

Request for Rate Increase in Collection Fees

There are some areas where the calculations we have performed based on the assumptions provided by IWMC result in adjustments to the projections provided. In our analysis below we focus on the impact of these adjustments on the projections where “no proposed increase” was assumed. **Please review our calculations and provide any feedback you might have on or before Thursday February 20, 2020.**

1. Household User Fee Revenue

IWMC projected Household User Fee revenue using a 1% increase in household counts across all regions however the percentage increase by individual regions were used in the projections for costs estimation. To be consistent the percentage increase by individual region was also applied in the estimation of projected revenue to analyse any impact.

IWMC calculated household user fee revenue with extended cottage revenue being projected using the cottage rate of \$95 rather than the extended cottage rate of \$120. An analysis of the calculation using the correct rate of \$120 showed an understatement of projected revenue of \$15,000 per year for extended cottage operations had been made. The result of both of these adjustments results in additional projected revenue between \$26,000 to \$156,000 over the four year period (Table 1).

Calculation Method:

1. The calculation of the 2019/20 year projected revenue with no rate increase used the estimated household count, cottage count, or extended cottage count from 2019 for 9 months and the estimated household cottage count for 2020 for 3 months. Each of these numbers was multiplied by the current rate (\$205, \$95, or \$120) and added together to achieve the projected revenue for the year. This same formula was used for subsequent years.
2. Household counts, cottage counts, or extended cottage counts were estimated for each region by using the estimated number of households for 2019 for the region and increasing it by the estimated percentage increase by individual region. This same formula was used for subsequent years.
3. The cottage counts and extended cottage counts were separated and each multiplied by its applicable current rate.

Table 1 shows the difference in revenue in the projections when the individual region projected increases in household units are applied and the extended cottage rate of \$120 is utilized. **Projected revenue is underestimated depending on the year by \$26,000 to \$156,000 when there is no rate increase.**

Table 1: Calculation of Household User Fee Revenue Based on Average 3 Yr. Increase in Unit Count by Region and Comparison to IWMC Projected Revenue

	3 yr. Avg. Increase	Est. Count 2019	Est. Count 2020	Est. Count 2021	Est. Count 2022	Est. Count 2023	Current Rate	No Rate Increase Projected Revenue 2020	No Rate Increase Projected Revenue 2021	No Rate Increase Projected Revenue 2022	No Rate Increase Projected Revenue 2023
Residences											
West Prince	0.8%	5,179	5,220	5,262	5,304	5,347	\$205	\$1,063,818	\$1,072,329	\$1,080,908	\$1,089,555
East Prince	0.8%	14,895	15,014	15,134	15,255	15,377	\$205	3,059,582	3,084,059	3,108,731	3,133,601
Central	1.6%	12,889	13,095	13,305	13,518	13,734	\$205	2,652,814	2,695,259	2,738,383	2,782,197
Capital	1.9%	24,328	24,790	25,261	25,741	26,230	\$205	5,010,929	5,106,137	5,203,154	5,302,014
Eastern Kings	0.7%	3,887	3,914	3,942	3,969	3,997	\$205	798,229	803,817	809,444	815,110
Southern Kings	0.1%	<u>4,981</u>	<u>4,986</u>	<u>4,991</u>	<u>4,996</u>	<u>5,001</u>	\$205	1,021,360	1,022,382	1,023,404	1,024,427
		66,159	67,020	67,895	68,784	69,686					
Cottages											
West Prince	0.8%	722	728	733	739	745	\$95	68,707	69,256	69,810	70,369
East Prince	0.8%	1,788	1,802	1,816	1,831	1,845	\$95	170,162	171,523	172,895	174,279
Central	1.6%	3,003	3,051	3,100	3,150	3,200	\$95	286,450	291,033	295,690	300,421
Capital	1.9%	167	171	174	177	181	\$95	15,984	16,288	16,597	16,913
Eastern Kings	0.7%	1,378	1,388	1,397	1,407	1,417	\$95	131,139	132,057	132,981	133,912
Southern Kings	0.1%	<u>774</u>	<u>775</u>	<u>775</u>	<u>776</u>	<u>777</u>	\$95	73,539	73,613	73,686	73,760
		7,832	7,914	7,997	8,080	8,165					
Extended Cottages											
West Prince	0.8%	39	40	40	40	40	\$120	4,715	4,753	4,791	4,830
East Prince	0.8%	149	151	152	153	154	\$120	17,964	18,107	18,252	18,398
Central	1.6%	342	347	353	358	364	\$120	41,174	41,832	42,502	43,182
Capital	1.9%	21	21	21	22	22	\$120	2,477	2,524	2,572	2,621
Eastern Kings	0.7%	-	-	-	-	-	\$120	-	-	-	-
Southern Kings	0.1%	<u>69</u>	<u>69</u>	<u>69</u>	<u>69</u>	<u>69</u>	\$120	<u>8,294</u>	<u>8,302</u>	<u>8,310</u>	<u>8,319</u>
Total		620	627	635	643	650		\$14,427,338	\$14,613,271	\$14,802,111	\$14,993,906
IWMC Total								<u>14,401,449</u>	<u>14,545,463</u>	<u>14,690,918</u>	<u>14,837,827</u>
Difference								<u>\$25,889</u>	<u>\$67,808</u>	<u>\$111,193</u>	<u>\$156,079</u>

2. Housing Adjustment

The calculations we made using the assumptions provided by IWMC showed differences in the total projected expenditures each year (Table 3) with the **expenditure being overestimated by IWMC by \$124,000 in 2019/20, \$136,000 in 2020/21, \$147,000 in 2021/22 and \$156,000 in 2022/23.**

Assumptions used:

1. For the 2019/20 year the projected housing adjustment with no rate increase used the estimated household count, cottage count, or extended cottage count from 2019 for 9 months and the estimated household cottage count for 2020 for 3 months. Each of these numbers was added together and then reduced by the count from the original contract. This number was then multiplied by the unit price for that year and by 50%. This same formula was used for subsequent years.
2. Household counts, cottage counts, or extended cottage counts were estimated for each region by using the estimated number of households for 2019 for the region and increasing it by the estimated percentage increase by individual region. This same formula was used for subsequent years.
3. Details on unit counts, averages and unit prices are shown in Table 2.

Table 2: Assumptions Used to Calculate Housing Adjustment

Area	Original Contract Count	Avg. Increase	Estimated Count 2020	Estimated Count 2021	Estimated Count 2022	Estimated Count 2023	2020 Unit Price	2021 Unit Price	2022 Unit Price	2023 Unit Price
Residences										
West Prince	5,002	0.8%	5,179	5,220	5,262	5,304	\$76.00	\$76.00	\$76.00	76.00
East Prince	14,435	0.8%	14,895	15,014	15,134	15,255	\$51.56	\$53.43	\$55.30	57.17
Central	11,629	1.6%	12,889	13,095	13,305	13,518	\$71.57	\$72.78	\$74.02	75.28
Capital	19,896	1.9%	24,328	24,790	25,261	25,741	\$46.23	\$47.01	\$47.81	48.62
Eastern Kings	3,800	0.7%	3,887	3,914	3,942	3,969	\$65.00	\$65.00	\$65.00	65.00
Southern Kings	4,750	0.1%	4,981	4,986	4,991	4,996	\$66.90	\$66.90	\$66.90	66.90
	59,512		66,159	67,020	67,895	68,784				
Cottages										
West Prince	731	0.8%	722	728	733	739	25.08	\$25.08	\$25.08	\$25.08
East Prince	1,873	0.8%	1,788	1,802	1,816	1,831	\$29.00	\$29.00	\$29.00	\$29.00
Central	3,051	1.6%	3,003	3,051	3,100	3,150	82.58	\$83.98	\$85.41	\$86.86
Capital	213	1.9%	167	171	174	177	82.58	\$83.98	\$85.41	\$86.86
Eastern Kings	1,020	0.7%	1,378	1,388	1,397	1,407	21.67	\$21.67	\$21.67	\$21.67
Southern Kings	782	0.1%	774	775	775	776	21.57	\$21.57	\$21.57	\$21.57
	7,670		7,832	7,914	7,997	8,080				
Extended Cottages										
West Prince	21	0.8%	39	40	40	40	45.08	\$45.08	\$45.08	\$45.08
East Prince	80	0.8%	149	151	152	153	29.95	\$29.95	\$29.95	\$29.95
Central	183	1.6%	342	347	353	358	99.08	\$100.76	102.48	104.22
Capital	11	1.9%	21	21	21	22	99.08	100.76	102.48	104.22
Eastern Kings	-	0.7%	-	-	-	-				
Southern Kings	37	0.1%	69	69	69	69	41.57	\$41.57	\$41.57	\$41.57
	332		620	627	635	643				
Special										
Capital	1,653		1,653	1,653	1,653	1,653	\$46.23	\$47.01	\$47.81	\$48.62

Table 3: Verification of IWMC Calculations for Compost and Waste Contract and Housing Adjustment

Area	2020 Projected Contract Cost	2021 Projected Contract Cost	2022 Projected Contract Cost	2023 Projected Contract Cost	2020 Projected Housing Adjustment	2021 Projected Housing Adjustment	2022 Projected Housing Adjustment	2023 Projected Housing Adjustment
Residences								
West Prince	\$380,152	\$380,152	\$380,152	\$380,152	\$7,120	\$8,697	\$10,287	\$11,890
East Prince	744,269	771,262	798,256	825,249	12,627	16,274	20,172	24,322
Central	832,288	846,359	860,779	875,431	46,934	55,262	63,989	73,123
Capital	919,792	935,311	951,228	967,344	105,117	117,807	131,125	145,069
Eastern Kings	247,000	247,000	247,000	247,000	3,049	3,934	4,826	5,725
Southern Kings	<u>317,775</u>	<u>317,775</u>	<u>317,775</u>	<u>317,775</u>	<u>7,769</u>	<u>7,935</u>	<u>8,102</u>	<u>8,269</u>
	\$3,441,275	\$3,497,859	\$3,555,189	\$3,612,951	\$182,614	\$209,910	\$238,501	\$268,398
Cottages								
West Prince	\$18,333	\$18,333	\$18,333	\$18,333	\$ (97)	\$ (25)	\$48	\$122
East Prince	54,317	54,317	54,317	4,317	(1,186)	(979)	(769)	(558)
Central	251,952	256,223	260,586	265,010	(1,475)	525	2,627	4,835
Capital	17,590	17,888	18,192	18,501	(1,848)	(1,745)	(1,635)	(1,519)
Eastern Kings	22,103	22,103	22,103	22,103	3,905	4,010	4,115	4,221
Southern Kings	<u>16,868</u>	<u>16,868</u>	<u>16,868</u>	<u>16,868</u>	<u>(85)</u>	<u>(77)</u>	<u>(69)</u>	<u>(60)</u>
	\$381,163	\$385,732	\$390,400	\$395,133	\$ (787)	\$1,710	\$4,318	\$7,041
Extended Cottages								
West Prince	\$947	\$1,768	\$0	\$ 1,768	\$412	\$419	\$427	\$434
East Prince	2,396	2,396	2,396	2,396	1,044	1,062	1,080	1,098
Central	18,132	18,439	18,754	19,072	7,932	8,343	8,771	9,216
Capital	1,090	1,108	1,127	1,146	478	505	535	565
Eastern Kings	-	-	-	-	-	-	-	-
Southern Kings	<u>1,538</u>	<u>1,538</u>	<u>1,538</u>	<u>1,538</u>	<u>667</u>	<u>669</u>	<u>670</u>	<u>672</u>
	\$24,102	\$25,249	\$23,816	\$25,921	\$10,533	\$10,999	\$11,483	\$11,984
Special								
Capital	<u>\$76,418</u>	<u>\$77,708</u>	<u>\$79,030</u>	<u>\$80,369</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Total	<u>\$3,922,958</u>	<u>3,986,548</u>	<u>\$4,048,434</u>	<u>\$4,114,373</u>	<u>\$192,360</u>	<u>\$222,619</u>	<u>\$254,302</u>	<u>\$287,423</u>
Calculation provided by IWMC								
West Prince	\$399,432	\$399,432	\$399,432	\$399,432	\$13,000	\$16,000	\$19,000	\$22,000
East Prince	754,740	816,728	843,721	870,715	13,000	19,000	25,000	31,000
Central	1,091,581	1,110,142	1,128,978	1,148,200	83,000	96,000	109,000	122,000
Capital	1,017,853	1,020,070	1,036,074	1,052,399	180,000	198,000	216,000	234,000
Eastern Kings	309,311	304,308	304,308	304,308	14,600	16,600	18,600	20,600
Southern Kings	<u>341,181</u>	<u>336,180</u>	<u>336,180</u>	<u>336,180</u>	<u>13,000</u>	<u>13,400</u>	<u>13,800</u>	<u>14,200</u>
IWMC Total	<u>\$3,914,099</u>	<u>\$3,986,859</u>	<u>\$4,048,693</u>	<u>\$4,111,233</u>	<u>\$316,600</u>	<u>\$359,000</u>	<u>\$401,400</u>	<u>\$443,800</u>
Difference	<u>\$8,860</u>	<u>\$ (311)</u>	<u>\$ (259)</u>	<u>\$3,139</u>	<u>\$ (124,240)</u>	<u>\$ (136,381)</u>	<u>\$ (147,098)</u>	<u>\$ (156,377)</u>

3. Fuel Adjustment

Using IWMC's assumptions of a starting price of 132.0 cents per litre and an annual increase of 3 cents, and the contract details shown in Table 4 the fuel adjustment was recalculated as shown in Table 5. **The recalculation reflects an overstatement of the fuel adjustment expenditure of approximately \$8,100 per year in IWMC's calculation.**

Table 4: Summary of Fuel Price Adjustment Inputs – Various Contracts

Contractor	Region	Base Fuel Price	Base Fuel Price + 5%	Base Fuel Price (-5%)	Deemed Effect of 1 cent change in price
Label Construction & Sanitation	East Prince	132.0	138.6	125.4	\$900
Label Construction & Sanitation	West Prince	123.6	129.8	117.4	\$600
Superior Sanitation	Capital	129.7	136.2	123.2	\$600
Superior Sanitation	Central	129.7	136.2	123.2	\$600
Superior Sanitation	Eastern Kings	115.0	120.8	109.3	\$700
Superior Sanitation	Southern Kings	121.8	127.9	115.7	\$500
Green Isle Environmental	All Regions	127.9	134.3	121.5	\$200
ADI International (PEI) Inc. (Diesel Adjustment)	Central Composting Facility	82.8	91.1	-	Based on litres consumed
ADI International (PEI) Inc. (Propane Adjustment)	Central Composting Facility	58.7	64.6	-	Based on litres consumed

Table 5: Recalculation of Fuel Adjustment based on Assumptions Provided

Contractor	Region	2019/20	2020/21	2021/22	2022/23
AMF Assumption 132.0 (2019)		135.0	138.0	141.0	144.0
Label Construction & Sanitation	East Prince	\$ -	\$ -	\$2,160	\$4,860
Label Construction & Sanitation	West Prince	3,120	4,920	6,720	8,520
Superior Sanitation	Capital	-	1,080	2,880	4,680
Superior Sanitation	Central	-	1,080	2,880	4,680
Superior Sanitation	Eastern Kings	9,940	12,040	14,140	16,240
Superior Sanitation	Southern Kings	3,550	5,050	6,550	8,050
Green Isle Environmental	All Regions	<u>140</u>	<u>740</u>	<u>1,340</u>	<u>1,940</u>
	Recalculated Total	\$16,750	\$24,910	\$36,670	\$48,970
IWMC Calculations					
Label Construction & Sanitation	East Prince	\$ -	\$ 540	\$2,160	\$4,860
Label Construction & Sanitation	West Prince	3,132	4,932	6,732	8,532
Superior Sanitation	Capital	-	1,080	2,880	4,680
Superior Sanitation	Central	-	1,080	2,880	4,680
Superior Sanitation	Eastern Kings	18,060	20,160	22,260	24,360
Superior Sanitation	Southern Kings	3,550	5,050	6,550	8,050
Green Isle Environmental	All Regions	<u>140</u>	<u>740</u>	<u>1,340</u>	<u>1,940</u>
	Total – IWMC Calculations	24,882	33,582	44,802	57,102
	Difference from IWMC Calculations	(\$8,132)	(\$8,132)	(\$8,672)	(\$8,132)

Request to Increase Disposal Fees

4. Residential Min-Max Disposal Fees

In the January 10, 2020 response to December 24, 2019 interrogatories the following detail was provided on the increased revenue associated with the proposed rate increase of the Residential Min-Max Disposal Fees based on the number of transactions in 2018.

Table 6: Projected Increase in Revenue Resulting from Increase in Residential Min-Max Disposal Fee

Residential Material Type	# of Transactions 2018	Cap @\$20	Cap @\$30	Increase \$
Waste	3,868	\$77,360	\$105,077	\$27,717
Yard Trim	2,434	\$48,680	\$68,375	\$19,695
Compost	<u>32</u>	<u>\$640</u>	<u>\$901</u>	<u>\$261</u>
TOTAL	<u>6,334</u>	<u>\$126,680</u>	<u>\$174,353</u>	<u>\$47,674</u>

In Table 6 the column Cap@\$30 is not a direct calculation of the number of transactions multiplied by \$30. The rates by which the transactions are multiplied by vary from \$27.17 to \$28.16 for an average of \$27.50. **Please provide any additional assumptions used.**

5. Out of Province (OOP) Contaminated Materials

Although it is reasonable to assume that material coming from out of province for disposal on PEI should be charged at a higher rate than that provided to the PEI customers for whom the corporation is intended to serve, no rationale was provided to support an increase in this rate. **Is there anything additional to provide?**

6. Out of Province (OOP) Contaminated Soil

The proposed rate for Out of Province (OOP) Contaminated Soil is \$15 or 18% higher than the commercial rate currently charged in PEI. When compared to Out of Province (OOP) Contaminated material received the difference in cost for out of province compared to in province is \$75 or 48% more than for PEI customers. **Is there any reason a similar logic would not be applied in setting out of province rates in other categories?**

Impact on Net Assets and Cash Flow

A summary of how the adjustments proposed in the previous sections impact the projections under the “No Proposed Rate Increase” scenario are shown in Table 7. While a net loss will still result in each year if the rate increases are not approved it appears there is sufficient net assets balance resulting from multiple previous years of surpluses to absorb these losses for the next four years and sufficient cash flow to support operations (see Table 8).

The comparison to Maritime Electric or residential rental property owners is not really relevant in terms of setting an annual profit level as they would be considered for profit entities with a goal of return for shareholders. A for profit entity’s goal is to generate profits each year for a reasonable rate of return for investors and as well to accumulate surpluses for future capital expenditures or unexpected changes in operations. A reasonable level of net assets for a Crown Corporation should be based on estimated unfinanced future capital expenditures and other risk management assessments such as future changes in insurance, staff benefits or future operating costs. A specific plan for capital needs was not provided and the risk of future changes in operating costs is low given that the majority of operating costs are under contracts which do not expire until at least 2024.

A comparison to Ontario Energy Board for establishing a debt-to-equity ration again may not be realistic as larger Ontario utilities would have significantly greater capital requirements for future capital replacements and would have need to accumulate larger surpluses or net assets to finance these expenditures.

Table 7: Summary of the Impact of Adjustments to Revenues and Expenditures Related to Household Collections

	Projected 2019/20	Projected 2020/21	Projected 2021/22	Projected 2022/23
REVENUE				
Household user fees – Understatement	\$26,000	\$68,000	\$111,000	\$156,000
EXPENDITURES				
Housing Adjustment - Overstatement	124,000	136,000	147,000	156,000
Fuel Adjustment - Overstatement	8,000	8,000	9,000	8,000
Impact on Net income (loss)	<u>\$158,000</u>	<u>\$212,100</u>	<u>\$267,000</u>	<u>\$320,000</u>
Net income (loss) – Per IWMC with no proposed rate increase	<u>(\$345,200)</u>	<u>(\$693,000)</u>	<u>(\$780,800)</u>	<u>(\$869,700)</u>
Adjusted Net income (loss)	<u>(\$187,200)</u>	<u>(\$481,000)</u>	<u>(\$513,800)</u>	<u>(\$549,700)</u>
Adjusted Net Assets balance	<u>\$2,087,426</u>	<u>\$1,606,426</u>	<u>\$1,092,626</u>	<u>\$542,926</u>

Projected Statements of Financial Position and Projected Statements of Cash Flows were not provided as part of the Rate Increase Application however we prepared the following simplified cash flow based on the projections for “No Proposed Increase” for analysis purposes. Based on this simplified cash flow sufficient cash balance would exist with no proposed rate increase to cover operations.

Table 8: Estimated Cash Flow Based on “No Proposed Increase” Projections

	Projected 2019/20	Projected 2020/21	Projected 2021/22	Projected 2022/23
Adjusted Net income (loss)	(\$187,200)	(\$480,900)	(\$513,800)	(\$549,700)
Adjusted for Cash Flow				
Add: Depreciation	2,000,000	2,200,000	2,200,000	2,200,000
Deduct: Principal Payments	<u>(2,202,744)</u>	<u>(1,881,816)</u>	<u>(1,989,216)</u>	<u>(2,098,516)</u>
Projected Annual Impact on Cash	(389,944)	(162,716)	(303,016)	(448,216)
Opening cash balance	<u>2,141,365</u>	<u>1,751,421</u>	<u>1,588,705</u>	<u>1,285,689</u>
Ending cash balance	<u>\$ 1,751,421</u>	<u>\$ 1,588,705</u>	<u>\$ 1,285,689</u>	<u>\$ 837,473</u>