



Water, Sewer and Stormwater Utilities Rate Study & System Development Charge Update

Council Workshop

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July 16, 2018



Discussion Outline

- ◆ **Background**
- ◆ **System Development Charges (SDCs)**
 - Overview
 - Methodology
 - Results
- ◆ **Next Steps**
- ◆ **Questions / discussion**



Background

- ◆ **Presented preliminary rate study findings to the Finance Committee and Council on May 7th**
 - No changes to storm
 - Minor adjustments to water & sewer
 - Water: eliminated the fire line rate
 - Sewer: adjustments to CIP and FTEs in 2019 and 2020

Utility	2019	2020	2021	2022	2023
Water	5.65%	5.65%	5.65%	5.65%	5.65%
Sewer	3.30%	3.30%	3.30%	3.30%	3.30%
Storm	3.00%	3.00%	3.00%	3.00%	3.00%

- ◆ **Presented SDC alternatives to the Finance Committee on June 18th**



SDC Overview

- ◆ **One time charge imposed on new development or expanded connection to system as a condition of service**
- ◆ **Represents a prorated share of the cost of providing system capacity**
 - Offset growth related costs that would not be necessary in absence of customer based growth
- ◆ **Charge calculated based on intent and structure of Revised Code of Washington (RCW 35.92.025)**
 - Based on cost of system
 - Proportionate share of capital investment



SDC Methodology

- ◆ **SDCs consist of two parts:**
 - Existing Cost Basis – is intended to recognize the current ratepayers' net investment in the original cost of the non-donated system
 - Future Cost Basis – is intended to include future facilities needed to serve growth, as well as to provide for regulatory system improvements



SDC Calculation

$$\text{SDC} = \frac{\text{Existing System Cost}}{\text{Existing Customer Base} + \text{Future Growth Served}} + \frac{\text{Future Project Costs: Growth Share}}{\text{Future Growth Served}}$$

◆ **Customer base:**

- Water: Meter Capacity Equivalents (MCEs) – meter based
- Sewer: Equivalent Residential Units (ERUs) – flow based

Water Utility



Water Existing SDCs

Meter	South Area			
		SDC		Industrial SDC
3/4"	\$	4,778	\$	28,270
1"		7,963		45,555
1.5"		15,925		88,632
2"		25,480		140,568
3"		50,960		281,092
4"		79,625		436,781
6"		159,250		868,727
8"		254,800		1,386,905

North Area			
	SDC		Industrial SDC
\$	7,310	\$	44,723
	12,183		72,313
	24,365		141,151
	38,984		223,999
	77,968		446,958
	121,825		695,386
	243,650		1,384,939
	389,840		2,212,246

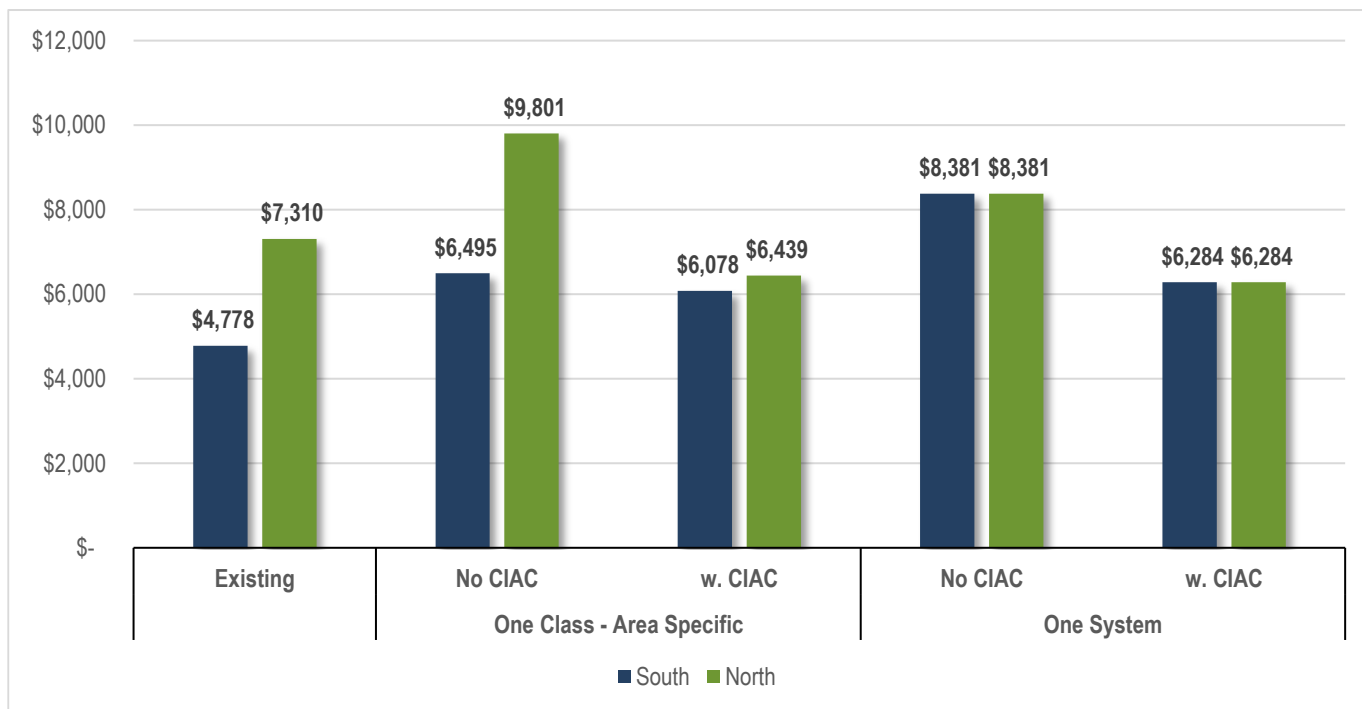


Water SDC Considerations

- ◆ **Maintain 2 class (Industrial & All Other) area specific SDCs – option eliminated by Finance Committee**
- ◆ **Condense SDCs into 1 charge – maintain area specific differential**
 - Future large industrial connections to be assessed through an independent study
- ◆ **Condense SDCs into “one system” charge – eliminate area specific differential**
- ◆ **Impact of assumed future developer donations (CIAC):**
 - Include an assumption in the charge:
 - Reduces overall charge for all customers (or within area)
 - Benefits customers that did not make the donation
 - Until funds are secured, the level of donation and timing can change, puts more risk on the City
 - Do not include any assumptions in charge:
 - Direct credit to customers that provide contributions
 - Less risk for the City
 - Greater overall SDCs



Water Options Summary

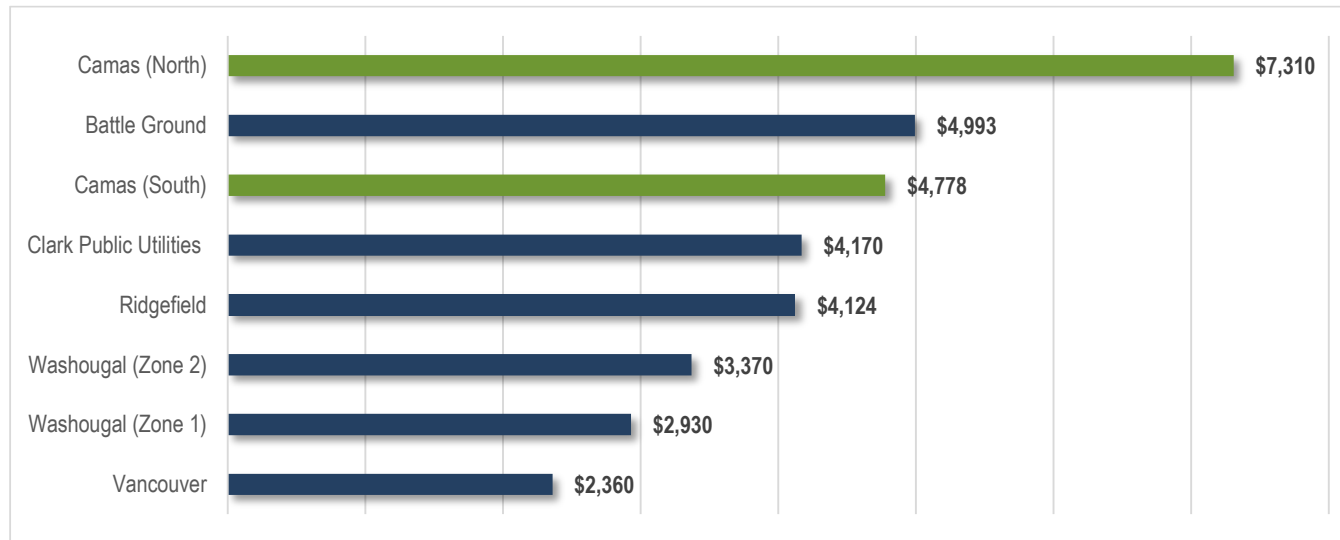


◆ **Notes:**

- Rate shown is for a ¾" meter, SDC increase with meter size
- Existing SDCs vary between industrial and non industrial classes
- One class or one system SDCs eliminate class based SDCs



Water Survey



Note: SDCs are based on a $\frac{3}{4}$ " meter.

Sewer Utility



Sewer Existing SDCs

Class	South Area	North Area
Residential	\$ 2,493	\$ 4,420
Commercial I		
5/8"	\$ 2,493	\$ 4,420
3/4"	3,740	6,630
1"	6,234	11,050
1.5"	12,467	22,101
2"	19,948	35,361
3"	39,896	70,722
4"	62,337	110,503
6"	124,674	221,006
8"	199,478	353,609
Commercial II		
Flow (gallons)	\$ 12.61	\$ 22.84
BOD (lbs/day)	2,386	3,948
TSS (lbs/day)	904	1,495



Sewer SDC Considerations

- ◆ **Condense SDC into one charge – Finance Committee in agreement**
 - Future large industrial connections would be assessed through an independent study
- ◆ **Eliminate meter based charges and assess SDCs on an ERU (flow) basis – Finance Committee in Agreement**
 - Meter capacity is not representative of sewer flow
- ◆ **Considerations**
 - Condense SDCs into “one system” charge – eliminate area specific differential
 - Impact of assumed future developer donations (CIAC):
 - Include an assumption in the charge:
 - Reduces overall charge for all customers (or within area)
 - Benefits customers that did not make the donation
 - Until funds are secured, the level of donation and timing can change, puts more risk on the City
 - Do not include any assumptions in charge:
 - Direct credit to customers that provide contributions
 - Less risk for the City
 - Greater overall SDCs



Sewer Options Summary

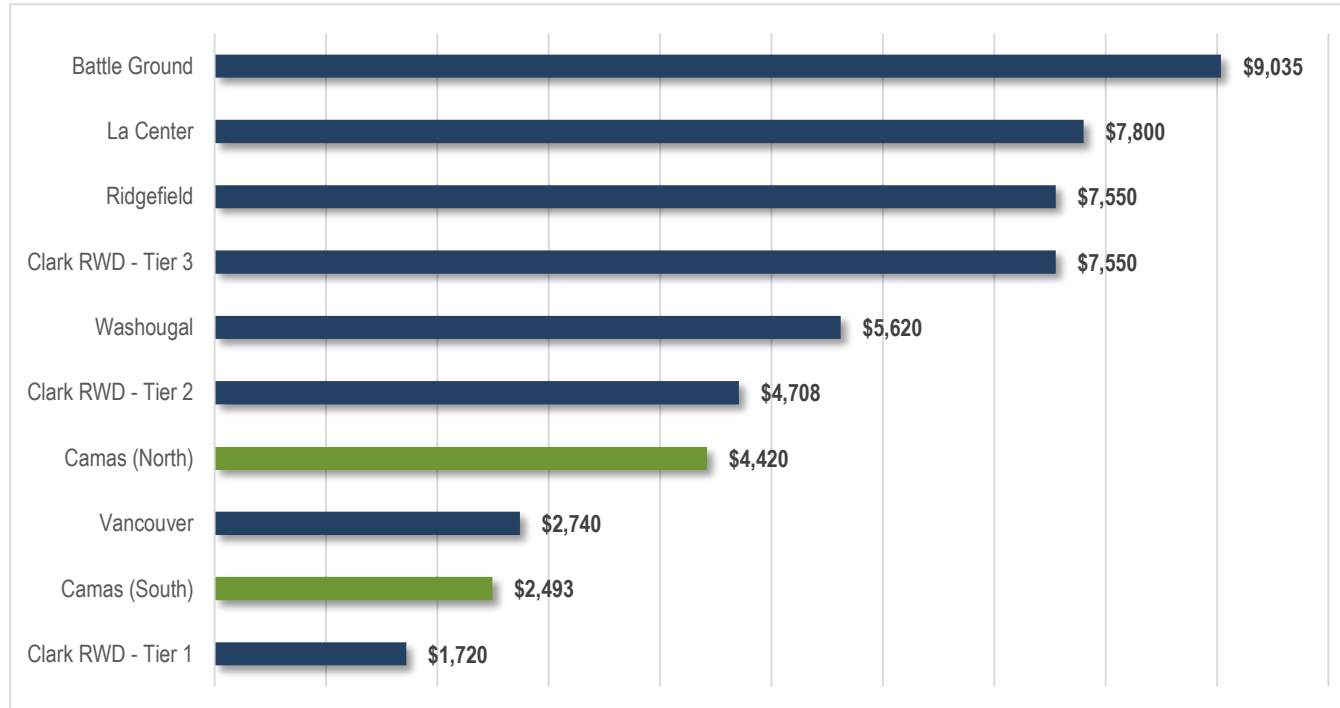


◆ **Notes:**

- Rate shown is per ERU
- Existing SDCs vary between Residential, Commercial I and II classes
- One class or one system SDCs eliminate class based SDCs



Sewer Survey





Discussion & Recommendations

- ◆ **Policy questions:**

- Area specific or “one system” charges?
- Developer contribution deduction?

- ◆ **Recommendations:**

- Condense SDCs into 1 charge for water and sewer
 - Eliminates class based charges (Industrial & All Other)
- Condense SDCs into “one system” charge
 - Eliminates area specific charges
- Do not include contributions (no CIAC) in the future cost basis



Next Steps

- ◆ **Incorporate feedback**
- ◆ **Present final Rates and SDCs to Council and/or public**
- ◆ **Rates and SDCs go into effect January 1st, 2019**



Questions/Discussion

Appendix



Water Cost Basis

Existing Cost Basis	Common Area	South Area	North Area	One System / Total
Plant in Service	\$ 61,723,356			\$ 61,723,356
plus: CWIP	2,438,428			2,438,428
less: M&S & Comp. Plans	(7,649,300)			(7,649,300)
less: CIAC	(14,572,325)			(14,572,325)
plus: Interest on Net Assets	14,985,800			14,985,800
less: Net Debt Principal Outstanding	(7,638,863)			(7,638,863)
Net Existing Cost Basis	\$ 49,287,096	\$ -	\$ -	\$ 49,287,096

Future Cost Basis	Common Area	South Area	North Area	One System / Total
Total Allocable CIP	\$ 51,162,133	\$ 59,527,750	\$ 28,964,250	\$ 139,654,133
less: Comp. Plans & M&S	(550,000)	(1,300,000)	-	(1,850,000)
less: R&R (Including Upgrade Share)	(9,154,184)	(53,771,938)	-	(62,926,122)
less: CIAC (Capacity Share Only)	-	-	-	-
Net Future Cost Basis	\$ 41,457,949	\$ 4,455,812	\$ 28,964,250	\$ 74,878,011

Customer Base	Common Area	South Area	North Area	One System / Total
Existing (MCEs)	9,686	9,641	45	9,686
Future (MCEs)	12,214	5,244	6,970	12,214
Total (MCEs)	21,900	14,885	7,015	21,900



Water With Existing Structure

Meter	Updated South Area		Existing South Area		\$ Difference	
	SDC	Industrial SDC	SDC	Industrial SDC	SDC	Industrial SDC
3/4"	\$ 4,870	\$ 68,228	\$ 4,778	\$ 28,270	\$ 92	\$ 39,958
1"	8,133	113,941	7,963	45,555	170	68,386
1.5"	16,218	227,200	15,925	88,632	293	138,568
2"	25,959	363,656	25,480	140,568	479	223,088
3"	51,966	727,995	50,960	281,092	1,006	446,903
4"	81,187	1,137,364	79,625	436,781	1,562	700,583
6"	162,326	2,274,047	159,250	868,727	3,076	1,405,320
8"	259,731	3,638,611	254,800	1,386,905	4,931	2,251,706

Meter	Updated North Area		Existing North Area		\$ Difference	
	SDC	Industrial SDC	SDC	Industrial SDC	SDC	Industrial SDC
3/4"	\$ 7,434	\$ 101,493	\$ 7,310	\$ 44,723	\$ 124	\$ 56,770
1"	12,414	169,494	12,183	72,313	231	97,181
1.5"	24,755	337,973	24,365	141,151	390	196,822
2"	39,622	540,960	38,984	223,999	638	316,961
3"	79,319	1,082,935	77,968	446,958	1,351	635,977
4"	123,921	1,691,896	121,825	695,386	2,096	996,510
6"	247,768	3,382,777	243,650	1,384,939	4,118	1,997,838
8"	396,444	5,412,647	389,840	2,212,246	6,604	3,200,401



Water Existing Structure – w. Est. CIAC

Meter	Updated South Area		Existing South Area		\$ Difference	
	SDC	Industrial SDC	SDC	Industrial SDC	SDC	Industrial SDC
3/4"	\$ 4,565	\$ 63,890	\$ 4,778	\$ 28,270	\$ (213)	\$ 35,620
1"	7,624	106,697	7,963	45,555	(339)	61,142
1.5"	15,202	212,754	15,925	88,632	(723)	124,122
2"	24,332	340,535	25,480	140,568	(1,148)	199,967
3"	48,710	681,708	50,960	281,092	(2,250)	400,616
4"	76,101	1,065,050	79,625	436,781	(3,524)	628,269
6"	152,157	2,129,461	159,250	868,727	(7,093)	1,260,734
8"	243,461	3,407,265	254,800	1,386,905	(11,339)	2,020,360

Meter	Updated North Area		Existing North Area		\$ Difference	
	SDC	Industrial SDC	SDC	Industrial SDC	SDC	Industrial SDC
3/4"	\$ 4,864	\$ 67,337	\$ 7,310	\$ 44,723	\$ (2,446)	\$ 22,614
1"	8,123	112,453	12,183	72,313	(4,060)	40,140
1.5"	16,197	224,233	24,365	141,151	(8,168)	83,082
2"	25,925	358,907	38,984	223,999	(13,059)	134,908
3"	51,899	718,488	77,968	446,958	(26,069)	271,530
4"	81,083	1,122,511	121,825	695,386	(40,742)	427,125
6"	162,117	2,244,349	243,650	1,384,939	(81,533)	859,410
8"	259,398	3,591,093	389,840	2,212,246	(130,442)	1,378,847



Water One Charge – w. Area Differential

Meter	South Area		
	Updated	Existing	\$ Difference
3/4"	\$ 6,495	\$ 4,778	\$ 1,717
1"	10,846	7,963	2,883
1.5"	21,627	15,925	5,702
2"	34,616	25,480	9,136
3"	69,297	50,960	18,337
4"	108,265	79,625	28,640
6"	216,464	159,250	57,214
8"	346,356	254,800	91,556

North Area		
Updated	Existing	\$ Difference
\$ 9,801	\$ 7,310	\$ 2,491
16,367	12,183	4,184
32,636	24,365	8,271
52,237	38,984	13,253
104,572	77,968	26,604
163,375	121,825	41,550
326,653	243,650	83,003
522,664	389,840	132,824

WITH ESTIMATED CIAC

Meter	South Area		
	Updated	Existing	\$ Difference
3/4"	\$ 6,078	\$ 4,778	\$ 1,300
1"	10,150	7,963	2,187
1.5"	20,239	15,925	4,314
2"	32,395	25,480	6,915
3"	64,850	50,960	13,890
4"	101,317	79,625	21,692
6"	202,572	159,250	43,322
8"	324,128	254,800	69,328

North Area		
Updated	Existing	\$ Difference
\$ 6,439	\$ 7,310	\$ (871)
10,753	12,183	(1,430)
21,442	24,365	(2,923)
34,321	38,984	(4,663)
68,706	77,968	(9,262)
107,341	121,825	(14,484)
214,618	243,650	(29,032)
343,401	389,840	(46,439)

Note: future large industrial connections will be assessed through an independent study.



Water One System

Meter	Updated	South		North	
		Existing	\$ Difference	Existing	\$ Difference
3/4"	\$ 8,381	\$ 4,778	\$ 3,603	\$ 7,310	\$ 1,071
1"	13,996	7,963	6,033	12,183	1,813
1.5"	27,909	15,925	11,984	24,365	3,544
2"	44,671	25,480	19,191	38,984	5,687
3"	89,427	50,960	38,467	77,968	11,459
4"	139,713	79,625	60,088	121,825	17,888
6"	279,343	159,250	120,093	243,650	35,693
8"	446,966	254,800	192,166	389,840	57,126

WITH ESTIMATED CIAC

Meter	Updated	South		North	
		Existing	\$ Difference	Existing	\$ Difference
3/4"	\$ 6,284	\$ 4,778	\$ 1,506	\$ 7,310	\$ (1,026)
1"	10,494	7,963	2,531	12,183	(1,689)
1.5"	20,926	15,925	5,001	24,365	(3,439)
2"	33,494	25,480	8,014	38,984	(5,490)
3"	67,050	50,960	16,090	77,968	(10,918)
4"	104,754	79,625	25,129	121,825	(17,071)
6"	209,446	159,250	50,196	243,650	(34,204)
8"	335,126	254,800	80,326	389,840	(54,714)

Note: future large industrial connections will be assessed through an independent study.



Water Options Summary

SOUTH AREA

Meter	Existing		Updated - Existing		Updated - Existing CIAC		One Charge		One System	
	SDC	Ind. SDC	SDC	Ind. SDC	SDC	Ind. SDC	SDC	w. CIAC	SDC	w. CIAC
3/4"	\$ 4,778	\$ 28,270	\$ 4,870	\$ 68,228	\$ 4,565	\$ 63,890	\$ 6,495	\$ 6,078	\$ 8,381	\$ 6,284
1"	7,963	45,555	8,133	113,941	7,624	106,697	10,846	10,150	13,996	10,494
1.5"	15,925	88,632	16,218	227,200	15,202	212,754	21,627	20,239	27,909	20,926
2"	25,480	140,568	25,959	363,656	24,332	340,535	34,616	32,395	44,671	33,494
3"	50,960	281,092	51,966	727,995	48,710	681,708	69,297	64,850	89,427	67,050
4"	79,625	436,781	81,187	1,137,364	76,101	1,065,050	108,265	101,317	139,713	104,754
6"	159,250	868,727	162,326	2,274,047	152,157	2,129,461	216,464	202,572	279,343	209,446
8"	254,800	1,386,905	259,731	3,638,611	243,461	3,407,265	346,356	324,128	446,966	335,126

NORTH AREA

Meter	Existing		Updated - Existing		Updated - Existing CIAC		One Charge		One System	
	SDC	Ind. SDC	SDC	Ind. SDC	SDC	Ind. SDC	SDC	w. CIAC	SDC	w. CIAC
3/4"	\$ 7,310	\$ 44,723	\$ 7,434	\$ 101,493	\$ 4,864	\$ 67,337	\$ 9,801	\$ 6,439	\$ 8,381	\$ 6,284
1"	12,183	72,313	12,414	169,494	8,123	112,453	16,367	10,753	13,996	10,494
1.5"	24,365	141,151	24,755	337,973	16,197	224,233	32,636	21,442	27,909	20,926
2"	38,984	223,999	39,622	540,960	25,925	358,907	52,237	34,321	44,671	33,494
3"	77,968	446,958	79,319	1,082,935	51,899	718,488	104,572	68,706	89,427	67,050
4"	121,825	695,386	123,921	1,691,896	81,083	1,122,511	163,375	107,341	139,713	104,754
6"	243,650	1,384,939	247,768	3,382,777	162,117	2,244,349	326,653	214,618	279,343	209,446
8"	389,840	2,212,246	396,444	5,412,647	259,398	3,591,093	522,664	343,401	446,966	335,126



Sewer Cost Basis

Existing Cost Basis	Common Area	South Area	North Area	One System / Total
Plant in Service	\$ 76,531,892			\$ 76,531,892
plus: CWIP	4,808,949			4,808,949
less: CIAC	(15,669,155)			(15,669,155)
plus: Interest on Net Assets	23,398,807			23,398,807
less: Net Debt Principal Outstanding	(18,033,185)			(18,033,185)
Net Existing Cost Basis	\$ 71,037,308	\$ -	\$ -	\$ 71,037,308

Future Cost Basis	Common Area	South Area	North Area	One System / Total
Total Allocable CIP	\$ 30,688,000	\$ 29,317,500	\$ 10,034,500	\$ 70,040,000
less: Comp. Plans & M&S	(450,000)	-	-	(450,000)
less: R&R (Including Upgrade Share)	(12,982,500)	(20,310,750)	(551,750)	(33,845,000)
less: CIAC (Capacity Share Only)	-	-	-	-
Net Future Cost Basis	\$ 17,255,500	\$ 9,006,750	\$ 9,482,750	\$ 35,745,000

Customer Base	Common Area	South Area	North Area	One System / Total
Existing (MCEs)	15,193	15,148	45	15,193
Future (MCEs)	19,673	14,647	5,026	19,673
Total (MCEs)	34,866	29,795	5,071	34,866



Sewer – Per ERU w. Area Differential

Description	Updated	South Area Existing	\$ Difference
Residential Equivalent	\$ 3,529	\$ 2,493	\$ 1,036

Updated	North Area Existing	\$ Difference
\$ 4,801	\$ 4,420	\$ 381

WITH ESTIMATED CIAC

Description	Updated	South Area Existing	\$ Difference
Residential Equivalent	\$ 3,529	\$ 2,493	\$ 1,036

Updated	North Area Existing	\$ Difference
\$ 4,674	\$ 4,420	\$ 254



Sewer – Per ERU One System Charge

Description	South Area			
	Updated	Existing	\$ Difference	
Residential Equivalent	\$ 3,854	\$ 2,493	\$ 1,361	

North Area			
Updated	Existing	\$ Difference	
\$ 3,854	\$ 4,420	\$ (566)	

WITH ESTIMATED CIAC

Description	South Area			
	Updated	Existing	\$ Difference	
Residential Equivalent	\$ 3,822	\$ 2,493	\$ 1,328	

North Area			
Updated	Existing	\$ Difference	
\$ 3,822	\$ 4,420	\$ (598)	