



2020 Operating and Capital Budget Water and Waste Department



November 14, 2019

Agenda

1. Strategic Objectives and Priorities
2. Performance Measurement
3. Operating Budget (including options to achieve target)
 - Operating Budget (Service Based)
 - Implications of the Recommended Target to Balance the Operating Budget
 - Year over Year Variance Explanations
 - Salaries and benefits, FTEs, and vacancy management and options to achieve target
4. Capital Budget (including options to achieve target)
 - Capital Budget
 - Implications of the Recommended Target for the Capital Budget
 - Capital Forecast to Submission Reconciliation
5. Operating and Capital Budget Referrals
6. Budget Summary
7. Questions

Strategic Objectives and Priorities

Departmental strategic objectives and priorities include:

- Deliver essential services and comply with provincial licences.
- Secure funding with other levels of government for the NEWPCC Upgrade project.
- Ongoing completion of the SEWPCC Upgrade and Expansion Project.
- Recommending a new Water Meter Renewal Reserve to fund the replacement of aging water meters and an advanced meter system.
- Undertaking a comprehensive financial plan and rate study for the Solid Waste Utility to ensure sustainable waste management operations.

Water and Waste Department Services

- Water Supply, Treatment and Distribution
- Sewage Treatment and Collection
- Land Drainage and Flood Control
- Solid Waste Collection
- Solid Waste Disposal
- Recycling and Waste Diversion

Recommended Target to Balance the Budget

1. Department Operating Budget - 2% annual growth rates, net of capital expenditures, based on 2019 expenditures
2. Cash to capital funding levels:

Department	2020	2021	2022	2023	2024	2025
Water and Waste	-	-	-	-	-	-

3. Key assumptions for multi-year budget:

Proposed recommended targets present a balanced tax-supported operating budget from 2020 to 2023:

- a. Property Tax Increases: 2.33% annually (road renewal and southwest rapid transit (stage 2))
- b. Fees and Charges: Inflationary increases annually
- c. Natural Assessment Base Growth: 1.2% annually
- d. Efficiencies/Vacancy Management: \$17 Million annually
- e. Additional Transfers/Savings: \$32.5 million in 2020 growing to \$40 million by 2023
- f. Provincial Operating Grants: Flat at \$149.7 million annually (2016 level)
- g. Utility dividend rate: 11% of Water and Sewer Sales
- h. Remaining Tax Supported Debt Room: \$150 million in total

Water Services

Water Supply and Treatment

- Intake
- Aqueduct
- Storage (Deacon, in-town reservoirs)
- Water treatment
- Pumping

Water Distribution

- Water mains
- Hydrants
- Valves
- Service pipes
- Meters
- Public water fill stations

Business Processes

- Operation
- Maintenance
- 24/7 emergency services
- Capital investment planning and delivery
- Development approvals, permits and inspections
- Regulatory compliance testing and reporting
- Customer service
- Meters and billing

Operating Budget – Water Service

2020 Draft Operating Budget and 2021 to 2023 Projections in millions of \$	2018 Actual	2019 Budget	2020 Draft Budget *	Year over Year Increase / (Decrease)	%	Exp. No.	2021 Draft Projection*	2022 Draft Projection*	2023 Draft Projection*
GOVERNMENT GRANTS	0.796	0.765	0.785	0.020			0.785	0.785	0.785
SERVICE AND OTHER	133.313	129.582	131.499	1.917			139.532	143.036	147.839
TOTAL REVENUE	134.109	130.347	132.284	1.937	1%	1	140.317	143.821	148.624
SALARIES & BENEFITS	30.286	33.090	33.526	0.436			34.286	34.988	35.794
SERVICES	19.467	20.635	20.170	(0.465)			20.745	20.974	21.216
MATS PARTS & SUPPLIES	14.820	17.198	16.537	(0.661)			17.192	17.965	17.942
ASSETS & PURCHASES	1.197	1.165	1.278	0.113			1.027	1.217	1.292
GRANTS, TRANSFERS & OTHER	21.954	20.802	21.007	0.205			22.030	22.565	23.247
RECOVERIES	(6.614)	(8.449)	(7.118)	1.331			(7.422)	(7.581)	(7.591)
TOTAL OPERATIONAL EXPENDITURES	81.110	84.441	85.401	0.960	1%		87.858	90.128	91.901
DEBT & FINANCE CHARGES	8.618	13.489	13.691	0.202			13.911	14.141	14.381
TRANSFER TO CAPITAL RESERVES	19.000	19.000	21.961	2.961			23.567	23.608	26.915
TOTAL EXPENDITURES	108.728	116.930	121.053	4.123	4%	2	125.336	127.877	133.197
Surplus / (Deficit) **	25.381	13.417	11.231	(2.186)			14.981	15.944	15.427
1 Options to Achieve Operating Budget Target:									
a. Reduce 24 hour emergency coverage from 2 crews to 1 crew, per shift			(0.430)				(0.430)	(0.430)	(0.430)
b. Reduce computer maintenance and defer hire for capital related projects			(0.220)				(0.173)	(0.088)	(0.024)
c. Discontinue specific grants and memberships			(0.113)				(0.116)	(0.118)	(0.121)
d. Reduce Engineer In Training program			(0.067)				(0.069)	(0.070)	(0.072)
Sub Total Options to Achieve the Target			(0.831)				(0.787)	(0.706)	(0.646)

* 2020 Draft Budget and 2021 to 2023 Draft Projections include the options to achieve the operating target.

** Target to be achieved on a department level.

Operating Budget – Water Service

Options to Achieve Operating Budget Target Continued:	2020 Draft Budget *				2021 Draft Projection*	2022 Draft Projection*	2023 Draft Projection*
Carry forward	(0.831)				(0.787)	(0.706)	(0.646)
e. Reduce non-essential maintenance for water infrastructure and buildings	(0.170)				(0.170)	(0.170)	(0.170)
f. Discontinue annual water main cleaning program	(0.136)				(0.136)	(0.137)	(0.138)
g. Discontinue Residential Toilet Replacement Credit Program	(0.045)				(0.045)	(0.045)	(0.045)
h. Discontinue annual Fish Mitigation Study	(0.025)				(0.025)	(0.025)	(0.025)
i. Reduce advertising	(0.015)				(0.012)	(0.012)	(0.012)
Total Operating Budget Options to Achieve the Target	(1.222)				(1.175)	(1.095)	(1.036)
EPC Recommended Target to Balance	(3.176)				(4.508)	(4.516)	(7.132)
** Variance (Shortfall from the Target)	(1.954)				(3.333)	(3.421)	(6.096)

* 2020 Draft Budget and 2021 to 2023 Draft Projections include the options to achieve the operating target.

** Target to be achieved on a department level.

Implications of the Recommended Target to Balance Operating Budget **Water Services**

- a. Reduce 24 hour Emergency coverage from 2 crews to 1 crew: During regular hours Emergency Services crews respond to WWD water distribution and sewer issues. After hours ES provides emergency response to all other City departments (except WFPS and WPS). Increased response times to after hour emergencies, increased risk of property damage, delay in new development warranty inspections, reduction in water by-law enforcement.
- b. Reduce computer maintenance and defer hire for capital related projects: Delay in evergreening, software purchases due to capital reductions. Continued inefficiencies from non-optimized tools and systems used for decision making (LIMS, Business Intelligence, Digital Enablement, SharePoint)
- c. Discontinue specific grants and memberships: Fort Whyte Alive - Slow the Flow Program, Save Our Seine. Memberships: Alliance for Water Efficiency, Assiniboine River Basin Initiative, Water Research Foundation. Loss of departmental access to industry research, updates and experts and loss of community support.
- d. Reduce Engineer-in-Training program: Scaling of program to meet anticipated demands. Gradual elimination of program with no anticipated impact to current candidates.

Implications of the Recommended Target to Balance Operating Budget **Water Services continued**

e. Reduce non-essential maintenance for water infrastructure and buildings: Would need to identify in-house alternatives and defer specialized maintenance items.

f. Discontinue annual Water Main Cleaning program: May increase reports of discoloured water.

g. Discontinue Residential Toilet Replacement Credit: Program has achieved its primary goal of reduced water consumption.

h. Discontinue fish monitoring studies at intake: Previous studies have shown no impacts.

i. Reduce advertising for job postings and summer meter reading program: May impact outreach.

Year over Year Variance Explanations – Water Service

(in millions)

Year over year (increase) / decrease	2020 Draft Budget	2021 Draft Projection	2022 Draft Projection	2023 Draft Projection
1) <i>Revenue change due to the following:</i>				
- Increase in water sales	\$ 1.501	\$ 7.779	\$ 3.261	\$ 4.549
- Increase in interest earned	0.214	0.238	0.228	0.238
- Miscellaneous adjustments	0.222	0.016	0.015	0.016
Net Revenue Change	\$ 1.937	\$ 8.033	\$ 3.504	\$ 4.803
2) <i>Expenditure change due to the following:</i>				
- Increase in transfers to reserves	\$ 2.961	\$ 1.606	\$ 0.041	\$ 3.307
- Decrease/(increase) in recoveries	1.331	(0.306)	(0.158)	(0.011)
- Increase/(decrease) in salaries and benefits	0.436	0.761	0.701	0.807
- Increase in utilities and property tax	0.439	0.268	0.278	0.290
- Increase in debt and finance	0.202	0.220	0.230	0.240
- Increase in dividend	0.165	0.856	0.359	0.500
- Increase/(decrease) in materials and maintenance	(0.882)	0.657	0.959	0.014
- Increase/(decrease) professional/non-prof services	(0.368)	0.014	0.000	0.000
- Miscellaneous adjustments.	(0.161)	0.207	0.132	0.171
Net Expenditure Change	\$ 4.122	\$ 4.283	\$ 2.542	\$ 5.319

Wastewater Sewer Services

Sewage Treatment

- Treatment plants
- Biosolids management
- Hauled wastewater disposal facility

Sewage Collection

- Service pipes
- Sewers
- Manholes
- Interceptors
- Lift stations
- CSO management

Business Processes

- Operation
- Maintenance
- Capital investment planning and delivery
- Development approvals, permits and inspections
- Regulatory compliance testing and reporting
- Customer service
- By-law inspection and enforcement

Operating Budget - Wastewater Service

2020 Draft Operating Budget and 2021 to 2023 Projections in millions of \$	2018 Actual	2019 Budget	2020 Draft Budget *	Year over Year Increase / (Decrease)	%	Exp. No.	2021 Draft Projection*	2022 Draft Projection*	2023 Draft Projection*
GOVERNMENT GRANTS	0.347	0.336	0.347	0.011			0.347	0.347	0.347
SERVICE AND OTHER	201.516	194.367	199.984	5.617			216.268	228.891	238.176
TOTAL REVENUE	201.863	194.703	200.331	5.628	3%	1	216.615	229.238	238.523
SALARIES & BENEFITS	32.288	34.719	35.717	0.998			36.496	37.501	38.386
SERVICES	26.119	28.880	28.576	(0.304)			29.863	30.406	30.845
MATS PARTS & SUPPLIES	12.955	11.219	11.708	0.489			10.654	10.384	10.609
ASSETS & PURCHASES	0.087	0.146	0.167	0.021			0.117	0.097	0.092
GRANTS, TRANSFERS & OTHER	36.006	33.811	34.154	0.343			36.438	38.342	39.902
RECOVERIES	(1.026)	(1.731)	(0.705)	1.027			(0.702)	(0.702)	(0.678)
TOTAL OPERATIONAL EXPENDITURES	106.429	107.044	109.618	2.574	2%		112.866	116.028	119.156
DEBT & FINANCE CHARGES	0.843	4.357	9.252	4.895			13.302	13.412	14.288
TRANSFER TO CAPITAL RESERVES	36.510	110.372	44.731	(65.641)			49.070	55.218	59.750
TRANSFERS TO LAND DRAINAGE	10.851	11.802	10.168	(1.635)			8.487	9.544	9.516
TOTAL EXPENDITURES	154.633	233.575	173.768	(59.807)	-26%	2	183.724	194.202	202.709
Surplus / (Deficit) **	47.230	(38.872)	26.563	(65.435)			32.891	35.036	35.814
Options to Achieve Operating Budget Target:									
a. Reduce 24 hour Emergency coverage from 2 crews to 1 crew, per shift			(0.107)				(0.107)	(0.107)	(0.107)
b. Reduce computer maintenance and defer hire for capital related projects			(0.220)				(0.173)	(0.088)	(0.024)
c. Discontinue specific grants and memberships			(0.113)				(0.116)	(0.118)	(0.121)
d. Reduce Engineer In Training Program			(0.106)				(0.108)	(0.110)	(0.112)
Sub Total Options to Achieve the Target			(0.546)				(0.503)	(0.423)	(0.364)

* 2020 Draft Budget and 2021 to 2023 Draft Projections include the options to achieve the operating target.

** Target variances to be achieved on a department level.

Operating Budget – Wastewater Service

Options to Achieve Operating Budget Target Continued:	2020 Draft Budget *				2021 Draft Projection*	2022 Draft Projection*	2023 Draft Projection*
Carry forward	(0.546)				(0.503)	(0.423)	(0.364)
e. Discontinue Large Volume Sewer Discount program	-				(2.612)	(2.664)	(2.667)
f. Reduce preventative maintenance for wastewater collections and treatment facilities	(0.596)				(0.671)	(0.674)	(0.692)
g. Reduce funding private sewer service repairs to residential only	(0.200)				(0.200)	(0.200)	(0.200)
h. Discontinue local sewer degreasing program	(0.100)				(0.100)	(0.100)	(0.100)
i. Discontinue preventative cleaning program within combined sewer districts	(0.095)				(0.095)	(0.095)	(0.095)
j. Reduce Industrial Waste sampling and inspection activities	(0.041)				(0.041)	(0.041)	(0.041)
k. Reviseroutine Basin Monitoring program to event based	(0.020)				(0.020)	(0.020)	(0.021)
l. Discontinue landscaping at former outdoor biosolids drying bed	-				(0.020)	(0.020)	(0.020)
Total Operating Budget Options to Achieve the Target	(1.598)				(4.262)	(4.238)	(4.200)
EPC Recommended Target to Balance	(2.135)				(6.070)	(12.120)	(15.756)
** Variance (Shortfall from the Target)	(0.537)				(1.808)	(7.882)	(11.556)

* 2020 Draft Budget and 2021 to 2023 Draft Projections include the options to achieve the operating target.

** Target to be achieved on a department level.

Implications of the Recommended Target to Balance Operating Budget **Wastewater Services**

a. Reduce 24 hour Emergency coverage from 2 crews to 1 crew: During regular hours Emergency Services crews respond to WWD water distribution and sewer issues. After hours ES provides emergency response to all other City departments (except WFPS and WPS). Increased response times to after hour emergencies, increased risk of property damage, delay in new development warranty inspections, reduction in water by-law enforcement.

b. Reduce computer maintenance and defer hire for capital related projects: Delay in evergreening, software purchases due to capital reductions. Continued inefficiencies from non-optimized tools and systems used for decision making (LIMS, Business Intelligence, Digital Enablement,

c. Discontinue specific grants and memberships: Fort Whyte Alive - Slow the Flow Program, Save Our Seine. Memberships: Alliance for Water Efficiency, Assiniboine River Basin Initiative, Water Research Foundation. Loss of departmental access to industry research, updates and experts and loss of community support.

d. Reduce Engineer-in-Training program: Scaling of program to meet anticipated demands. Gradual elimination of program with no anticipated impact to current candidates.

Implications of the Recommended Target to Balance Operating Budget **Wastewater Services**

e. Discontinue Large Volume Sewer Discount program: Could impact commercial economic development.

f. Reduce preventative maintenance for wastewater collections and treatment facilities: Impact to equipment (pumps, valves, motors, instrumentation, blowers, boilers, backup generators, etc.). Could result in deferred maintenance and licence violations.

g. Reduce funding private sewer service repairs to residential only Sewer By-Law Section 41: Currently all property types are eligible for the program. Reduction would limit the program eligibility to single family dwellings and owner occupied duplex units.

h. Discontinue local sewer degreasing program: Increased accumulation of grease and blockages within sewer system can cause sewer backup and property damage.

i. Discontinue preventative cleaning within combined sewer districts: Intent is prevention of sewer system overflows through preventive cleaning and to address blockages.

j. Reduce waste sampling supporting pollution prevention and inspection activities: Longer response times for pollution prevention program.

k. Revise routine Basin Monitoring program to event based: Results in less historical data.

l. Discontinue landscaping at former outdoor biosolids drying bed: Tenancy agreement with WPS up for renewal. If renewed, WPS to be responsible for site maintenance during their operations.

Year over Year Variance Explanations – Wastewater Service

(in millions)

Year over year (increase) / decrease	2020 Draft Budget	2021 Draft Projection	2022 Draft Projection	2023 Draft Projection
1) <i>Revenue change due to the following:</i>				
- Increase in sewer services	\$ 4.550	\$ 16.161	\$ 12.500	\$ 9.160
- Increase in leachate	0.650	0.000	0.000	0.000
- Miscellaneous adjustments.	0.428	0.123	0.123	0.125
Net Revenue Change	\$ 5.628	\$ 16.284	\$ 12.623	\$ 9.285
2) <i>Expenditure change due to the following:</i>				
- (Decrease)/Increase in transfer to capital reserves	\$ (65.641)	\$ 4.339	\$ 6.148	\$ 4.532
- (Decrease)/Increase in transfer to land drainage	(1.635)	(1.681)	1.057	(0.027)
-(Decrease)/Increase allocated costs	(0.979)	0.225	0.226	0.021
- Increase in debt and finance charges	4.895	4.051	0.109	0.876
- Increase in salaries and benefits	0.998	0.779	1.005	0.885
- Increase in chemicals	0.856	0.881	(0.397)	0.134
- Decrease/(Increase) in recoveries	1.026	0.002	0.001	0.024
- Increase in transfer to general revenue	0.500	1.778	1.375	1.008
- Increase in heat, light and power	0.390	0.603	0.330	0.226
- Miscellaneous adjustments.	(0.217)	(1.018)	0.626	0.828
Net Expenditure Change	\$ (59.807)	\$ 9.959	\$ 10.479	\$ 8.507

Land Drainage and Flood Control Services

Land Drainage

- Curb inlets
- Land drainage sewers
- Stormwater retention basins
- Underpass stations
- Storm relief sewers

Flood Control

- Primary line of defense (diking)
- Flood pumping stations
- Temporary pumping
- Temporary diking

Waterways Management

- Waterways permits, inspections and enforcement
- Riverbank monitoring and prioritization of stabilization works

Business Processes

- Operation and maintenance
- Capital investment planning and delivery
- Development approvals, permits and inspections
- Flood level projections
- Customer service (including temporary diking assistance)

Operating Budget – Land Drainage and Flood Control Services

2020 Contributing Departments:
Water and Waste 79%; Planning, Property and Development 18%; Public Works 3%

2020 Draft Operating Budget and 2021 to 2023 Projections in millions of \$	2018 Actual	2019 Budget	2020 Draft Budget *	Year over Year Increase / (Decrease)	%	Exp. No.	2021 Draft Projection*	2022 Draft Projection*	2023 Draft Projection*
GOVERNMENT GRANTS	0.702	0.426	0.480	0.054			0.483	0.487	0.491
SERVICE AND OTHER	4.161	5.478	4.388	(1.090)			4.417	4.444	4.446
TOTAL REVENUE	4.863	5.904	4.868	(1.036)	-18%	1	4.900	4.931	4.937
SALARIES & BENEFITS	2.285	2.354	2.405	0.051			2.429	2.454	2.479
SERVICES	1.905	2.363	1.900	(0.464)			1.891	1.880	1.847
MATS PARTS & SUPPLIES	0.657	0.809	0.677	(0.132)			0.697	0.718	0.735
ASSETS & PURCHASES	0.002	0.003	0.004	0.001			0.004	0.004	0.004
GRANTS, TRANSFERS & OTHER	0.040	0.041	0.041	-			0.041	0.041	0.041
RECOVERIES	(0.050)	-	-	-			-	-	-
TOTAL OPERATIONAL EXPENDITURES	4.839	5.570	5.027	(0.544)	-10%		5.062	5.097	5.106
DEBT & FINANCE CHARGES	0.120	0.789	0.321	(0.468)			0.321	0.320	0.320
CASH TO CAPITAL	0.506	0.205	-	(0.205)			0.100	-	-
TOTAL EXPENDITURES	5.465	6.564	5.348	(1.217)	-19%	2	5.483	5.417	5.426
Surplus / (Deficit) **	(0.602)	(0.660)	(0.480)	0.180			(0.583)	(0.486)	(0.489)
Options to Achieve Operating Budget Target:									
a. Reduce land drainage sewer maintenance program			(0.213)				(0.213)	(0.213)	(0.237)
b. Discontinue aesthetic maintenance of storm water retention basins and fountains			(0.240)				(0.255)	(0.265)	(0.280)
Total Options to Achieve the Target			(0.453)				(0.468)	(0.478)	(0.517)
EPC Recommended Target to Balance			-				-	-	-
Variance (Shortfall from the Target)			0.453				0.468	0.478	0.517

* 2020 Draft Budget and 2021 to 2023 Draft Projections include the options to achieve the operating target.

** Target variances to be achieved on a department level.

Implications of the Recommended Target to Balance Operating Budget **Land Drainage and Flood Control**

a. Reduce land drainage sewer maintenance program: Reduction will result in backlog of sewer system repairs.

b. Discontinue aesthetic maintenance of storm water retention basins and fountains.

Year over Year Variance Explanations

Year over year (increase) / decrease	2020 Draft Budget	2021 Draft Projection	2022 Draft Projection	2023 Draft Projection
1) <i>Revenue change due to the following:</i>				
- Increase/(decrease) in transfer from Sewage Disposal	\$ (1.090)	\$ 0.029	\$ 0.027	\$ 0.003
- Miscellaneous adjustments.	0.054	0.004	0.004	0.004
Net Revenue Change	\$ (1.036)	\$ 0.032	\$ 0.030	\$ 0.007
2) <i>Expenditure change due to the following:</i>				
- Increase/(decrease) in transfers and other	\$ (0.205)	\$ 0.100	\$ (0.100)	\$ -
- Increase/(decrease) in maintenance	\$ (0.596)	\$ 0.011	\$ 0.010	\$ (0.016)
- Increase/(decrease) debt and finance charges	(0.468)	0.000	(0.001)	0.000
- Miscellaneous adjustments.	0.051	0.025	0.025	0.024
Net Expenditure Change	\$ (1.218)	\$ 0.136	\$ (0.066)	\$ 0.009

Solid Waste Collection Services

Collection Services

- Automated garbage carts
- Multi family, City, commercial bins
- Bulky and surplus waste
- Dead animals
- Appliances with ozone depleting substances

Business Processes

- Operation
- Customer service
- By-law inspection and enforcement

Operating Budget – Solid Waste Collection

2020 Draft Operating Budget and 2021 to 2023 Projections in millions of \$	2018 Actual	2019 Budget	2020 Draft Budget *	Year over Year Increase/ (Decrease)	%	Exp. No.	2021 Draft Projection*	2022 Draft Projection*	2023 Draft Projection*
GOVERNMENT GRANTS	-	-	-	-			-	-	-
SERVICE AND OTHER	1.161	1.142	1.167	0.025			1.188	0.993	0.976
TOTAL REVENUE	1.161	1.142	1.167	0.025	2%	1	1.188	0.993	0.976
SALARIES & BENEFITS	0.879	1.123	1.440	0.317			1.479	1.079	0.920
SERVICES	20.376	21.637	21.030	(0.607)			22.197	22.105	21.323
MATS PARTS & SUPPLIES	0.027	0.095	0.405	0.310			0.415	0.055	0.041
ASSETS & PURCHASES	0.244	0.239	0.256	0.017			0.263	0.271	0.279
GRANTS, TRANSFERS & OTHER	0.124	0.124	0.149	0.025			0.150	0.151	0.152
RECOVERIES	(0.028)	-	-	-			-	-	-
TOTAL OPERATIONAL EXPENDITURES	21.622	23.218	23.280	0.062	0%		24.504	23.661	22.715
DEBT & FINANCE CHARGES	0.012	0.008	0.008	-			0.008	0.006	0.001
TRANSFER TO CAPITAL RESERVES	-	-	-	-			-	-	-
TOTAL EXPENDITURES	21.634	23.226	23.288	0.062	0%	2	24.512	23.667	22.716
Mill Rate Support / (Contribution) **	20.473	22.084	22.121	0.037			23.324	22.674	21.740
Options to Achieve Operating Budget Target:									
a. Reduce single family collection contract costs			(0.212)				(0.252)	(0.280)	(0.300)
b. Discontinue garbage bin collection for multi-family, charity and commercial customer			-				-	(1.624)	(3.516)
Total Options to Achieve the Target			(0.212)				(0.252)	(1.904)	(3.816)
EPC Recommended Target to Balance			-				(0.599)	(1.137)	(1.641)
Variance (Shortfall from the Target)			0.212				(0.347)	0.767	2.175

* 2020 Draft Budget and 2021 to 2023 Draft Projections include the options to achieve the operating target.

** Target variances to be achieved on a department level.

Implications of the Recommended Target to Balance Operating Budget **Solid Waste Collection Services**

a. Reduce single family contract costs: Due to favourable price adjustments. No impact to customer.

b. Discontinue garbage bin collection for multi-family, charity and commercial customers: Service level reduction using a staged approach factoring in expiring contracts. Impacted customers would select service directly through private contractors.

Year over Year Variance Explanations

(in millions)

Year over year (increase) / decrease	2020 Draft Budget	2021 Draft Projection	2022 Draft Projection	2023 Draft Projection
1) <i>Revenue change due to the following:</i>				
- Decrease in small commercial	\$ -	\$ -	\$ (0.214)	\$ (0.022)
- Miscellaneous adjustments.	\$ 0.025	\$ 0.021	\$ 0.019	\$ 0.005
Net Revenue Change	\$ 0.025	\$ 0.021	\$ (0.195)	\$ (0.017)
2) <i>Expenditure change due to the following:</i>				
- Increase/(decrease) in fleet	\$ 0.454	\$ 0.006	\$ (0.155)	\$ (0.014)
- Increase/(decrease) in salaries and benefits	\$ 0.317	\$ 0.039	\$ (0.400)	\$ (0.159)
- Increase in fuel	\$ 0.171	\$ 0.005	\$ (0.180)	\$ (0.014)
- Decrease/(increase) in collection contracts	(0.997)	1.177	(0.103)	(0.781)
- Miscellaneous adjustments.	0.117	(0.003)	(0.007)	0.017
Net Expenditure Change	\$ 0.062	\$ 1.224	\$ (0.845)	\$ (0.951)

Solid Waste Disposal Services

Services/Facilities

- Landfill
- Closed landfills

Business Processes

- Operation
- Gas capture
- Leachate management
- Environmental monitoring
- Capital investment planning and delivery
- Customer service
- Stakeholder participation

Operating Budget – Solid Waste Disposal

2020 Draft Operating Budget and 2021 to 2023 Projections in millions of \$	2018 Actual	2019 Budget	2020 Draft Budget *	Year over Year Increase / (Decrease)	%	Exp. No.	2021 Draft Projection*	2022 Draft Projection*	2023 Draft Projection*
GOVERNMENT GRANTS	0.065	0.062	0.065	0.003			0.065	0.065	0.065
SERVICE AND OTHER	15.276	15.342	15.200	(0.142)			15.612	15.698	15.860
TOTAL REVENUE	15.341	15.404	15.265	(0.139)	-1%	1	15.677	15.763	15.925
SALARIES & BENEFITS	3.496	3.344	3.521	0.177			3.596	3.694	3.777
SERVICES	5.934	8.274	8.425	0.151			8.613	8.905	9.109
MATS PARTS & SUPPLIES	0.739	0.710	0.760	0.050			0.782	0.803	0.813
ASSETS & PURCHASES	0.002	0.095	0.094	(0.001)			0.094	0.094	0.094
GRANTS, TRANSFERS & OTHER	0.794	0.748	0.729	(0.019)			0.736	0.741	0.745
RECOVERIES	(0.836)	(0.035)	(0.035)	-			(0.035)	(0.035)	(0.035)
TOTAL OPERATIONAL EXPENDITURES	10.129	13.136	13.494	0.358	3%		13.786	14.202	14.503
DEBT & FINANCE CHARGES	0.210	0.366	0.364	(0.002)			0.355	0.251	0.260
TRANSFER TO CAPITAL RESERVES	-	-	-	-			-	-	-
TOTAL EXPENDITURES	10.339	13.502	13.858	0.356	3%	2	14.141	14.453	14.763
Surplus / (Deficit) **	5.002	1.902	1.407	0.495			1.536	1.310	1.162
Options to Achieve Operating Budget Target:									
N/A									
Total Options to Achieve the Target			-	-	-	-	-	-	-
EPC Recommended Target to Balance			-	-	-	-	-	-	-
Variance (Shortfall from the Target)			-	-	-	-	-	-	-

* 2020 Draft Budget and 2021 to 2023 Draft Projections include the options to achieve the operating target.

** Target variances to be achieved on a department level.

Year over Year Variance Explanations

(in millions)

Year over year (increase) / decrease	2020 Draft Budget	2021 Draft Projection	2022 Draft Projection	2023 Draft Projection
1) <i>Revenue change due to the following:</i>				
- Increase in internal tipping	\$ 0.360	\$ 0.252	\$ 0.009	\$ -
- Decrease/(increase) in commercial tipping	(0.353)	0.168	0.084	0.168
- Miscellaneous adjustments.	(0.146)	(0.008)	(0.007)	(0.006)
Net Revenue Change	\$ (0.139)	\$ 0.412	\$ 0.086	\$ 0.162
2) <i>Expenditure change due to the following:</i>				
- Increase in leachate treatment	\$ 0.331	\$ 0.090	\$ 0.072	\$ 0.063
- Miscellaneous adjustments.	0.027	0.193	0.240	0.247
Net Expenditure Change	\$ 0.358	\$ 0.283	\$ 0.312	\$ 0.310

Recycling and Waste Diversion Services

Services/Facilities

- Recycling collection
- Recycling processing / sales
- Curbside yard waste collection and composting
- Waste diversion depots (Christmas tree, 24-7 community recycling depots)
- 4R Winnipeg Depots
- Biosolids composting

Business Processes

- Operation
- Capital investment planning and delivery
- Customer service
- Stakeholder participation

Operating Budget – Recycling and Waste Diversion

2020 Draft Operating Budget and 2021 to 2023 Projections in millions of \$	2018 Actual	2019 Budget	2020 Draft Budget *	Year over Year Increase / (Decrease)	%	Exp. No.	2021 Draft Projection*	2022 Draft Projection*	2023 Draft Projection*
GOVERNMENT GRANTS	5.451	4.926	4.584	(0.342)			4.621	4.624	4.626
SERVICE AND OTHER	23.573	24.884	27.011	2.127			30.001	32.340	32.724
TOTAL REVENUE	29.024	29.810	31.595	1.785	6%	1	34.622	36.964	37.350
SALARIES & BENEFITS	4.880	5.860	5.889	0.029			6.011	6.164	6.309
SERVICES	27.389	29.407	27.501	(1.906)			28.475	29.535	30.555
MATS PARTS & SUPPLIES	0.394	0.577	0.496	(0.081)			0.465	0.469	0.470
ASSETS & PURCHASES	0.267	0.323	0.338	0.015			0.339	0.340	0.341
GRANTS, TRANSFERS & OTHER	0.162	0.211	0.220	0.009			0.222	0.224	0.226
RECOVERIES	(0.336)	(0.780)	(0.260)	0.520			(0.260)	(0.260)	(0.260)
TOTAL OPERATIONAL EXPENDITURES	32.756	35.598	34.184	(1.414)	-4%		35.252	36.472	37.641
DEBT & FINANCE CHARGES	0.773	3.177	3.069	(0.108)			2.981	1.736	1.888
TRANSFER TO CAPITAL RESERVES	-	-	-	-			-	-	-
TOTAL EXPENDITURES	33.529	38.775	37.253	(1.522)	-4%	2	38.233	38.208	39.529
Surplus / (Deficit) **	(4.505)	(8.965)	(5.658)	(3.307)			(3.611)	(1.244)	(2.179)
Options to Achieve Operating Budget Target:									
n/a									
Total Options to Achieve the Target			-	-	-	-	-	-	-
EPC Recommended Target to Balance			-	-	-	-	-	-	-
Variance (Shortfall from the Target)			-	-	-	-	-	-	-

* 2020 Draft Budget and 2021 to 2023 Draft Projections include the options to achieve the operating target.

** Target variances to be achieved on a department level.

Year over Year Variance Explanations

(in millions)				
Year over year (increase) / decrease	2020 Draft Budget	2021 Draft Projection	2022 Draft Projection	2023 Draft Projection
1) <i>Revenue change due to the following:</i>				
- Increase in funding from Multi-Material Stewardship Manitoba	\$ 1.870	\$ 2.665	\$ 2.010	\$ 0.050
- Increase in waste diversion	0.453	0.318	0.321	0.325
- Decrease in waste reduction support grant	(0.375)	(0.035)	0.000	0.000
- Decrease in sale of recyclables	(0.158)	0.000	0.000	0.000
- Miscellaneous adjustments.	(0.005)	0.079	0.011	0.011
Net Revenue Change	\$ 1.785	\$ 3.027	\$ 2.342	\$ 0.386
2) <i>Expenditure change due to the following:</i>				
- Increase in leaf and yard waste collection	\$ 0.297	\$ 0.300	\$ 0.200	\$ 0.250
- Increase in recycling collection	0.008	0.500	0.518	0.508
- Decrease in interfund recoveries	0.520	0.000	0.000	0.000
- Decrease/(increase) in recycling processing	(2.170)	0.200	0.200	0.250
- Decrease/increase in debt and finance	(0.108)	(0.880)	(1.245)	0.152
- Miscellaneous adjustments.	(0.069)	0.860	0.302	0.161
Net Expenditure Change	\$ (1.522)	\$ 0.980	\$ (0.025)	\$ 1.321

Salary Budget and Full Time Equivalents (FTEs) / Vacancy Management / Options to Achieve the Target

2020 Draft Operating Budget

	2019 Adopted Budget	2020 Draft Budget*	Increase / (Decrease)	2021 Draft Projection*	2022 Draft Projection*	2023 Draft Projection*
Full Time Equivalents - Utility	962.10	956.44	(5.66)	957.94	957.42	957.92
Full Time Equivalents - Garbage Collection	15.18	17.19	2.01	17.19	12.21	10.21
Full Time Equivalents - Department <i>(number of FTEs)</i>	977.28	973.63	(3.65)	975.13	969.63	968.13
Salaries & Benefits <i>(in millions of \$)</i>	\$ 80.117	\$ 82.112	\$ 1.995	\$ 83.905	\$ 85.443	\$ 87.257
Vacancy Management included in Salaries & Benefits <i>(in millions of \$)</i>	\$ (4.365)	\$ (4.401)	\$ (0.036)	\$ (4.464)	\$ (4.542)	\$ (4.620)

FTE and Salary for Water and Waste Department only

Capital Budget – Land Drainage Utility Fund

List of Capital Projects:

- 1 Flood Pumping Station Rehabilitation
- 2 Land Drainage Sewers - Regional / Local Streets
- 3 Land Drainage and Combined Sewers Outfall Gate Structures
- 4 Stormwater Retention Basin Upgrades
- 5 Outfall Rehabilitation
- 6 Development Agreement Paybacks
- 7 Land Drainage Utility
 - Lot 16 Drain Slope Stabilization Works
 - St. Boniface Hospital Primary Line of Defence (PLD) Slope Stability Analysis and Stabilization Works

Authorization (\$000's)

2019 Adopted	2020 Draft Budget	Forecast					6-Year Total
		2021	2022	2023	2024	2025	
1,000	1,000	1,000	1,000	1,000	1,000	1,000	6,000
1,000	-	-	-	-	100	100	200
1,870	2,680	-	-	-	-	-	2,680
-	-	430	-	-	485	-	915
2,000	2,000	2,000	4,000	3,500	3,500	4,000	19,000
-	-	1,040	700	1,000	1,700	500	4,940
-	-	-	-	-	-	-	-
1,175	-	-	-	-	-	-	-
150	-	-	-	-	-	-	-
7,195	5,680	4,470	5,700	5,500	6,785	5,600	33,735

TOTAL CAPITAL PROJECTS

Options to Achieve the Target		2020	2021	2022	2023	2024	2025	6-Yr Total
a.	Cancel 2020-2023 Land Drainage Sewers - Regional/Local Streets	(100)	(100)	(100)	(100)			(400)
b.	Defer some Stormwater Retention Basin Upgrades one year				(470)	485		15
Total Options to Achieve the Target *		(100)	(100)	(100)	(570)	485	-	(385)
EPC Recommended Target to Balance								
Variance (Shortfall from Target)		-	-	-	-	-	-	-

Implications of the Recommended Target for the Capital Budget

- | |
|--|
| a. Land Drainage Sewers – Regional / Local Streets
Decreased coordination with Public Works; postponement of non-critical infrastructure works. |
| b. Stormwater Retention Basin Upgrades
Deferral of less-critical work which may result in additional reactive maintenance, escalated costs for rehabilitation and potential aesthetic issues. |

Capital Budget

Included in General Capital Fund (Planning, Property and Development Department)

List of Capital Projects:

- 1 Riverbank Greenways Program
 - 2 Riverbank Stabilization - Physical Asset Protection
- TOTAL CAPITAL PROJECTS**

Authorization (\$000's)							
2019 Adopted	2020 Draft Budget*	Forecast					6-Year Total
		2021	2022	2023	2024	2025	
205	-	-	-	-	-	-	-
500	1,641	100	-	-	-	-	1,741
705	1,641	100	-	-	-	-	1,741

Options to Achieve the Target	2020	2021	2022	2023	2024	2025	6-Year Total
a. Eliminate Riverbank Greenways program	(375)	(212)	-	-	(129)	(114)	(830)
b. Reduce Riverbank Stabilization Physical Asset Protection program	(352)	(423)	(500)	-	(405)	(386)	(2,066)
Total Options to Achieve the Target *	(727)	(635)	(500)	-	(534)	(500)	(2,896)
EPC Recommended Target to Balance**	(727)	(635)	(500)	-	(534)	(500)	(2,896)
Variance (Shortfall from Target)	-	-	-	-	-	-	-

* 2020 Draft Budget and Five Year Draft Forecast include the options to achieve the capital target

** Amounts listed are a component of the EPC recommended reductions to achieve Planning, Property and Development's capital target

Implications of the Recommended Target for the Capital Budget

a. Riverbank Greenways Program

No dedicated funding for acquisition of riverbank lands for the City's linear parkway system or to facilitate public access to rivers and riverbank lands (e.g. boat/canoe launches, active transportation initiatives, accessibility improvements, etc.). Planned land acquisition and improvement projects will be cancelled.

b. Riverbank Stabilization

Shortfall of \$500,000 in 2020 for Wellington Crescent-Academy Road project budget. The Riverbank Stabilization Program will cease with no stabilization works undertaken and only limited erosion protection measures on smaller creeks will be possible.

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Land Drainage Utility

CAPITAL PROJECTS SUMMARY <i>(in Thousands of \$)</i>	ADOPTED BUDGET	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT BUDGET
	2019	2020	2020	2020
Flood Pumping Station Rehabilitation				
- Transfer from Sewer Disposal Fund	129	1,000	(500)	500
- Transfer from Prior Year Authorization	871		500	500
Total Flood Pumping Station Rehabilitation	1,000	1,000		1,000
Land Drainage Sewers - Regional / Local Streets	1,000	100	(100)	
Land Drainage and Combined Sewers Outfall Gate Structures	1,870	2,180	500	2,680
Stormwater Retention Basin Upgrades (name changed from Stormwater Retention Basin Revetments)		430	(430)	
Land Drainage Utility				
Outfall Rehabilitation	2,000	2,000		2,000
Development Agreement Paybacks				
- Developer Capacity Charges				
- Transfer from Prior Year Authorization				
Total Development Agreement Paybacks				
Lot 16 Drain Slope Stabilization Works	1,175			
St. Boniface Hospital Primary Line of Defence (PLD) Slope Stability Analysis and Stabilization Works	150			
TOTAL LAND DRAINAGE UTILITY (Utility Supported)	7,195	5,710	(30)	5,680

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Land Drainage

Utility

CAPITAL PROJECTS SUMMARY

(in Thousands of \$)

	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST
	2021	2021	2021	2022	2022	2022
Flood Pumping Station Rehabilitation						
- Transfer from Sewer Disposal Fund	1,000		1,000	1,000		1,000
- Transfer from Prior Year Authorization						
Total Flood Pumping Station Rehabilitation	1,000		1,000	1,000		1,000
Land Drainage Sewers - Regional / Local Streets	100	(100)		100	(100)	
Land Drainage and Combined Sewers Outfall Gate Structures						
Stormwater Retention Basin Upgrades (name changed from Stormwater Retention Basin Revetments)		430	430	470	(470)	
Land Drainage Utility						
Outfall Rehabilitation	2,000		2,000	3,500	500	4,000
Development Agreement Paybacks						
- Developer Capacity Charges	500		500	700		700
- Transfer from Prior Year Authorization		540	540			
Total Development Agreement Paybacks	500	540	1,040	700		700
Lot 16 Drain Slope Stabilization Works						
St. Boniface Hospital Primary Line of Defence (PLD) Slope Stability Analysis and Stabilization Works						
TOTAL LAND DRAINAGE UTILITY (Utility Supported)	3,600	870	4,470	5,770	(70)	5,700

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Land Drainage Utility

CAPITAL PROJECTS SUMMARY <i>(in Thousands of \$)</i>	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	DRAFT FORECAST	6 YEAR TOTAL
	2023	2023	2023	2024	2024	2024	2025	2020-2025
Flood Pumping Station Rehabilitation								
- Transfer from Sewer Disposal Fund	1,000		1,000	1,500	(500)	1,000	1,000	5,500
- Transfer from Prior Year Authorization								500
Total Flood Pumping Station Rehabilitation	1,000		1,000	1,500		1,000	1,000	6,000
Land Drainage Sewers - Regional / Local Streets	100	(100)		100		100	100	200
Land Drainage and Combined Sewers Outfall Gate Structures								2,680
Stormwater Retention Basin Upgrades (name changed from Stormwater Retention Basin Revetments)					485	485		915
Land Drainage Utility				400	(400)			
Outfall Rehabilitation	3,500		3,500	3,500		3,500	4,000	19,000
Development Agreement Paybacks								
- Developer Capacity Charges	1,000		1,000	1,700		1,700	500	4,400
- Transfer from Prior Year Authorization								540
Total Development Agreement Paybacks	1,000		1,000	1,700		1,700	500	4,940
Lot 16 Drain Slope Stabilization Works								
St. Boniface Hospital Primary Line of Defence (PLD) Slope Stability Analysis and Stabilization Works								
TOTAL LAND DRAINAGE UTILITY (Utility Supported)	5,600	(100)	5,500	7,200	(415)	6,785	5,600	33,735

Capital Budget – Water Utility: Supply and Treatment

Authorization (\$000's)

2019 Adopted	2020 Draft Budget	Forecast					6-Year Total
		2021	2022	2023	2024	2025	
-	200	520	2,000	1,030	1,650	3,700	9,100
-	-	2,050	5,450	-	4,265	585	12,350
-	1,000	-	-	1,000	-	1,000	3,000
785	-	1,000	-	-	1,300	685	2,985
-	800	-	-	-	-	-	800
-	-	3,575	-	-	-	-	3,575
4,125	2,690	-	-	-	-	-	2,690
-	500	-	-	-	-	-	500
-	-	575	-	-	-	-	575
-	-	-	-	-	-	100	100
-	-	-	350	985	-	-	1,335
-	1,850	-	-	-	-	-	1,850
-	4,090	-	-	-	-	-	4,090
-	855	1,735	-	-	-	-	2,590
150	-	3,950	-	-	-	-	3,950
575	470	5,530	-	-	-	-	6,000
-	-	200	-	-	-	-	200
-	-	425	-	-	-	-	425
155	-	-	-	-	-	-	-
5,790	12,455	19,560	7,800	3,015	7,215	6,070	56,115

Options to Achieve the Target		2020	2021	2022	2023	2024	2025	6-Yr Total
a.	Defer aspects of Shoal Lake Aqueduct Intake Facility Rehabilitation program		(250)	(550)		265	585	50
b.	Defer aspects of Tache Booster Pumping Station			(1,220)	(645)	1,300	685	120
c.	Defer Deacon Reservoir Cell Rehabilitation			(100)			100	-
Total Options to Achieve the Target *		-	(250)	(1,870)	(645)	1,565	1,370	170
EPC Recommended Target to Balance								
Variance (Shortfall from Target)		-	-	-	-	-	-	-

Implications of the Recommended Target for the Capital Budget

- | | |
|----|--|
| a. | Shoal Lake Aqueduct Intake Facility Rehabilitation
Deferral of less-critical work which may result in additional reactive maintenance; additional escalation costs. |
| b. | Tache Booster Pumping Station
Deferral of less-critical work which may result in additional reactive maintenance; additional escalation costs. |
| c. | Deacon Reservoir Cell Rehabilitation
Increased, but manageable, risk related to reservoir capacity. |

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Water Utility: Supply and Treatment

CAPITAL PROJECTS SUMMARY <i>(in Thousands of \$)</i>	ADOPTED BUDGET	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT BUDGET
	2019	2020	2020	2020
Shoal Lake Aqueduct Condition Assessment and Rehabilitation (name changed from Shoal Lake Aqueduct Asset Preservation)			200	200
Shoal Lake Aqueduct Intake Facility Rehabilitation				
Branch Aqueduct Condition Assessment and Rehabilitation				
- Retained Earnings				
- Transfer from Prior Years Authorization			1,000	1,000
Total Branch Aqueduct Condition Assessment and Rehabilitation			1,000	1,000
Tache Booster Pumping Station	785			
Pumping Stations and Reservoirs Structural Upgrades		800		800
Chlorination Upgrading at Pumping Stations				
Water Supervisory Control and Data Acquisition (SCADA)	4,125		2,690	2,690
Waterworks System Security Upgrades		500		500
Regulatory Assessment of Water System Infrastructure and Supply Sources				
Deacon Reservoir Cell Rehabilitation				
Deacon Booster Pumping Station Suction Header Divider Wall		1,245	(1,245)	
Deacon Site Flood Protection				
- Retained Earnings			25	25
- Transfer from Prior Years Authorization			1,825	1,825
Total Deacon Site Flood Protection			1,850	1,850
HVAC Upgrades at Pumping Stations		4,090		4,090
Ultraviolet Light Disinfection System Upgrade				
- Retained Earnings		855	(855)	
- Transfer from Prior Years Authorization			855	855
Total Ultraviolet Light Disinfection System Upgrade		855		855
Discharge Meter Upgrades at the In-town Pumping Stations	150			
Water Treatment Plant Asset Refurbishment and Replacement	575	4,650	(4,180)	470
Pumping Stations Reliability Upgrades				
Study of Backup Power Supply for the Hurst Pumping Station				
Water Conservation and Efficiency Study	155			
Total Waterworks System - Supply and Treatment	5,790	12,140	315	12,455

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Water Utility: Supply and Treatment

CAPITAL PROJECTS SUMMARY <i>(in Thousands of \$)</i>	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST
	2021	2021	2021	2022	2022	2022
Shoal Lake Aqueduct Condition Assessment and Rehabilitation (name changed from Shoal Lake Aqueduct Asset Preservation)	1,840	(1,320)	520	2,000		2,000
Shoal Lake Aqueduct Intake Facility Rehabilitation		2,050	2,050	7,400	(1,950)	5,450
Branch Aqueduct Condition Assessment and Rehabilitation						
- Retained Earnings	1,000	(1,000)				
- Transfer from Prior Years Authorization						
Total Branch Aqueduct Condition Assessment and Rehabilitation	1,000	(1,000)				
Tache Booster Pumping Station	1,000		1,000	1,220	(1,220)	
Pumping Stations and Reservoirs Structural Upgrades						
Chlorination Upgrading at Pumping Stations	3,575		3,575			
Water Supervisory Control and Data Acquisition (SCADA)						
Waterworks System Security Upgrades						
Regulatory Assessment of Water System Infrastructure and Supply Sources	575		575			
Deacon Reservoir Cell Rehabilitation				100	(100)	
Deacon Booster Pumping Station Suction Header Divider Wall					350	350
Deacon Site Flood Protection						
- Retained Earnings						
- Transfer from Prior Years Authorization						
Total Deacon Site Flood Protection						
HVAC Upgrades at Pumping Stations						
Ultraviolet Light Disinfection System Upgrade						
- Retained Earnings		1,735	1,735			
- Transfer from Prior Years Authorization						
Total Ultraviolet Light Disinfection System Upgrade		1,735	1,735			
Discharge Meter Upgrades at the In-town Pumping Stations	3,950		3,950			
Water Treatment Plant Asset Refurbishment and Replacement		5,530	5,530			
Pumping Stations Reliability Upgrades		200	200			
Study of Backup Power Supply for the Hurst Pumping Station		425	425			
Water Conservation and Efficiency Study						
Total Waterworks System - Supply and Treatment	11,940	7,620	19,560	10,720	(2,920)	7,800

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Water Utility: Supply and

CAPITAL PROJECTS SUMMARY <i>(in Thousands of \$)</i>	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	DRAFT FORECAST	6 YEAR TOTAL
	2023	2023	2023	2024	2024	2024	2025	2020-2025
Shoal Lake Aqueduct Condition Assessment and Rehabilitation (name changed from Shoal Lake Aqueduct Asset Preservation)	1,465	(435)	1,030		1,650	1,650	3,700	9,100
Shoal Lake Aqueduct Intake Facility Rehabilitation	150	(150)		3,055	1,210	4,265	585	12,350
Branch Aqueduct Condition Assessment and Rehabilitation								
- Retained Earnings	1,000		1,000				1,000	2,000
- Transfer from Prior Years Authorization								1,000
Total Branch Aqueduct Condition Assessment and Rehabilitation	1,000		1,000				1,000	3,000
Tache Booster Pumping Station	645	(645)			1,300	1,300	685	2,985
Pumping Stations and Reservoirs Structural Upgrades								800
Chlorination Upgrading at Pumping Stations								3,575
Water Supervisory Control and Data Acquisition (SCADA)								2,690
Waterworks System Security Upgrades								500
Regulatory Assessment of Water System Infrastructure and Supply Sources								575
Deacon Reservoir Cell Rehabilitation							100	100
Deacon Booster Pumping Station Suction Header Divider Wall		985	985					1,335
Deacon Site Flood Protection								
- Retained Earnings								25
- Transfer from Prior Years Authorization								1,825
Total Deacon Site Flood Protection								1,850
HVAC Upgrades at Pumping Stations								4,090
Ultraviolet Light Disinfection System Upgrade								
- Retained Earnings								1,735
- Transfer from Prior Years Authorization								855
Total Ultraviolet Light Disinfection System Upgrade								2,590
Discharge Meter Upgrades at the In-town Pumping Stations								3,950
Water Treatment Plant Asset Refurbishment and Replacement				2,000	(2,000)			6,000
Pumping Stations Reliability Upgrades								200
Study of Backup Power Supply for the Hurst Pumping Station								425
Water Conservation and Efficiency Study								
Total Waterworks System - Supply and Treatment	3,260	(245)	3,015	5,055	2,160	7,215	6,070	56,115

Capital Budget – Water Utility: Distribution

List of Capital Projects:

- 19 Feeder Main Condition Assessment and Rehabilitation
- 20 Water Meter Renewals
- 21 Water Main Renewals
- 22 Customer Billing and Work Management Systems Upgrades Program
- 23 Application and Data Integration
- 24 Digital Enablement for Plant and Field Employees
- 25 Information Technology Enterprise Architecture
- 26 Laboratory Information Management System Upgrade and Enhancement
- Public Water Outlets
- Customer Care and Billing - iNovah Integration
- Automated Remittance Processing
- Information Technology Cybersecurity Review
- GIS Enhancements

Authorization (\$000's)							
2019 Adopted	2020 Draft Budget	Forecast					6-Year Total
		2021	2022	2023	2024	2025	
350	3,550	200	500	200	1,150	1,860	7,460
-	450	-	-	-	-	16,000	16,450
16,500	17,500	18,000	18,500	19,000	20,000	20,500	113,500
185	1,045	2,200	350	550	750	600	5,495
-	250	250	350	400	565	515	2,330
530	1,300	750	750	750	500	500	4,550
-	-	-	-	-	-	-	-
	1,050	-	-	-	-	-	1,050
475	-	-	-	-	-	-	-
130	-	-	-	-	-	-	-
400	-	-	-	-	-	-	-
340	-	-	-	-	-	-	-
300	-	-	-	-	-	-	-
19,210	25,145	21,400	20,450	20,900	22,965	39,975	150,835

TOTAL CAPITAL PROJECTS: Waterworks System - Distribution

Options to Achieve the Target		2020	2021	2022	2023	2024	2025	6-Yr Total
d.	Defer aspects of Feeder Main Condition Assessment and Rehabilitation			(600)			656	56
e.	Reduce Water Main Renewals program	(500)	(1,000)	(1,000)	(1,000)			(3,500)
f.	Reduce Customer Billing and Work Management Systems Upgrades	(105)						(105)
g.	Defer aspects of Application and Data Integration			(200)	(200)	215	215	30
h.	Cancel Information Technology Enterprise Architecture	(125)						(125)
Total Options to Achieve the Target *		(730)	(1,000)	(1,800)	(1,200)	215	871	(3,644)
EPC Recommended Target to Balance								
Variance (Shortfall from Target)		-	-	-	-	-	-	-

Implications of the Recommended Target for the Capital Budget

d.	Feeder Main Condition Assessment and Rehabilitation Deferral of less-critical work which may result in additional reactive maintenance; additional escalation costs.
e.	Water Main Renewals Potential for a reduction in customer levels of service and reduced ability to coordinate with Public Works Department road renewals
f.	Customer Billing and Work Management Systems Upgrades Program Impact of this decision is mitigated due to descopeing of hardware capacity and funding made available from the Innovation Department.
g.	Application and Data Integration A deferral in this program will limit the Department's ability to integrate various applications and data sources to be able to connect information across systems and to obtain a single source of truth.
h.	Information Technology Enterprise Architecture Canceling this project will result in increased costs to future technology initiatives that do not follow a standard architectural blueprint.

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Water Utility: Distribution

<i>CAPITAL PROJECTS SUMMARY</i> <i>(in Thousands of \$)</i>	ADOPTED BUDGET	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT BUDGET
	2019	2020	2020	2020
Feeder Main Condition Assessment and Rehabilitation	350	3,550		3,550
Building Renovations - 1199 Pacific Avenue				
Water Meter Renewals (name changed from Water Meter		450		450
- Retained Earnings				
- Water Meter Renewal Reserve				
Total Water Meter Replacement Program		450		450
Public Water Outlets	475			
Water Main Renewals	16,500	18,000	(500)	17,500
- Water Main Renewal Reserve				
Customer Billing and Work Management Systems Upgrades	185	1,565	(520)	1,045
Customer Care and Billing - iNovah Integration	130			
Automated Remittance Processing	400			
Application and Data Integration		250		250
Digital Enablement for Plant and Field Employees	530	850	450	1,300
Information Technology Cybersecurity Review	340			
GIS Enhancements	300			
Information Technology Enterprise Architecture		125	(125)	
Laboratory Information Management System Upgrade and			1,050	1,050
Total Waterworks System - Distribution	19,210	24,790	355	25,145
TOTAL WATERWORKS SYSTEM (Utility Supported)	25,000	36,930	670	37,600

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Water Utility: Distribution

CAPITAL PROJECTS SUMMARY <i>(in Thousands of \$)</i>	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST
	2021	2021	2021	2022	2022	2022
Feeder Main Condition Assessment and Rehabilitation	1,000	(800)	200	1,100	(600)	500
Building Renovations - 1199 Pacific Avenue						
Water Meter Renewals (name changed from Water Meter						
- Retained Earnings						
- Water Meter Renewal Reserve						
Total Water Meter Replacement Program						
Public Water Outlets						
Water Main Renewals						
- Water Main Renewal Reserve	19,000	(1,000)	18,000	19,500	(1,000)	18,500
Customer Billing and Work Management Systems Upgrades	2,110	90	2,200	430	(80)	350
Customer Care and Billing - iNovah Integration						
Automated Remittance Processing						
Application and Data Integration	610	(360)	250		350	350
Digital Enablement for Plant and Field Employees	660	90	750	680	70	750
Information Technology Cybersecurity Review						
GIS Enhancements						
Information Technology Enterprise Architecture						
Laboratory Information Management System Upgrade and						
Total Waterworks System - Distribution	23,380	(1,980)	21,400	21,710	(1,260)	20,450
TOTAL WATERWORKS SYSTEM (Utility Supported)	35,320	5,640	40,960	32,430	(4,180)	28,250

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Water Utility: Distribution

CAPITAL PROJECTS SUMMARY <i>(in Thousands of \$)</i>	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	DRAFT FORECAST	6 YEAR TOTAL
	2023	2023	2023	2024	2024	2024	2025	2020-2025
Feeder Main Condition Assessment and Rehabilitation	1,100	(900)	200	1,150		1,150	1,860	7,460
Building Renovations - 1199 Pacific Avenue	2,100	(2,100)		2,100	(2,100)			
Water Meter Renewals (name changed from Water Meter								
- Retained Earnings								450
- Water Meter Renewal Reserve							16,000	16,000
Total Water Meter Replacement Program							16,000	16,450
Public Water Outlets								
Water Main Renewals								
- Water Main Renewal Reserve	20,000	(1,000)	19,000	20,000		20,000	20,500	113,500
Customer Billing and Work Management Systems Upgrades	925	(375)	550	730	20	750	600	5,495
Customer Care and Billing - iNovah Integration								
Automated Remittance Processing								
Application and Data Integration		400	400		565	565	515	2,330
Digital Enablement for Plant and Field Employees	660	90	750		500	500	500	4,550
Information Technology Cybersecurity Review								
GIS Enhancements								
Information Technology Enterprise Architecture								
Laboratory Information Management System Upgrade and								1,050
Total Waterworks System - Distribution	24,785	(3,885)	20,900	23,980	(1,015)	22,965	39,975	150,835
TOTAL WATERWORKS SYSTEM (Utility Supported)	28,045	(4,130)	23,915	29,035	1,145	30,180	46,045	206,950

Capital Budget – Sewer Utility: Treatment

List of Capital Projects:

- 1 Sludge Drying Beds Decommissioning
- 2 Process Control System Master Plan and Upgrade
- 3 Asset Refurbishment and Replacement Program
- 4 West End Sewage Treatment Plant (WEWPCC) - Facilities Plan
- 5 SEWPCC Second Stage Dewatering

TOTAL CAPITAL PROJECTS: Sewage Disposal System - Treatment

Authorization (\$000's)							
2019 Adopted	2020 Draft Budget	Forecast					6-Year Total
		2021	2022	2023	2024	2025	
-	-	-	-	-	375	-	375
-	-	3,000	-	-	7,000	-	10,000
6,000	6,000	5,000	2,000	5,000	5,000	5,000	28,000
-	-	500	-	-	-	-	500
-	-	-	-	-	-	-	-
6,000	6,000	8,500	2,000	5,000	12,375	5,000	38,875

Options to Achieve the Target		2020	2021	2022	2023	2024	2025	6-Yr Total
a.	Defer Sludge Drying Beds Decommissioning two years			(350)		375		25
b.	Defer aspects of Process Control System Master Plan and Upgrade three years		(6,500)			7,000		500
Total Options to Achieve the Target *		-	(6,500)	(350)	-	7,375	-	525
EPC Recommended Target to Balance								
Variance (Shortfall from Target)		-	-	-	-	-	-	-

Implications of the Recommended Target for the Capital Budget

a. Sludge Drying Beds Decommissioning

Deferring this project will delay administrative issues related to licences; additional escalation costs.

b. Process Control System Master Plan and Upgrade

Project deferred to coordinate with other plant upgrades.

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Sewer Utility: Treatment

<i>CAPITAL PROJECTS SUMMARY</i> <i>(in Thousands of \$)</i>	ADOPTED BUDGET	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT BUDGET
	2019	2020	2020	2020
SEWPCC Second Stage Dewatering				
Sludge Drying Beds Decommissioning				
Process Control System Master Plan and Upgrade				
Asset Refurbishment and Replacement Program	6,000	6,000		6,000
West End Sewage Treatment Plant (WEWPCC) - Facilities Plan				
Total Sewage Disposal System - Treatment	6,000	6,000		6,000

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Sewer Utility: Treatment

CAPITAL PROJECTS SUMMARY <i>(in Thousands of \$)</i>	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST
	2021	2021	2021	2022	2022	2022
SEWPCC Second Stage Dewatering				1,000	(1,000)	
Sludge Drying Beds Decommissioning				350	(350)	
Process Control System Master Plan and Upgrade		3,000	3,000			
Asset Refurbishment and Replacement Program	2,000	3,000	5,000	2,000		2,000
West End Sewage Treatment Plant (WEWPCC) - Facilities Plan	500		500			
Total Sewage Disposal System - Treatment	2,500	6,000	8,500	3,350	(1,350)	2,000

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Sewer Utility: Treatment

CAPITAL PROJECTS SUMMARY <i>(in Thousands of \$)</i>	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	DRAFT FORECAST	6 YEAR TOTAL
	2023	2023	2023	2024	2024	2024	2025	2020-2025
SEWPCC Second Stage Dewatering								
Sludge Drying Beds Decommissioning					375	375		375
Process Control System Master Plan and Upgrade	2,000	(2,000)			7,000	7,000		10,000
Asset Refurbishment and Replacement Program	5,000		5,000	5,000		5,000	5,000	28,000
West End Sewage Treatment Plant (WEWPCC) - Facilities Plan								500
Total Sewage Disposal System - Treatment	7,000	(2,000)	5,000	5,000	7,375	12,375	5,000	38,875

Capital Budget – Sewer Utility: Collection

List of Capital Projects:

6	Arc Flash Hazard Analysis and Remediation
7	D'Arcy Lift Station Load Shedding Upgrade
8	Lift Stations Upgrading
9	River Crossings Monitoring and Rehabilitation
10	Combined Sewer Overflow and Basement Flood Management Strategy
11	Comminutor Chamber Rehabilitation Program
12	Southwest Interceptor River Crossing
13	Wastewater Services Facilities Plan
14	Environmental Standards Laboratory Facility Plan
15	Sewer Renewals
16	Departmental Levels of Service Framework
17	Water and Waste Department (WWD) Business Intelligence
18	Customer Billing and Work Management Systems Upgrades Program
19	Digital Customer Solutions
20	WWD Document Management System
21	WWD Learning Management System
22	Supervisory Control and Data Acquisition (SCADA) Upgrade for Collections
TOTAL CAPITAL PROJECTS: Sewage Disposal System - Collection	

Authorization (\$000's)							
2019 Adopted	2020 Draft Budget	Forecast					6-Year Total
		2021	2022	2023	2024	2025	
879	385	320	270	-	-	-	975
-	-	400	-	-	-	-	400
2,825	2,925	6,250	6,250	3,250	6,500	7,000	32,175
700	6,200	950	1,700	600	-	5,000	14,450
31,100	31,610	23,110	29,120	27,120	23,130	25,130	159,220
1,200	1,300	-	-	-	-	-	1,300
1,100	-	-	-	-	5,000	35,000	40,000
-	350	-	-	-	-	-	350
-	-	-	-	-	530	-	530
17,500	17,000	17,500	18,000	18,500	21,000	21,000	113,000
-	200	-	-	-	-	-	200
600	1,050	1,550	300	300	1,100	550	4,850
185	1,045	2,200	350	550	750	600	5,495
1,600	500	500	350	350	715	715	3,130
500	500	250	250	-	-	-	1,000
-	-	-	-	-	565	-	565
-	-	-	-	-	-	-	-
58,189	63,065	53,030	56,590	50,670	59,290	94,995	377,640

Options to Achieve the Target		2020	2021	2022	2023	2024	2025	6-Yr Total
c.	Decrease funding for Lift Stations Upgrading in 2023				(3,000)			(3,000)
d.	Defer the Southwest Interceptor River Crossing one year				(5,000)	(30,000)	15,000	(20,000)
e.	Defer the Environmental Standards Laboratory Facility Plan two years			(500)		530		30
f.	Decrease the pacing of the Sewer Renewal program	(1,500)	(2,000)	(2,000)	(2,000)			(7,500)
g.	Decrease the pacing of the WWD Business Intelligence program			(1,000)	(1,450)	(700)	(1,750)	(4,900)
h.	Reduce Customer Billing and Work Management Systems Upgrades	(105)						(105)
i.	Defer some aspects of the Digital Customer Solutions program			(200)	(200)	215	215	30
j.	Defer the WWD Learning Management System four years	(500)				565		65
Total Options to Achieve the Target *		(2,105)	(2,000)	(3,700)	(11,650)	(29,390)	13,465	(35,380)
EPC Recommended Target to Balance								
Variance (Shortfall from Target)		-	-	-	-	-	-	-

Implications of the Recommended Target for the Capital Budget

c. Lift Stations Upgrading	Deferral of upgrade work which may result in additional reactive maintenance; increased infrastructure deficit and operational risk to the department.
d. Southwest Interceptor River Crossing	Growth in the southwest quadrant of the city may be delayed; optimization of portions of the collection system will be delayed; operating resilience is delayed.
e. Environmental Standards Laboratory Facility Plan	Deferral of this project will limit long-term capital planning capabilities until the study is complete.
f. Sewer Renewals	Impact of this decision is mitigated, in the short-term, due to recent favourable pricing on tendered contracts.
g. Water and Waste Department (WWD) Business Intelligence	Reducing this program will limit the business' ability to make effective evidence-based decisions, hinder strategies and efforts to address operational inefficiencies and delay potential operational savings.
h. Customer Billing and Work Management Systems Upgrades Program	Impact of this decision is mitigated due to descoping of hardware capacity and funding made available from the Innovation Department.
i. Digital Customer Solutions	Deferring this project will delay enhancing customer self-service features and improving customers online experience.
j. WWD Learning Management System	Deferring this project delays the Department's ability to deliver training to its employees and results in continued inefficiencies related to regulatory compliance reporting.

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Sewer Utility:

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CAPITAL PROJECTS SUMMARY <i>(in Thousands of \$)</i>	ADOPTED BUDGET	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT BUDGET
	2019	2020	2020	2020
Arc Flash Hazard Analysis and Remediation	879	385		385
D'Arcy Lift Station Load Shedding Upgrade				
Lift Stations Upgrading	2,825	2,925		2,925
River Crossings Monitoring and Rehabilitation	700	700	5,500	6,200
Combined Sewer Overflow and Basement Flood Management				
- Environmental Projects Reserve	31,100	32,610	(1,000)	31,610
Comminutor Chamber Rehabilitation Program	1,200	1,300		1,300
Southwest Interceptor River Crossing	1,100			
Wastewater Services Facilities Plan		350		350
Environmental Standards Laboratory Facility Plan				
Sewer Renewals				
- Sewer System Rehabilitation Reserve	17,500	18,500	(11,500)	7,000
- Transfer from Prior Years Authorization			10,000	10,000
Total Sewer Renewals	17,500	18,500	(1,500)	17,000
Departmental Levels of Service Framework			200	200
Water and Waste Department (WWD) Business Intelligence	600	280	770	1,050
Customer Billing and Work Management Systems Upgrades	185	1,565	(520)	1,045
Digital Customer Solutions	1,600	1,000	(500)	500
WWD Document Management System	500	500		500
WWD Learning Management System		500	(500)	
Total Sewage Disposal System - Collection	58,189	60,615	2,450	63,065
TOTAL SEWAGE DISPOSAL SYSTEM (Utility Supported)	64,189	66,615	2,450	69,065

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Sewer Utility:

CAPITAL PROJECTS SUMMARY (in Thousands of \$)	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST
	2021	2021	2021	2022	2022	2022
Arc Flash Hazard Analysis and Remediation	320		320	270		270
D'Arcy Lift Station Load Shedding Upgrade		400	400			
Lift Stations Upgrading	6,250		6,250	6,250		6,250
River Crossings Monitoring and Rehabilitation	1,350	(400)	950	1,700		1,700
Combined Sewer Overflow and Basement Flood Management						
- Environmental Projects Reserve	24,110	(1,000)	23,110	29,120		29,120
Comminutor Chamber Rehabilitation Program						
Southwest Interceptor River Crossing						
Wastewater Services Facilities Plan						
Environmental Standards Laboratory Facility Plan				500	(500)	
Sewer Renewals						
- Sewer System Rehabilitation Reserve	19,500	(2,000)	17,500	20,000	(2,000)	18,000
- Transfer from Prior Years Authorization						
Total Sewer Renewals	19,500	(2,000)	17,500	20,000	(2,000)	18,000
Departmental Levels of Service Framework						
Water and Waste Department (WWD) Business Intelligence	200	1,350	1,550		300	300
Customer Billing and Work Management Systems Upgrades	2,110	90	2,200	430	(80)	350
Digital Customer Solutions	1,095	(595)	500	175	175	350
WWD Document Management System	150	100	250		250	250
WWD Learning Management System						
Total Sewage Disposal System - Collection	55,085	(2,055)	53,030	58,445	(1,855)	56,590
TOTAL SEWAGE DISPOSAL SYSTEM (Utility Supported)	57,585	3,945	61,530	61,795	(3,205)	58,590

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Sewer Utility:

Collection CAPITAL FORECAST SUMMARY (in Thousands of \$)	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	DRAFT FORECAST	6 YEAR TOTAL
	2023	2023	2023	2024	2024	2024	2025	2020-2025
Arc Flash Hazard Analysis and Remediation								975
D'Arcy Lift Station Load Shedding Upgrade								400
Lift Stations Upgrading	6,250	(3,000)	3,250	6,500		6,500	7,000	32,175
River Crossings Monitoring and Rehabilitation	600		600				5,000	14,450
Combined Sewer Overflow and Basement Flood Management - Environmental Projects Reserve	27,120		27,120	25,130	(2,000)	23,130	25,130	159,220
Comminutor Chamber Rehabilitation Program								1,300
Southwest Interceptor River Crossing	5,000	(5,000)		35,000	(30,000)	5,000	35,000	40,000
Wastewater Services Facilities Plan								350
Environmental Standards Laboratory Facility Plan					530	530		530
Sewer Renewals - Sewer System Rehabilitation Reserve - Transfer from Prior Years Authorization	20,500	(2,000)	18,500	21,000		21,000	21,000	103,000 10,000
Total Sewer Renewals	20,500	(2,000)	18,500	21,000		21,000	21,000	113,000
Departmental Levels of Service Framework								200
Water and Waste Department (WWD) Business Intelligence		300	300		1,100	1,100	550	4,850
Customer Billing and Work Management Systems Upgrades	925	(375)	550	730	20	750	600	5,495
Digital Customer Solutions	160	190	350	110	605	715	715	3,130
WWD Document Management System								1,000
WWD Learning Management System					565	565		565
Total Sewage Disposal System - Collection	60,555	(9,885)	50,670	88,470	(29,180)	59,290	94,995	377,640
TOTAL SEWAGE DISPOSAL SYSTEM (Utility Supported)	67,555	(11,885)	55,670	93,470	(21,805)	71,665	99,995	416,515

Capital Budget – Solid Waste Utility: Landfill

List of Capital Projects:

- 1 Brady Road Resource Management Facility - Cell Construction
- 2 Brady Road Resource Management Facility - Site Improvements
- 3 Brady Road Resource Management Facility - Alternative Energy Project
- 4 Closed Landfill Site Improvement
- 5 Soil Fabrication for Landfill Cover
- 6 Brady Road Resource Management Facility - Landfill Gas Capture Expansion
- Brady Road Resource Management Facility - Onsite Leachate Management

Authorization (\$000's)							
2019 Adopted	2020 Draft Budget	Forecast					6-Year Total
		2021	2022	2023	2024	2025	
2,500	700	1,200	750	1,300	500	-	4,450
200	-	200	-	-	-	-	200
-	-	-	2,500	-	-	-	2,500
225	970	100	100	100	-	-	1,270
-	-	1,250	1,300	1,300	1,350	1,400	6,600
-	-	-	-	-	-	-	-
450	-	-	-	-	-	-	-
3,375	1,670	2,750	4,650	2,700	1,850	1,400	15,020

TOTAL CAPITAL PROJECTS: Solid Waste Disposal - Landfill

Options to Achieve the Target		2020	2021	2022	2023	2024	2025	6-Yr Total
a.								-
Total Options to Achieve the Target *		-	-	-	-	-	-	-
EPC Recommended Target to Balance								
Variance (Shortfall from Target)		-	-	-	-	-	-	-

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Solid Waste Utility: Landfill

<i>CAPITAL PROJECTS SUMMARY</i> <i>(in Thousands of \$)</i>	ADOPTED BUDGET	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT BUDGET
	2019	2020	2020	2020
Brady Road Resource Management Facility - Cell Construction	2,500	700		700
Brady Road Resource Management Facility - Site Improvements				
- Landfill Rehabilitation Reserve	200	200	(200)	
Brady Road Resource Management Facility - Landfill Gas Capture Expansion				
- Landfill Rehabilitation Reserve				
Brady Road Resource Management Facility - Alternative Energy				
- External Debt		2,500	(2,500)	
Brady Road Resource Management Facility - Onsite Leachate Management				
- Landfill Rehabilitation Reserve	450			
Closed Landfill Site Improvement				
- Landfill Rehabilitation Reserve	225	220	750	970
Soil Fabrication for Landfill Cover				
- Landfill Rehabilitation Reserve				
Total Solid Waste Disposal System - Landfill	3,375	3,620	(1,950)	1,670

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Solid Waste Utility: Landfill

CAPITAL PROJECTS SUMMARY <i>(in Thousands of \$)</i>	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST
	2021	2021	2021	2022	2022	2022
Brady Road Resource Management Facility - Cell Construction	1,200		1,200	750		750
Brady Road Resource Management Facility - Site Improvements						
- Landfill Rehabilitation Reserve		200	200			
Brady Road Resource Management Facility - Landfill Gas Capture Expansion						
- Landfill Rehabilitation Reserve				2,600	(2,600)	
Brady Road Resource Management Facility - Alternative Energy						
- External Debt					2,500	2,500
Brady Road Resource Management Facility - Onsite Leachate Management						
- Landfill Rehabilitation Reserve						
Closed Landfill Site Improvement						
- Landfill Rehabilitation Reserve	285	(185)	100	200	(100)	100
Soil Fabrication for Landfill Cover						
- Landfill Rehabilitation Reserve		1,250	1,250		1,300	1,300
Total Solid Waste Disposal System - Landfill	1,485	1,265	2,750	3,550	1,100	4,650

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Solid Waste Utility: Landfill

CAPITAL PROJECTS SUMMARY <i>(in Thousands of \$)</i>	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	DRAFT FORECAST	6 YEAR TOTAL
	2023	2023	2023	2024	2024	2024	2025	2020-2025
Brady Road Resource Management Facility - Cell Construction	1,300		1,300	500		500		4,450
Brady Road Resource Management Facility - Site Improvements								
- Landfill Rehabilitation Reserve								200
Brady Road Resource Management Facility - Landfill Gas Capture Expansion								
- Landfill Rehabilitation Reserve								
Brady Road Resource Management Facility - Alternative Energy								
- External Debt								2,500
Brady Road Resource Management Facility - Onsite Leachate Management								
- Landfill Rehabilitation Reserve								
Closed Landfill Site Improvement								
- Landfill Rehabilitation Reserve	200	(100)	100	200	(200)			1,270
Soil Fabrication for Landfill Cover								
- Landfill Rehabilitation Reserve		1,300	1,300		1,350	1,350	1,400	6,600
Total Solid Waste Disposal System - Landfill	1,500	1,200	2,700	700	1,150	1,850	1,400	15,020

Capital Budget – Solid Waste Utility: Recycling and Waste Diversion

List of Capital Projects:

- 7 Comprehensive Integrated Waste Management Strategy (CIWMS) - Review
- 8 Source Separated Organics
- 9 Collection Management System
- Comprehensive Integrated Waste Management Strategy (CIWMS) - Materials Recovery Facility Education Centre

TOTAL CAPITAL PROJECTS: Solid Waste Disposal - Recycling and Waste Diversion

Authorization (\$000's)							
2019 Adopted	2020 Draft Budget	Forecast					6-Year Total
		2021	2022	2023	2024	2025	
-	-	-	-	450	-	-	450
-	1,800	-	-	-	-	-	1,800
-	-	-	250	-	-	-	250
250	-	-	-	-	-	-	-
250	1,800	-	250	450	-	-	2,500

Options to Achieve the Target		2020	2021	2022	2023	2024	2025	6-Yr Total
a.								-
Total Options to Achieve the Target *		-	-	-	-	-	-	-
EPC Recommended Target to Balance								
Variance (Shortfall from Target)		-	-	-	-	-	-	-

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Solid Waste Utility: Recycling and Waste Diversion

<i>CAPITAL PROJECTS SUMMARY</i> <i>(in Thousands of \$)</i>	ADOPTED BUDGET	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT BUDGET
	2019	2020	2020	2020
Comprehensive Integrated Waste Management Strategy (CIWMS) - Materials Recovery Facility Education Centre				
- Transfer from Prior Year Authorization - External Debt	250			
Comprehensive Integrated Waste Management Strategy (CIWMS) - Review				
Source Separated Organics			1,800	1,800
Collection Management System		250	(250)	
Total Solid Waste Disposal System - Recycling and Waste Diversion	250	250	1,550	1,800
TOTAL SOLID WASTE DISPOSAL SYSTEM (Utility	3,625	3,870	(400)	3,470

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Solid Waste Utility: Recycling and Waste Diversion

CAPITAL PROJECTS SUMMARY <i>(in Thousands of \$)</i>	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST
	2021	2021	2021	2022	2022	2022
Comprehensive Integrated Waste Management Strategy (CIWMS) - Materials Recovery Facility Education Centre						
- Transfer from Prior Year Authorization - External Debt						
Comprehensive Integrated Waste Management Strategy (CIWMS) - Review						
Source Separated Organics						
Collection Management System					250	250
Total Solid Waste Disposal System - Recycling and Waste Diversion					250	250
TOTAL SOLID WASTE DISPOSAL SYSTEM (Utility	1,485	1,265	2,750	3,550	1,350	4,900

Capital Forecast to Draft Budget (Including Options to Achieve Capital Target) Reconciliation – Solid Waste Utility: Recycling and Waste Diversion

CAPITAL PROJECTS SUMMARY <i>(in Thousands of \$)</i>	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	ADOPTED IN PRINCIPLE FORECAST	CHANGES	DRAFT FORECAST	DRAFT FORECAST	6 YEAR TOTAL
	2023	2023	2023	2024	2024	2024	2025	2020-2025
Comprehensive Integrated Waste Management Strategy (CWMS) - Materials Recovery Facility Education Centre								
- Transfer from Prior Year Authorization - External Debt								
Comprehensive Integrated Waste Management Strategy (CWMS) - Review	450		450					450
Source Separated Organics								1,800
Collection Management System								250
Total Solid Waste Disposal System - Recycling and Waste Diversion	450		450					2,500
TOTAL SOLID WASTE DISPOSAL SYSTEM (Utility)	1,950	1,200	3,150	700	1,150	1,850	1,400	17,520

Budget Referrals

Budget Referrals			2020	2021	2022	2023
Toilet Replacement Credit Program	That the Toilet Replacement Credit Program be expanded to include multi-family residences and revise other eligibility requirements for this program.	SPC Water and Waste, Riverbank Management and the Environment (March 7, 2019)	x	x	x	x
Infrastructure Projects Government Funding	Infrastructure projects for federal and provincial funding under the Investing in Canada Infrastructure Program. That additional operating impacts be referred to the 2020 budget process.	Council (September 26, 2019)	x	x	x	x
Planning, Property and Development - Riverbank Stabilization	Riverbank Stabilization - 404 Desaleberry Avenue (Elmwood-East Kildonan Ward) - \$400,000 in funding at 404 Desaleberry to stop further riverbank erosion be referred to the 2020 Capital Budget process.	SPC Water & Waste, Riverbank Management & the Environment (March 7, 2019)	x	x	x	x

Included in the budget	✓
Not budgeted	x

Budget Summary – Garbage Collection

Recommended target – 4 year budget – 2% annual budget growth rate

(in millions of \$)

GARBAGE COLLECTION	2019 Approved Budget	2020 Projection (from 2019)	2020 Draft Budget	2021 Draft Projection	2022 Draft Projection	2023 Draft Projection
Operating Expenditure Budget*	23.23	23.98	23.29	24.51	23.67	22.72
EPC Recommended Operating Expenditure Target			-	0.60	1.14	1.64
Options to Achieve Target			0.21	0.25	1.90	3.82
Variance (Shortfall from Target)			0.21	(0.35)	0.77	2.18

*Draft budget and projections include the options to achieve the EPC recommended targets.

Budget Summary

Recommended target – 4 year budget – 2% annual budget growth rate

(in millions of \$)

UTILITY	2019 Approved Budget	2020 Projection (from 2019)	2020 Draft Budget	2021 Draft Projection	2022 Draft Projection	2023 Draft Projection
Operating Expenditure Budget*	409.34	353.23	351.28	366.92	380.16	395.62
EPC Recommended Operating Expenditure Target			5.31	10.58	16.64	22.89
Operating Budget Options to Achieve Target			3.27	5.91	5.81	5.75
Variance (Shortfall from Target)			(2.04)	(4.67)	(10.83)	(17.14)
Cash Funded Capital to Achieve Operating Target			2.94	9.85	7.82	14.07
Variance (Shortfall from Target) **			0.90	5.18	(3.01)	(3.07)

*Draft budget and projections include the options to achieve the EPC recommended target.

** Targets to be achieved on a departmental level.

Thank You