



City of Venice, FL

Plant Capacity Charge Study

April 23, 2019

Plant Capacity Charges

- One-time charge paid by new connections to the City's water and sewer system
- Method of recovery for the cost of constructing capacity
- Revenue from charges pays for growth-related capital projects

Background

- Stantec was hired by the City in 2018 to update the Plant Capacity Charge study
 - Water fees last updated in 1990
 - Sewer fees last updated in 1983

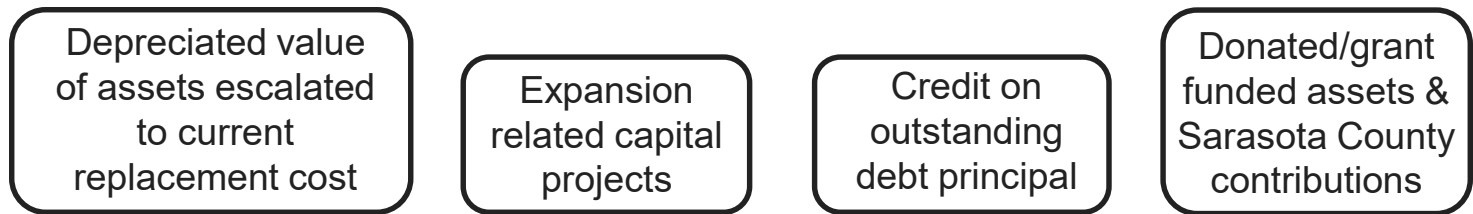
Methodologies of Calculation

Methodology	Description	Appropriate for
Buy-in method	Fees are based on cost of constructing existing utility system	System with ample existing capacity to sell
Incremental cost method	Fees are based on planned capital improvements	System with no/very limited existing capacity to sell
Combined method	Fees are based on cost of existing system and planned capital improvements	System with existing capacity to sell and with significant growth related capital projects

Stantec recommends using the Combined method for the City.

Plant Capacity Charge Variables

Calculation



Plant Capacity Charge =

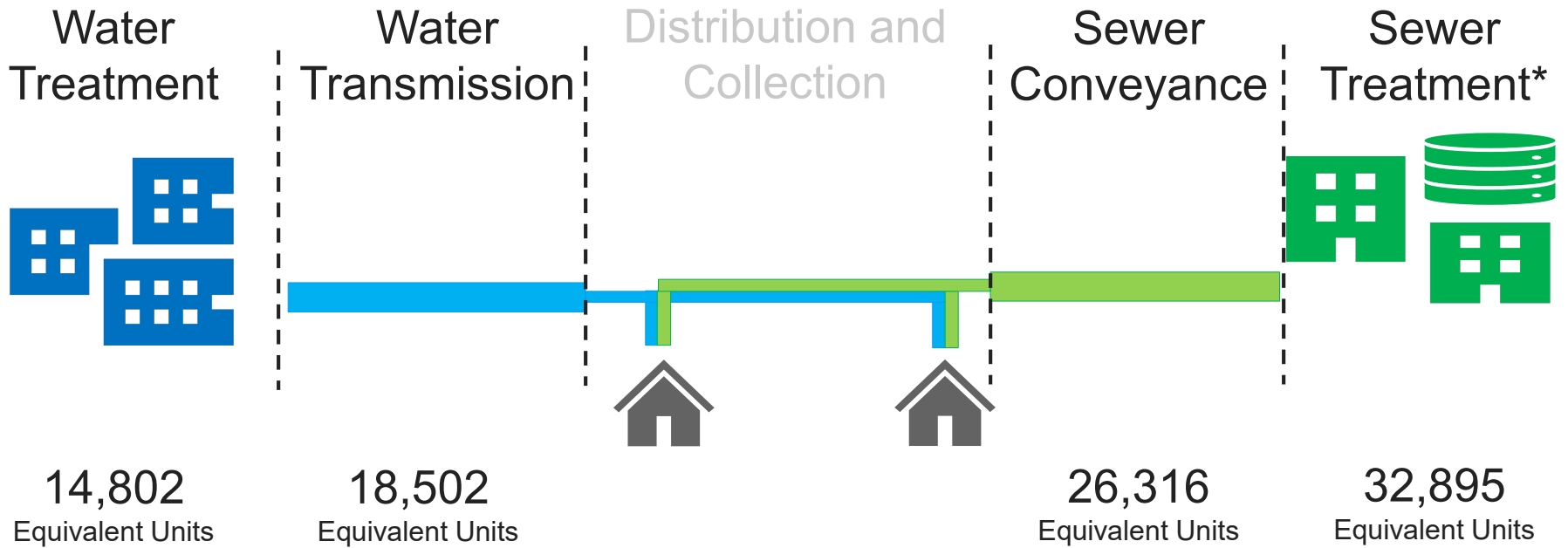
$$\frac{\text{Plant in Service} + \text{CIP} - \text{Debt}^1 - \text{Contributions}}{\text{System Capacity}}$$

(Measured in Equivalent Residential Units)

¹Debt service is paid for through user rates, so the credit ensures no double cost recovery.

System Capacities

Calculation



**Represents only the City's portion of sewer capacity*

Water PCC Calculation

Calculation

Functional Component	Treatment	Transmission	Total
<i>System Value Calculation:</i>			
Gross Plant in Service Value	\$ 29,336,372	\$ 30,751,749	\$ 60,088,122
Capital Improvement Cost	\$ 11,207,615	\$ 21,246,175	\$ 32,453,790
Gross System Value	\$ 40,543,988	\$ 51,997,924	\$ 92,541,912
<i>Credits:</i>			
Principal Credit	\$ 7,882,026	\$ 10,108,750	\$ 17,990,776
Specific Asset Contributions / Exclusions	\$ 8,773	\$ 12,199,302	\$ 12,208,075
Net System Value	\$ 32,653,188	\$ 29,689,872	\$ 62,343,060
Equivalent Residential Units (ERUs)	14,802	18,502	
<i>Fee Calculation:</i>			
Calculated Cost per ERU	\$ 2,206	\$ 1,605	\$ 3,811
Escalation Factor to Effective Year			3.00%
Calculated Fee per ERU¹	\$ 2,272	\$ 1,653	\$ 3,925
Current Fee			1,210

¹Fees include a 3% escalation to account for FY 2019 inflation

Sewer PCC Calculation

Calculation

Functional Component	Treatment / Disposal ¹	Conveyance	Total
<i>System Value Calculation:</i>			
Gross Plant in Service Value	\$ 57,000,090	\$ 26,761,048	\$ 83,761,138
Capital Improvement Cost	\$ 140,805	\$ 8,741,508	\$ 8,882,313
Gross System Value	\$ 57,140,895	\$ 35,502,556	\$ 92,643,451
<i>Credits:</i>			
Principal Credit	\$ 12,079,895	\$ 7,505,433	\$ 19,585,328
Specific Asset Contributions / Exclusions ²	\$ 12,778,067	\$ 9,836,765	\$ 22,614,832
Net System Value	\$ 32,282,933	\$ 18,160,358	\$ 50,443,291
Equivalent Residential Units (ERUs) ³	26,316	32,895	
<i>Fee Calculation:</i>			
Calculated Cost per ERU	\$ 1,227	\$ 552	\$ 1,779
Escalation Factor to Effective Year			3.00%
Calculated Fee per ERU⁴	\$ 1,264	\$ 569	\$ 1,832
Current Fee			1,450

¹Costs of reclaimed water system included in sewer treatment costs

²Contributions include portion of treatment plant paid for by Sarasota County

³ERUs represent the City's portion of capacity only

⁴Fees include a 3% escalation to account for FY 2019 inflation

Water PCC Summary

Calculation

Meter Size	AWWA Meter Equivalency ¹	Current PCC	Calculated PCC	\$ Change
3/4"	1.0	\$ 1,210	\$ 3,925	\$ 2,715
1"	1.67	3,025	6,542	3,517
1 1/2"	3.33	6,050	13,084	7,034
2"	5.33	9,680	20,935	11,255
3"	11.67	19,360	45,796	26,436
4"	20.00	30,250	78,507	48,257
6"	45.00	60,500	176,640	116,140
8"	53.33	96,800	209,351	112,551
10"	140.00	139,150	549,546	410,396
	Equivalency ²	Current PCC	Calculated PCC	\$ Change
Each Manufactured Home Dwelling Unit	0.774	\$ 937	\$ 3,038	\$ 2,101
Each Multifamily Dwelling Unit	0.831	1,075	3,262	2,187
Each Hotel and Motel Unit		575	Based on Meter Size ³	

¹Current PCC scaled based on 5/8" meter. Proposed PCC scaled based on 3/4" meter.

²Equivalent factors were determined through rate structure and usage analysis finalized in 2013.

7 ³No historical data of unit costs for this class. Proposal to charge fees based on meter size.

Sewer PCC Summary

Calculation

Meter Size	AWWA Meter Equivalency ¹	Current PCC	Calculated PCC	\$ Change
3/4"	1.0	\$ 1,450	\$ 1,832	\$ 382
1"	1.67	3,625	3,054	(571)
1 1/2"	3.33	7,250	6,108	(1,142)
2"	5.33	11,600	9,773	(1,827)
3"	11.67	23,200	21,378	(1,822)
4"	20.00	36,250	36,647	397
6"	45.00	72,500	82,457	9,957
8"	53.33	116,000	97,726	(18,274)
10"	140.00	166,750	256,532	89,782
	Equivalency ²	Current PCC	Calculated PCC	\$ Change
Each Manufactured Home Dwelling Unit	0.774	\$ 1,205	\$ 1,418	\$ 213
Each Multifamily Dwelling Unit	0.831	1,290	1,523	233
Each Hotel and Motel Unit		886	Based on Meter Size ³	

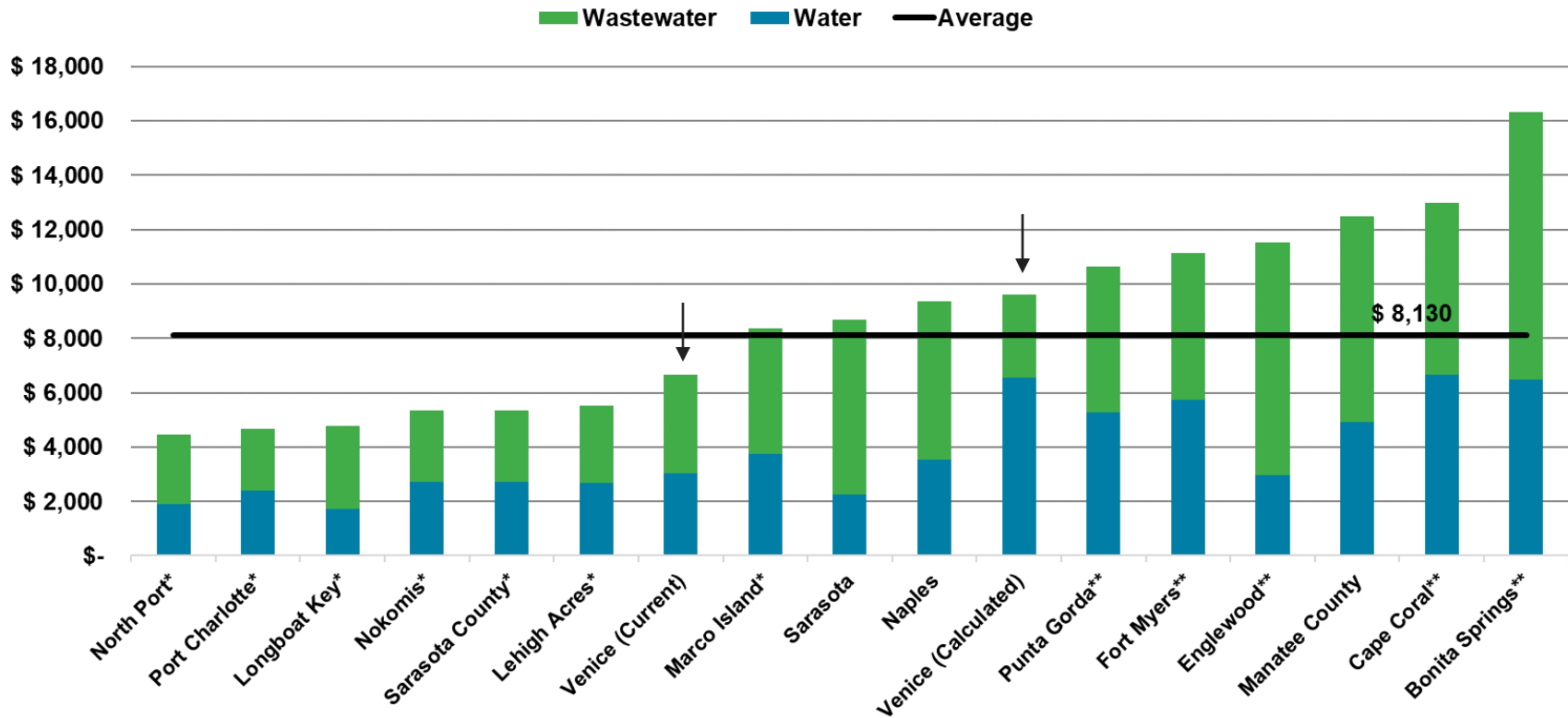
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Plant Capacity Charge Survey – 1" Meter (Current Residential Development Practice)

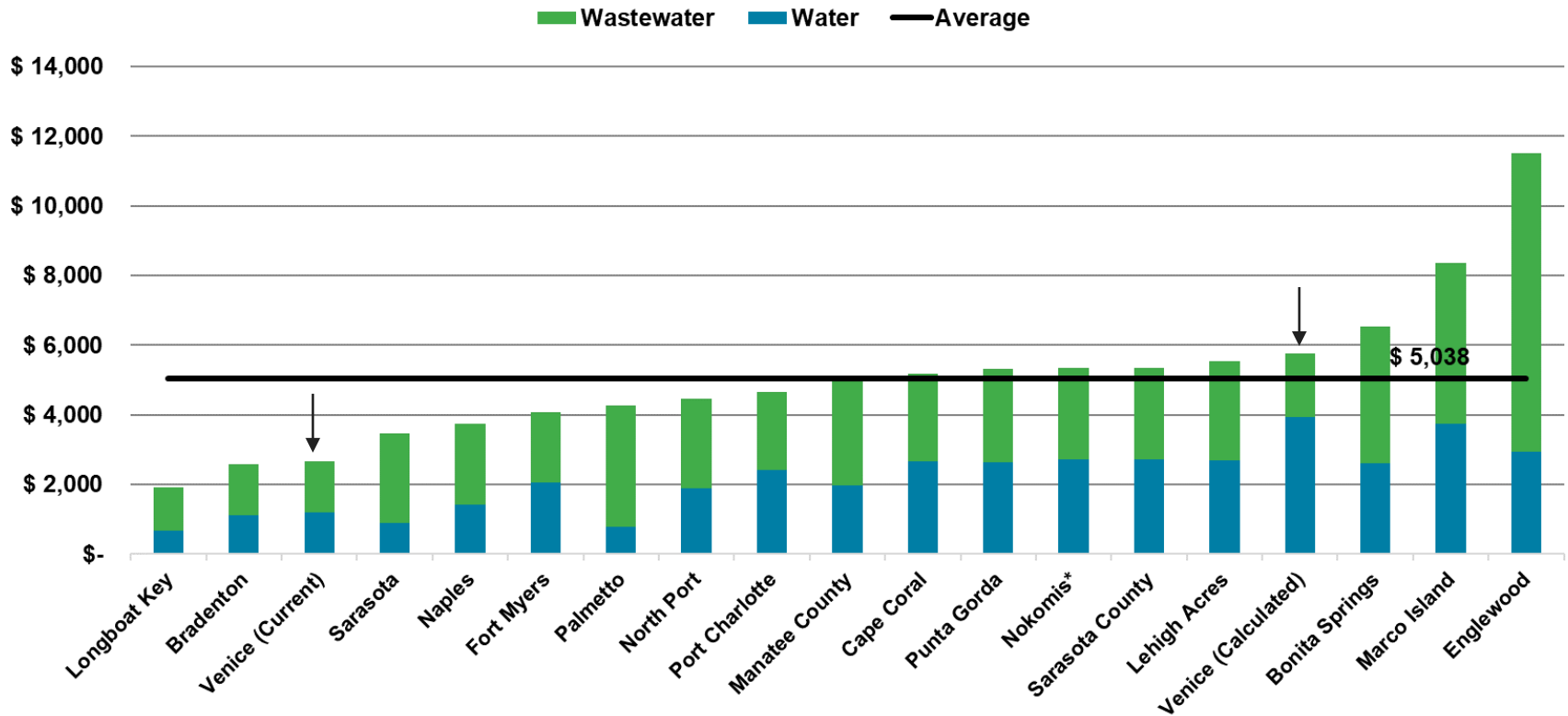
Local Survey



*Fees are charged per Equivalent Residential Connection (ERC); assuming 1 ERC

**Fees represent non-residential fee for a 1" meter

Residential Plant Capacity Charge Survey – 3/4" Meter



Next Steps

- Provide notice of fee change and public hearings in the newspaper
- May: Hold 2 public hearings
- June, July, August: 90 day notice should be given before new charges will go into effect
- October 1: New charges in effect

Additional Questions and Discussion