.94	1.99	2.03	2.08	2.12	2.16	
<b>Annual Percentage Change</b>	<b>2%</b>	<b>5%</b>	<b>2%</b>	<b>3%</b>	<b>2%</b>	<b>3%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>



## **Appendix B – Wastewater Financial Plan**



**Figure B-1**  
**Conversion Adjustments**  
**Statement of Operations (Wastewater)**

Modified Cash Basis	Budget 2015	Adjustments		Full Accrual Budget 2015	Accrual Basis
		DR	CR		
<b>Revenues</b>					<b>Revenues</b>
Rate Based Revenue	15,449,400		380,500	15,449,400	Rate Based Revenue
Other Revenue <sup>1</sup>	1,827,900		812,749	2,640,649	Earned Development Charges and Gas Tax Revenue
<b>Total Revenues</b>	<b>17,277,300</b>			<b>18,470,549</b>	<b>Total Revenues</b>
<b>Expenditures</b>					<b>Expenses</b>
Operating <sup>2</sup>	8,242,600	150,000		8,392,600	Operating Expenses
Other (GRCA)	517,100			517,100	Other (GRCA)
Capital					
Transfers to Reserves	8,517,600		8,517,600		
		4,048,694		4,048,694	Amortization
<b>Total Expenditures</b>	<b>17,277,300</b>			<b>12,958,394</b>	<b>Total Expenses</b>
<b>Net Expenditures</b>	<b>-</b>			<b>5,512,155</b>	<b>Annual Surplus/(Deficit)</b>
Increase (decrease) in amounts to be recovered	-			146,607,891	Accumulated Surplus/(Deficit), beginning of year
<b>Change in Fund Balances</b>	<b>-</b>	<b>5,512,155</b>		<b>152,120,046</b>	<b>Accumulated Surplus/(Deficit), end of year</b>
<b>TOTAL ADJUSTMENTS<sup>3</sup></b>		<b>9,710,849</b>	<b>9,710,849</b>		

**Notes:**

- 1 Other revenue adjusted to include interest earned on Wastewater Capital Reserve Funds
- 2 Operating expense adjusted to include capital expenditures not meeting the definition of tangible capital assets (Studies)
- 3 The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)

**Figure B-2**  
**Conversion Adjustments**  
**Statement of Financial Position (Wastewater)**

Modified Cash Basis	Budget 2015	Adjustments		Full Accrual Budget 2015	Accrual Basis
		DR	CR		
<b>ASSETS</b>					<b>ASSETS</b>
<b>Financial Assets</b>					<b>Financial Assets</b>
Cash	32,032,059			32,032,059	Cash
Accounts Receivable	1,831,659			1,831,659	Accounts Receivable
<i>Total Financial Assets</i>	<i>33,863,718</i>			<i>33,863,718</i>	<i>Total Financial Assets</i>
<b>LIABILITIES</b>					<b>Liabilities</b>
Accounts Payable & Accrued Liabilities	1,423,889			1,423,889	Accounts Payable & Accrued Liabilities
Deferred Revenue	4,535,433			4,535,433	Deferred Revenue
<i>Total Liabilities</i>	<i>5,959,322</i>			<i>5,959,322</i>	<i>Total Liabilities</i>
<b>Net Assets/(Debt)</b>	<b>27,904,396</b>			<b>27,904,396</b>	<b>Net Financial Assets/(Debt)</b>
		124,365,650	150,000	124,215,650	<b>Non-Financial Assets</b>
				<b>124,215,650</b>	Tangible Capital Assets
					<b>Total Non-Financial Assets</b>
<b>Municipal Position</b>					
Wastewater Reserves	27,904,396	27,904,396			
Development Charge Reserve Fund	4,535,433	4,535,433			
Amounts to be Recovered	(4,535,433)		4,535,433		
<b>Total Municipal Position</b>	<b>27,904,396</b>		152,120,046	<b>152,120,046</b>	<b>Accumulated Surplus/(Deficit), end of year</b>
<b>TOTAL ADJUSTMENTS</b>		<b>156,805,479</b>	<b>156,805,479</b>		

**Note:** The combined adjustments above should be balanced and net to \$0 (i.e. Total DR = Total CR)

**Table B-1**  
**Statement of Financial Position: Wastewater Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Financial Assets</b>											
Cash	1	32,032,059	28,556,741	25,658,223	24,792,540	29,376,455	37,500,385	39,398,541	36,329,009	41,063,937	45,912,740
Accounts Receivable	1	1,831,659	1,936,637	1,996,024	2,071,484	2,138,059	2,211,165	2,275,252	2,348,954	2,410,349	2,473,052
Accounts Receivable - Other	3	-	-	369,476	-	-	-	749,696	8,251,303	7,845,637	7,712,881
<b>Total Financial Assets</b>		<b>33,863,718</b>	<b>30,493,378</b>	<b>28,023,723</b>	<b>26,864,024</b>	<b>31,514,514</b>	<b>39,711,550</b>	<b>42,423,489</b>	<b>46,929,266</b>	<b>51,319,923</b>	<b>56,098,673</b>
<b>Liabilities</b>											
Accounts Payable & Accrued Liabilities	1	1,423,889	1,449,283	1,492,642	1,537,332	1,583,404	1,630,823	1,679,624	1,729,911	1,781,787	1,835,132
Deferred Revenue	3	4,535,433	2,810,347	-	57,549	334,438	920,763	-	-	-	-
<b>Total Liabilities</b>		<b>5,959,322</b>	<b>4,259,630</b>	<b>1,492,642</b>	<b>1,594,881</b>	<b>1,917,842</b>	<b>2,551,586</b>	<b>1,679,624</b>	<b>1,729,911</b>	<b>1,781,787</b>	<b>1,835,132</b>
<b>Net Financial Assets/(Debt)</b>		<b>27,904,396</b>	<b>26,233,748</b>	<b>26,531,081</b>	<b>25,269,143</b>	<b>29,596,672</b>	<b>37,159,964</b>	<b>40,743,865</b>	<b>45,199,355</b>	<b>49,538,136</b>	<b>54,263,541</b>
<b>Non-Financial Assets</b>											
Tangible Capital Assets	4	124,215,650	135,642,582	146,406,174	158,248,692	160,404,553	159,874,079	168,083,444	179,142,411	182,619,309	186,055,987
<b>Total Non-Financial Assets</b>		<b>124,215,650</b>	<b>135,642,582</b>	<b>146,406,174</b>	<b>158,248,692</b>	<b>160,404,553</b>	<b>159,874,079</b>	<b>168,083,444</b>	<b>179,142,411</b>	<b>182,619,309</b>	<b>186,055,987</b>
<b>Accumulated Surplus/(Deficit)</b>	5	<b>152,120,046</b>	<b>161,876,330</b>	<b>172,937,255</b>	<b>183,517,835</b>	<b>190,001,225</b>	<b>197,034,043</b>	<b>208,827,309</b>	<b>224,341,766</b>	<b>232,157,445</b>	<b>240,319,528</b>
<b>Financial Indicators</b>											
	<b>Total Change</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
1) Increase/(Decrease) in Net Financial Assets	27,742,994	1,383,849	(1,670,648)	297,333	(1,261,938)	4,327,529	7,563,292	3,583,901	4,455,490	4,338,781	4,725,405
2) Increase/(Decrease) in Tangible Capital Assets	65,968,643	4,128,306	11,426,932	10,763,592	11,842,518	2,155,861	(530,474)	8,209,365	11,058,967	3,476,898	3,436,678
3) Increase/(Decrease) in Accumulated Surplus	93,711,637	5,512,155	9,756,284	11,060,925	10,580,580	6,483,390	7,032,818	11,793,266	15,514,457	7,815,679	8,162,083

**Table B-2**  
**Statement of Operations: Wastewater Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Wastewater Revenue</b>											
Rate Based Revenue		15,449,400	16,365,962	16,879,140	17,534,125	18,110,146	18,793,520	19,396,744	20,084,589	20,663,210	21,253,001
Earned Development Charges Revenue	3	380,500	2,314,500	3,833,000	262,000	446,000	178,500	2,453,000	8,058,000	189,500	492,500
Developer Contributions	4	-	1,736,000	1,317,000	4,329,000	-	-	2,170,000	-	-	-
Other Revenue	6	2,640,649	2,636,090	2,647,393	2,657,337	2,831,483	3,051,372	3,156,757	3,229,101	3,359,671	3,503,004
<b>Total Revenues</b>		<b>18,470,549</b>	<b>23,052,552</b>	<b>24,676,533</b>	<b>24,782,462</b>	<b>21,387,629</b>	<b>22,023,392</b>	<b>27,176,501</b>	<b>31,371,690</b>	<b>24,212,381</b>	<b>25,248,505</b>
<b>Wastewater Expenses</b>											
Operating Expenses	Sch. B-1	8,392,600	8,542,600	8,640,600	8,952,300	9,437,000	9,440,500	9,723,000	10,014,100	10,373,400	10,922,200
Amortization	4	4,048,694	4,221,068	4,426,408	4,684,482	4,885,139	4,950,474	5,042,635	5,207,033	5,368,102	5,489,322
Loss on Disposal of Tangible Capital Assets		517,100	532,600	548,600	565,100	582,100	599,600	617,600	636,100	655,200	674,900
<b>Total Expenses</b>		<b>12,958,394</b>	<b>13,296,268</b>	<b>13,615,608</b>	<b>14,201,882</b>	<b>14,904,239</b>	<b>14,990,574</b>	<b>15,383,235</b>	<b>15,857,233</b>	<b>16,396,702</b>	<b>17,086,422</b>
<b>Annual Surplus/(Deficit)</b>		<b>5,512,155</b>	<b>9,756,284</b>	<b>11,060,925</b>	<b>10,580,580</b>	<b>6,483,390</b>	<b>7,032,818</b>	<b>11,793,266</b>	<b>15,514,457</b>	<b>7,815,679</b>	<b>8,162,083</b>
Accumulated Surplus/(Deficit), beginning of year	5	146,607,891	152,120,046	161,876,330	172,937,255	183,517,835	190,001,225	197,034,043	208,827,309	224,341,766	232,157,445
Accumulated Surplus/(Deficit), end of year		152,120,046	161,876,330	172,937,255	183,517,835	190,001,225	197,034,043	208,827,309	224,341,766	232,157,445	240,319,528
<b>Note 5:</b>											
<b>Accumulated Surplus/(Deficit) Reconciliation:</b>		<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
<b>Reserve Balances</b>											
Reserves: Development Charges		4,535,433	2,810,347	(369,476)	57,549	334,438	920,763	(749,696)	(8,251,303)	(7,845,637)	(7,712,881)
Reserves: Capital/Other		27,904,396	26,233,748	26,531,081	25,269,143	29,596,672	37,159,964	40,743,865	45,199,355	49,538,136	54,263,541
<b>Total Reserves Balance</b>		<b>32,439,829</b>	<b>29,044,095</b>	<b>26,161,605</b>	<b>25,326,692</b>	<b>29,931,110</b>	<b>38,080,727</b>	<b>39,994,169</b>	<b>36,948,052</b>	<b>41,692,499</b>	<b>46,550,660</b>
Less: Debt Obligations and Deferred Revenue		(4,535,433)	(2,810,347)	369,476	(57,549)	(334,438)	(920,763)	749,696	8,251,303	7,845,637	7,712,881
Add: Tangible Capital Assets	4	124,215,650	135,642,582	146,406,174	158,248,692	160,404,553	159,874,079	168,083,444	179,142,411	182,619,309	186,055,987
<b>Total Ending Balance</b>		<b>152,120,046</b>	<b>161,876,330</b>	<b>172,937,255</b>	<b>183,517,835</b>	<b>190,001,225</b>	<b>197,034,043</b>	<b>208,827,309</b>	<b>224,341,766</b>	<b>232,157,445</b>	<b>240,319,528</b>
<b>Financial Indicators</b>											
	<b>Total Change</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
1) Expense to Revenue Ratio		70%	58%	55%	57%	70%	68%	57%	51%	68%	68%
2) Increase/(Decrease) in Accumulated Surplus	93,711,637	5,512,155	9,756,284	11,060,925	10,580,580	6,483,390	7,032,818	11,793,266	15,514,457	7,815,679	8,162,083

**Schedule B-1**  
**Schedule of Operating Expenses: Wastewater Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Operating Expenses</b>											
Wastewater Administration		5,051,100	5,202,700	5,358,600	5,519,200	5,684,700	5,855,300	6,030,900	6,211,900	6,398,400	6,590,500
Wastewater Collection Pumping Station		493,600	408,400	420,700	433,300	446,300	459,600	473,400	487,600	502,200	517,200
Wastewater Collection System Maintenance		1,400,300	1,442,200	1,485,200	1,529,700	1,575,600	1,622,900	1,671,500	1,721,500	1,773,200	1,826,100
Compliance Administration		258,600	266,300	274,200	282,300	290,700	299,300	308,200	317,300	326,700	336,300
Compliance Control and Inspection		817,000	841,400	866,500	892,400	919,000	946,200	974,100	1,002,900	1,032,800	1,063,600
Water Quality and DWQMS		222,000	228,600	235,400	242,400	249,700	257,200	264,900	272,900	281,100	289,500
Non TCA - Expenses from Capital Budget	7	150,000	153,000	-	53,000	271,000	-	-	-	59,000	299,000
<b>TOTAL OPERATING EXPENSES</b>		<b>8,392,600</b>	<b>8,542,600</b>	<b>8,640,600</b>	<b>8,952,300</b>	<b>9,437,000</b>	<b>9,440,500</b>	<b>9,723,000</b>	<b>10,014,100</b>	<b>10,373,400</b>	<b>10,922,200</b>

**Table B-3**  
**Statement of Changes in Net Financial Assets/Debt: Wastewater Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Annual Surplus/(Deficit)		5,512,155	9,756,284	11,060,925	10,580,580	6,483,390	7,032,818	11,793,266	15,514,457	7,815,679	8,162,083
Less: Acquisition of Tangible Capital Assets	4	(8,177,000)	(15,648,000)	(15,190,000)	(16,527,000)	(7,041,000)	(4,420,000)	(13,252,000)	(16,266,000)	(8,845,000)	(8,926,000)
Add: Amortization of Tangible Capital Assets	4	4,048,694	4,221,068	4,426,408	4,684,482	4,885,139	4,950,474	5,042,635	5,207,033	5,368,102	5,489,322
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
		(4,128,306)	(11,426,932)	(10,763,592)	(11,842,518)	(2,155,861)	530,474	(8,209,365)	(11,058,967)	(3,476,898)	(3,436,678)
Increase/(Decrease) in Net Financial Assets/(Net Debt)		1,383,849	(1,670,648)	297,333	(1,261,938)	4,327,529	7,563,292	3,583,901	4,455,490	4,338,781	4,725,405
Net Financial Assets/(Net Debt), beginning of year		26,520,547	27,904,396	26,233,748	26,531,081	25,269,143	29,596,672	37,159,964	40,743,865	45,199,355	49,538,136
<b>Net Financial Assets/(Net Debt), end of year</b>		<b>27,904,396</b>	<b>26,233,748</b>	<b>26,531,081</b>	<b>25,269,143</b>	<b>29,596,672</b>	<b>37,159,964</b>	<b>40,743,865</b>	<b>45,199,355</b>	<b>49,538,136</b>	<b>54,263,541</b>

  

Financial Indicators	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
1) Acquisition of Tangible Capital Assets (Cumulative)	8,177,000	23,825,000	39,015,000	55,542,000	62,583,000	67,003,000	80,255,000	96,521,000	105,366,000	114,292,000
2) Annual Surplus/Deficit before Amortization (Cumulative)	9,560,849	23,538,201	39,025,534	54,290,596	65,659,125	77,642,417	94,478,318	115,199,808	128,383,589	142,034,994
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)	1.17	0.99	1.00	0.98	1.05	1.16	1.18	1.19	1.22	1.24



**Table B-4**  
**Statement of Cash Flow – Indirect Method: Wastewater Services**  
**UNAUDITED: For Financial Planning Purposes Only**  
**2015-2024**

	Notes	Forecast									
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Operating Transactions</b>											
Annual Surplus/Deficit		5,512,155	9,756,284	11,060,925	10,580,580	6,483,390	7,032,818	11,793,266	15,514,457	7,815,679	8,162,083
Add: Amortization of TCA's	4	4,048,694	4,221,068	4,426,408	4,684,482	4,885,139	4,950,474	5,042,635	5,207,033	5,368,102	5,489,322
(Gain)/Loss on disposal of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Less: Earned Deferred Revenue	3	(380,500)	(2,314,500)	(3,833,000)	(262,000)	(446,000)	(178,500)	(2,453,000)	(8,058,000)	(189,500)	(492,500)
Less: Developer Contributions		-	(1,736,000)	(1,317,000)	(4,329,000)	-	-	(2,170,000)	-	-	-
Add: Deferred Revenue Proceeds		621,546	589,414	653,177	689,025	722,889	764,825	782,541	556,393	595,166	625,256
Change in A/R (Increase)/Decrease		86,702	(104,978)	(59,387)	(75,460)	(66,575)	(73,106)	(64,087)	(73,702)	(61,395)	(62,703)
Change in A/P Increase/(Decrease)		41,486	25,394	43,359	44,690	46,072	47,419	48,801	50,287	51,876	53,345
Less: Interest Proceeds		(812,749)	(764,090)	(729,993)	(693,237)	(819,282)	(1,039,572)	(1,143,957)	(1,213,700)	(1,340,071)	(1,477,705)
Cash Provided by Operating Transactions		9,117,334	9,672,592	10,244,489	10,639,080	10,805,633	11,504,358	11,836,199	11,982,768	12,239,857	12,297,098
<b>Capital Transactions</b>											
Proceeds on sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-
Less: Cash Used to acquire Tangible Capital Assets	4	(8,177,000)	(13,912,000)	(13,873,000)	(12,198,000)	(7,041,000)	(4,420,000)	(11,082,000)	(16,266,000)	(8,845,000)	(8,926,000)
Cash Applied to Capital Transactions		(8,177,000)	(13,912,000)	(13,873,000)	(12,198,000)	(7,041,000)	(4,420,000)	(11,082,000)	(16,266,000)	(8,845,000)	(8,926,000)
<b>Investing Transactions</b>											
Proceeds from Investments		812,749	764,090	729,993	693,237	819,282	1,039,572	1,143,957	1,213,700	1,340,071	1,477,705
Less: Cash Used to Acquire Investments		-	-	-	-	-	-	-	-	-	-
Cash Provided by (applied to) Investing Transactions		812,749	764,090	729,993	693,237	819,282	1,039,572	1,143,957	1,213,700	1,340,071	1,477,705
Increase in Cash and Cash Equivalents		1,753,083	(3,475,318)	(2,898,518)	(865,683)	4,583,915	8,123,930	1,898,156	(3,069,532)	4,734,928	4,848,803
Cash and Cash Equivalents, beginning of year	1	30,278,976	32,032,059	28,556,741	25,658,223	24,792,540	29,376,455	37,500,385	39,398,541	36,329,009	41,063,937
<b>Cash and Cash Equivalents, end of year</b>	<b>1</b>	<b>32,032,059</b>	<b>28,556,741</b>	<b>25,658,223</b>	<b>24,792,540</b>	<b>29,376,455</b>	<b>37,500,385</b>	<b>39,398,541</b>	<b>36,329,009</b>	<b>41,063,937</b>	<b>45,912,740</b>

## **Wastewater Notes to Financial Plan**

The financial plan format, as outlined in Chapter 4, closely approximates the full accrual format used by municipalities (2009 onward) on their audited financial statements. The financial plan, however, is not an audited document and contains various estimates. In this regard, Section 3 (2) of O.Reg. 453/07 states the following:

“Each of the following sub-subparagraphs applies only if the information referred to in the sub-subparagraph is known to the owner at the time the financial plans are prepared:

1. Sub-subparagraphs 4 i A, B and C of subsection (1)
2. Sub-subparagraphs 4 iii A, C, E and F of subsection (1).”

The information referred to in sub-subparagraphs 4 i A, B and C of subsection (1) includes:

- A. Total financial assets (i.e. cash and receivables);
- B. Total liabilities (i.e. payables, debt and deferred revenue); and
- C. Net debt (i.e. the difference between A and B above).

The information referred to in sub-subparagraphs 4 iii A, C, E and F of subsection (1) includes:

- A. Operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges;
- C. Investing transactions that are acquisitions and disposal of investments;
- E. Change in cash and cash equivalents during the year; and
- F. Cash and cash equivalents at the beginning and end of the year.

In order to show a balanced financial plan in a full accrual format for the City of Brantford, some of the items listed above have been estimated given that the City does not maintain all financial asset and liability data separately for wastewater. Usually, this type of data is combined with the financial assets and liabilities of other departments and services given that there is not a current obligation to disclose this data separately (as there is with revenue and expenses). The assumptions used have been documented below:

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## 1. Cash, Receivables and Payables

It is assumed that the opening cash balances required to complete the financial plan are equal to:

Ending Reserve/Reserve Fund Balance  
Plus: Ending Accounts Payable Balance  
Less: Ending Accounts Receivable Balance  
Equals: Approximate Ending Cash Balance

Receivable and payable balances were estimated for each year of the forecast based on the following factors:

- a) Receivables: Based on historical levels of receivables and accrued receivables as a percentage of annual revenues, applied to projected wastewater revenues (source: provided by City staff); and
- b) Payables: Based on historical levels of municipal-wide payables as a percentage of annual municipal expenses incurred, applied to projected wastewater expenses (source: prior years audited financial statement).

## 2. Debt

The City has no wastewater-related outstanding debt at the end of 2014 and do not anticipate any debt proceeds over the forecast period.

For financial reporting purposes, debt principal payments represent a decrease in debt liability and the interest payments represent a current year operating expense.

## 3. Deferred Revenue/Accounts Receivable-Other

Deferred revenue is made up of wastewater development charge reserve fund balances which are considered to be a liability for financial reporting purposes until the funds are used to emplace the works for which they have been collected. In years when the water development charge reserve fund balance is negative, it is shown as an asset (accounts receivable – other) for financial reporting purposes.

#### 4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes wastewater-related assets in the following categories:
  - i. Infrastructure;
  - ii. Land Improvements; and
  - iii. Facilities.
- Amortization is calculated based on the straight-line approach, assuming a half year's amount of amortization in the year of acquisition for new capital.
- Given the planned asset replacement forecast in the 2015 Rate Study, useful life on acquisitions is assumed to be equal to the weighted average useful life for all assets on hand in the respective asset category.
- Write-offs are assumed to equal \$0 for each year in the forecast period.
- Tangible capital assets are shown on a net basis. It is assumed that disposals occur when the asset is being replaced, unless the asset is documented as a new asset. The value of each asset disposal is calculated by estimating the original purchase/construction date and deflating current replacement cost values to those estimated dates in order to calculate original historical cost.
- Gains/losses on disposals are assumed to be \$0 (it is assumed that historical cost is equal to accumulated amortization for all disposals).
- Residual value is assumed to be \$0 for all assets contained within the forecast period.
- Contributed Assets, as described in subsection 3.2.1, are shown on the Statement of Operations as revenue earned in the year of contribution.

The balance of tangible capital assets is summarized as follows:

Asset Historical Cost	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Opening Tangible Capital Asset Balance	209,979,500	217,364,727	232,424,871	246,721,369	261,931,008	268,515,742	272,194,246	284,871,142	300,605,551	308,888,329
Acquisitions	8,177,000	15,648,000	15,190,000	16,527,000	7,041,000	4,420,000	13,252,000	16,266,000	8,845,000	8,926,000
Disposals	791,773	587,856	893,502	1,317,361	456,266	741,496	575,104	531,591	562,222	764,776
<b>Closing Tangible Capital Asset Balance</b>	<b>217,364,727</b>	<b>232,424,871</b>	<b>246,721,369</b>	<b>261,931,008</b>	<b>268,515,742</b>	<b>272,194,246</b>	<b>284,871,142</b>	<b>300,605,551</b>	<b>308,888,329</b>	<b>317,049,553</b>
Opening Accumulated Amortization	89,892,156	93,149,077	96,782,289	100,315,195	103,682,316	108,111,189	112,320,167	116,787,698	121,463,140	126,269,020
Amortization Expense	4,048,694	4,221,068	4,426,408	4,684,482	4,885,139	4,950,474	5,042,635	5,207,033	5,368,102	5,489,322
Amortization on Disposal	791,773	587,856	893,502	1,317,361	456,266	741,496	575,104	531,591	562,222	764,776
<b>Ending Accumulated Amortization</b>	<b>93,149,077</b>	<b>96,782,289</b>	<b>100,315,195</b>	<b>103,682,316</b>	<b>108,111,189</b>	<b>112,320,167</b>	<b>116,787,698</b>	<b>121,463,140</b>	<b>126,269,020</b>	<b>130,993,566</b>
<b>Net Book Value</b>	<b>124,215,650</b>	<b>135,642,582</b>	<b>146,406,174</b>	<b>158,248,692</b>	<b>160,404,553</b>	<b>159,874,079</b>	<b>168,083,444</b>	<b>179,142,411</b>	<b>182,619,309</b>	<b>186,055,987</b>

## 5. Accumulated Surplus

Opening accumulated surplus for the forecast period is reconciled as follows:

Wastewater	2015 Opening Accumulated Surplus
<b>Reserve Balances</b>	
Reserves: Development Charges	4,294,387
Reserves: Capital/Other	26,520,547
<b>Total Reserves Balance</b>	<b>30,814,934</b>
Less: Debt Obligations and Deferred Revenue	(4,294,387)
Add: Tangible Capital Assets	120,087,344
<b>Total Opening Balance</b>	<b>146,607,891</b>

The accumulated surplus reconciliation for all years within the forecast period is contained in Table B-2.

## 6. Other Revenue

Other revenue includes high strength surcharges, service charges, cost recoveries, penalties and other non-operating general revenues.

## 7. Operating Expenses

Capital expenditures for items not meeting the definition of tangible capital assets have been reclassified as operating expenses and have been expensed in the year in which they occur.