



**A CONTINUED MEETING OF  
THE CITY COUNCIL  
January 17, 2019, 12:00 Noon  
LIBRARY COMMUNITY ROOM**

**AGENDA**

**A. CALL TO ORDER**

**B. WORKSHOP REGARDING WATER RATE STUDY – Action Item**

- 1. Presentation by: Angie Sanchez Virnoche, Vice President/Principal FCS Group**

**C. ADJOURNMENT**

*NOTE: The City will make reasonable accommodations for anyone attending this meeting who require special assistance for hearing, physical or other impairments. Please contact the City Clerk at (208) 769-2231 at least 48 hours in advance of the meeting date and time.*

**CITY COUNCIL  
STAFF REPORT**

**DATE:**            **January 17, 2019**  
**FROM:**            Terry Pickel, Water Superintendent  
**SUBJECT:**       **2018 Water Rate Study Recommendations**

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**DECISION POINT:** Staff is requesting that City Council set a public hearing for approval of recommendations for a rate and fee increase per the completion of the 2018 Water Rate Study.

**HISTORY:** As it is a recommended industry practice to conduct water rate analyses on a routine basis, staff typically plans to have a fairly comprehensive review completed every five years. The previous study was completed in coordination with the 2012 Comprehensive Water Plan Update. The results of the 2012 study recommended user rate increases to adequately fund operations and maintenance along with capitalization fee increases to fund future projects. Those increases were phased in over a 5 year period to lessen the impact on the consumers and developers. The last incremental increase took place January 1<sup>st</sup>, 2018. This brought rates and fees up to a level that was recommended to have been in place as of FY 2013. The phased approach left the recommended funding levels slightly short of anticipated project funding goals.


**FINANCIAL ANALYSIS:** FCS Group analyzed the asset value of the public water system and determined a net replacement value of \$191,902,015. Staff reviewed current total system capacity in terms of Economic Development Units, (EDU's), which equates to approximately 1300 gallons per day. The consultant determined that existing available capacity is 31,056 EDU's, with 23,335 having already been allocated. Dividing the plant value by the total EDU's determines the available capitalization fee that can legally be assessed. Through efficiencies in operation and spreading allocation of anticipated improvements costs over multiple years, staff is proposing a very modest increase to both rates and capitalization fees instead.

**PERFORMANCE ANALYSIS:** FCS Group utilized the Idaho code approved methodology for calculation of user rates and especially capitalization fees. This methodology only recognizes the replacement cost of existing asset values of the public water system in calculation of applicable capitalization fees. This approach also requires apportioning anticipated infrastructure improvement costs among all who will benefit rather than solely on development. Thus, user rates are also factored into system improvements. Anticipated costs for planned improvements, previously relied upon to determine capitalization fees, are now only used as bench mark for proposed fees. Staff will have visited with NIBCA on January 15<sup>th</sup>.

**DECISION POINT/RECOMMENDATION:** Staff requests that City Council set a public hearing for February 5<sup>th</sup>, 2019, for approval of a user rate and cap fee increase as recommended by FCS Group.




# City Council Workshop



## Water Rate and Capitalization Fee Study

January 17, 2019

Presented by:  
Angie Sanchez Virnoche, Vice President and Principal  
Sergey Tarasov, Project Manager

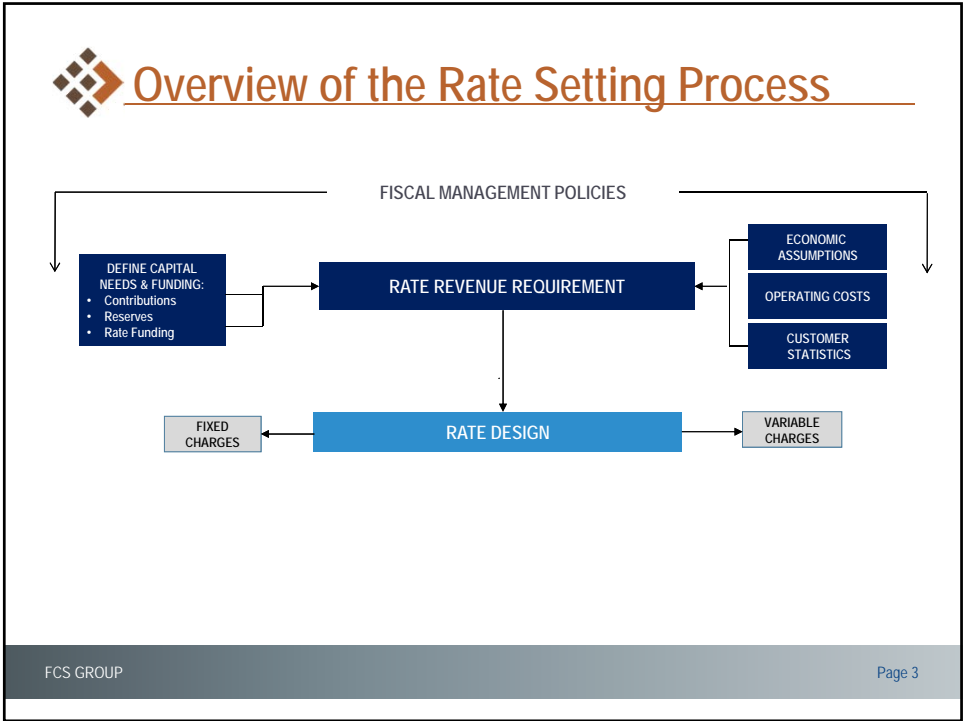


**FCS GROUP**  
Solutions-Oriented Consulting

## Discussion Outline

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- ◆ Overview of rate study process
- ◆ Results
  - Revenue requirement
  - Rate design
  - Capitalization fee
- ◆ Next steps
- ◆ Discussion/Input



## Revenue Requirement Overview

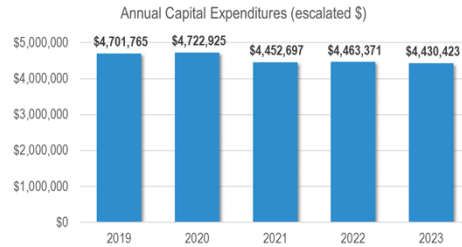
- ◆ Determines the amount of revenue necessary to meet all utility financial obligations on a stand-alone basis
  - Operating costs
  - Capital costs
  - Financial policies and targets
- ◆ Evaluates existing revenue levels for sufficiency
- ◆ Develops a multi-year rate implementation strategy

## Key Assumptions

- ◆ Study period FY 2019 – FY 2023
  - Study evaluated twenty year projection
- ◆ Projected rate revenue based on summary level customer statistics plus 1.5% growth annually for all classes
- ◆ FY 2019 budget used as baseline – various escalation factors used for future years
- ◆ Fiscal policy targets:
  - Operating reserve target: 90 days of O&M expenses
  - Capital reserve target: 1% original asset cost
  - System reinvestment:
    - Target: annual depreciation
    - Study: achieves 85% depreciation by 2023

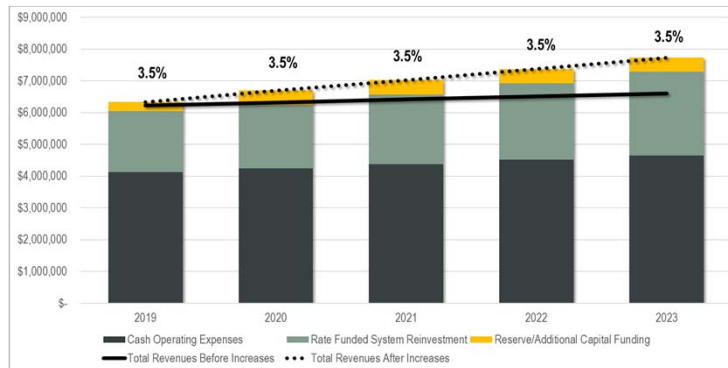
## Key Components

Description	(2019 - 2023)
Existing Rate Revenue	\$5.97M - \$6.34M
O&M Expenses	\$4.13M - \$4.66M
Existing Debt Service	\$0
New Debt Service	\$0
System Reinvestment	\$1.92M - \$2.64M
Total CIP (2019 - 2023)	\$22,771,180



- ◆ \$22.8 million in capital projects to be funded by fund balances, system reinvestment revenue, capitalization fees and hookup fees
- ◆ No new debt assumed

## Revenue Requirement Forecast



Monthly Bill	Existing	2019	2020	2021	2022	2023
Proposed Increases		3.50%	3.50%	3.50%	3.50%	3.50%
Sample Residential Mo. Bill	\$ 19.76	\$ 20.45	\$ 21.17	\$ 21.91	\$ 22.68	\$ 23.47
\$ Mo. Difference		\$ 0.69	\$ 0.72	\$ 0.74	\$ 0.77	\$ 0.79

Note: Assumes a 3/4" meter with 12 kgals water usage monthly



 **Rate Design**

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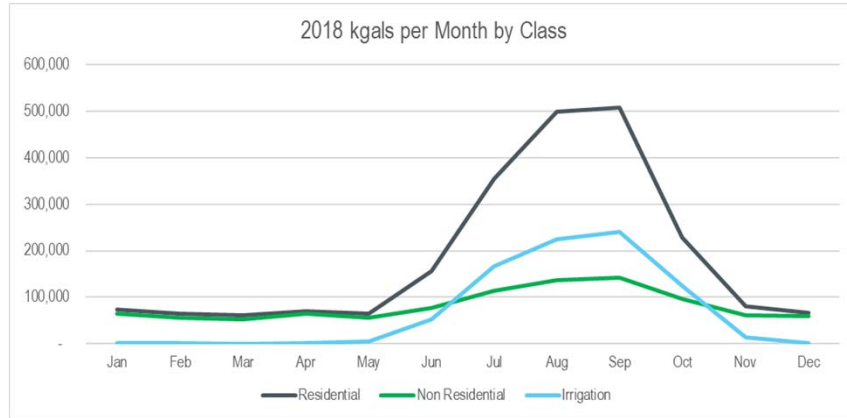
- ♦ Composed of fixed and variable charges
- ♦ Produce sufficient revenue to meet utility financial requirements
- ♦ Meet the goals and objectives of the utility
- ♦ Considerations:

- Proposed rate design restructures classes:

Existing Classes	Proposed Classes
Residential	Residential
Non Residential	Non Residential Low (<50 kgal 6 mo)
	Non Residential High (>50 kgal 6 mo)
Irrigation	Irrigation

- Addition of third tier to residential and irrigation classes
    - Tiered structure for non residential low class

## Customer Class Usage Profile



## Existing Monthly Rate Schedule

Meter Size	Fixed Rate
3/4"	\$8.48
1"	\$9.35
1 1/2"	\$10.46
2"	\$13.61
3"	\$36.70
4"	\$45.27
6"	\$65.23
8"	\$88.04
10"	\$113.70

Class	Variable Rate per kgal
Residential (0-30 kgal)	\$0.94
Residential (+30 kgal)	\$1.35
Non-Residential	\$0.82
Irrigation Only	\$1.09





## Residential Rate Design – FY 2019

Meter Size	Existing Fixed Rate
3/4"	\$8.48
1"	\$9.35
1 1/2"	\$10.46
2"	\$13.61
3"	\$36.70
4"	\$45.27
6"	\$65.23
8"	\$88.04
10"	\$113.70
Tiers	Existing Variable Rate per kgal
0-30 kgals	\$0.94
+30 kgals	\$1.35

Meter Size	Proposed Fixed Rate
3/4"	\$8.78
1"	\$9.68
1 1/2"	\$10.83
2"	\$14.09
3"	\$37.98
4"	\$46.85
6"	\$67.51
8"	\$91.12
10"	\$117.68
Tiers	Proposed Variable Rate per kgal
0-30 kgals	\$0.95
31-50 kgals	\$1.37
+50 kgals	\$1.86

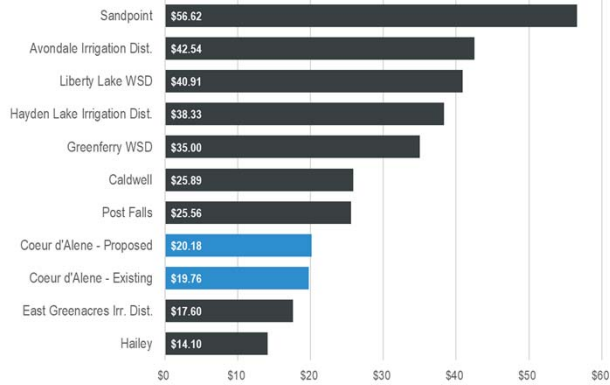
- ♦ Fixed rate increases by 3.5%
- ♦ Proposed rate design adds third conservation tier



## Residential Bill Comparison

	kgal	Existing	Proposed	\$	%
	0	\$ 8.48	\$ 8.78	\$ 0.30	3.5%
Winter Avg	5	\$ 13.18	\$ 13.53	\$ 0.35	2.7%
	10	\$ 17.88	\$ 18.28	\$ 0.40	2.2%
Annual Avg	12	\$ 19.76	\$ 20.18	\$ 0.42	2.1%
	20	\$ 27.28	\$ 27.78	\$ 0.50	1.8%
Summer Avg	24	\$ 31.04	\$ 31.58	\$ 0.54	1.7%
	30	\$ 36.68	\$ 37.28	\$ 0.60	1.6%
	60	\$ 77.18	\$ 83.18	\$ 6.00	7.8%
	90	\$ 117.68	\$ 138.68	\$ 21.00	17.8%
	120	\$ 158.18	\$ 194.18	\$ 36.00	22.8%

## Residential Rate Comparison



Note: assumes 12 kgal monthly usage

## Non Residential Low Rate Design – FY 2019

Meter Size	Existing Fixed Rate
3/4"	\$8.48
1"	\$9.35
1 1/2"	\$10.46
2"	\$13.61
3"	\$36.70
4"	\$45.27
6"	\$65.23
8"	\$88.04
10"	\$113.70
Tiers	Existing Variable Rate per kgal
Non Residential	\$0.82

Meter Size	Proposed Fixed Rate
3/4"	\$8.78
1"	\$9.68
1 1/2"	\$10.83
2"	\$14.09
3"	\$37.98
4"	\$46.85
6"	\$67.51
8"	\$91.12
10"	\$117.68
Tiers	Proposed Variable Rate per kgal
0-50 kgal	\$0.85
+50 kgal	\$1.67

- ◆ Fixed rate increases by 3.5%
- ◆ Proposed rate design adds a conservation tier for usage over 50 kgal

## Non Residential Low Bill Comparison

	kgal	Existing	Proposed	\$	%
Winter Avg	0	\$ 8.48	\$ 8.78	\$ 0.30	3.5%
	10	\$ 16.68	\$ 17.28	\$ 0.60	3.6%
	15	\$ 20.78	\$ 21.53	\$ 0.75	3.6%
Annual Avg	18	\$ 23.24	\$ 24.08	\$ 0.84	3.6%
	20	\$ 24.88	\$ 25.78	\$ 0.90	3.6%
Summer Avg	24	\$ 28.16	\$ 29.18	\$ 1.02	3.6%
	30	\$ 33.08	\$ 34.28	\$ 1.20	3.6%
	60	\$ 57.68	\$ 67.88	\$ 10.20	17.7%
	90	\$ 82.28	\$ 117.68	\$ 35.40	43.0%
	120	\$ 106.88	\$ 167.48	\$ 60.60	56.7%
	150	\$ 131.48	\$ 217.28	\$ 85.80	65.3%
	300	\$ 254.48	\$ 466.28	\$ 211.80	83.2%

## Non Residential High Rate Design – FY 2019

Meter Size	Existing Fixed Rate
3/4"	\$8.48
1"	\$9.35
1 1/2"	\$10.46
2"	\$13.61
3"	\$36.70
4"	\$45.27
6"	\$65.23
8"	\$88.04
10"	\$113.70
Tiers	Existing Variable Rate per kgal
Non Residential	\$0.82

Meter Size	Proposed Fixed Rate
3/4"	\$8.78
1"	\$9.68
1 1/2"	\$10.83
2"	\$14.09
3"	\$37.98
4"	\$46.85
6"	\$67.51
8"	\$91.12
10"	\$117.68
Tiers	Proposed Variable Rate per kgal
Non Residential	\$0.85

- ◆ No structure changes for new non residential high class
- ◆ 3.5% rate increase applied equally to fixed and variable charges

## Non Residential High Bill Comparison

	kgal	Existing	Proposed	\$	%
	0	\$ 8.48	\$ 8.78	\$ 0.30	3.5%
	45	\$ 45.38	\$ 46.97	\$ 1.59	3.5%
Winter Avg	90	\$ 82.28	\$ 85.16	\$ 2.88	3.5%
	110	\$ 98.68	\$ 102.14	\$ 3.46	3.5%
	130	\$ 115.08	\$ 119.11	\$ 4.03	3.5%
	150	\$ 131.48	\$ 136.08	\$ 4.60	3.5%
	170	\$ 147.88	\$ 153.06	\$ 5.18	3.5%
Annual Avg	190	\$ 164.28	\$ 170.03	\$ 5.75	3.5%
	210	\$ 180.68	\$ 187.00	\$ 6.32	3.5%
	230	\$ 197.08	\$ 203.98	\$ 6.90	3.5%
Summer Avg	260	\$ 221.68	\$ 229.44	\$ 7.76	3.5%
	280	\$ 238.08	\$ 246.41	\$ 8.33	3.5%

## Non Residential Sample Bills

Business	Proposed Class	Meter	SUMMER				WINTER			
			Avg kgal	Existing	Proposed	\$ Difference	Avg kgal	Existing	Proposed	\$ Difference
Safeway Store # 1470	Non Residential High	1"	259	\$ 221.73	\$ 229.49	\$ 7.76	195	\$ 169.25	\$ 175.17	\$ 5.92
Holiday Inn Express	Non Residential High	3"	111	\$ 127.72	\$ 132.19	\$ 4.47	48	\$ 76.06	\$ 78.72	\$ 2.66
CDA Tap House	Non Residential High	2"	132	\$ 121.85	\$ 126.11	\$ 4.26	44	\$ 49.69	\$ 51.43	\$ 1.74
French Cleaners Corp.	Non Residential High	3/4"	86	\$ 79.00	\$ 81.76	\$ 2.76	75	\$ 69.98	\$ 72.43	\$ 2.45
US Bank Corp	Non Residential Low	1.5"	217	\$ 188.40	\$ 332.22	\$ 143.82	3	\$ 12.92	\$ 13.38	\$ 0.46
Sweetb Burrito	Non Residential Low	2"	136	\$ 125.13	\$ 200.21	\$ 75.08	18	\$ 28.37	\$ 29.39	\$ 1.02
Rock Tech Ent	Non Residential Low	3/4"	91	\$ 83.10	\$ 119.75	\$ 36.65	1	\$ 9.30	\$ 9.63	\$ 0.33
Paris Wholesalers	Non Residential Low	3/4"	4	\$ 11.76	\$ 12.18	\$ 0.42	2	\$ 10.12	\$ 10.48	\$ 0.36

## Irrigation Rate Design – FY 2019

Meter Size	Existing Fixed Rate
3/4"	\$8.48
1"	\$9.35
1 1/2"	\$10.46
2"	\$13.61
3"	\$36.70
4"	\$45.27
6"	\$65.23
8"	\$88.04
10"	\$113.70
Tiers	Existing Variable Rate per kgal
Irrigation Only	\$1.09

Meter Size	Proposed Fixed Rate
3/4"	\$8.78
1"	\$9.68
1 1/2"	\$10.83
2"	\$14.09
3"	\$37.98
4"	\$46.85
6"	\$67.51
8"	\$91.12
10"	\$117.68
Tiers	Proposed Variable Rate per kgal
0-200 kgal	\$1.13
201-400 kgal	\$1.52
+400 kgal	\$1.86

- ♦ Fixed rate increases by 3.5%
- ♦ Proposed rate design adds conservation tiered structure

## Irrigation Bill Comparison

	kgal	Existing	Proposed	\$	%
	0	\$ 8.48	\$ 8.78	\$ 0.30	3.5%
	50	\$ 62.98	\$ 65.25	\$ 2.27	3.6%
	100	\$ 117.48	\$ 121.73	\$ 4.25	3.6%
	150	\$ 171.98	\$ 178.20	\$ 6.22	3.6%
	200	\$ 226.48	\$ 234.68	\$ 8.20	3.6%
Avg Summer	250	\$ 280.98	\$ 310.92	\$ 29.94	10.7%
	300	\$ 335.48	\$ 387.17	\$ 51.69	15.4%
	350	\$ 389.98	\$ 463.41	\$ 73.43	18.8%
	400	\$ 444.48	\$ 539.65	\$ 95.17	21.4%
	450	\$ 498.98	\$ 632.84	\$ 133.86	26.8%
	500	\$ 553.48	\$ 726.02	\$ 172.54	31.2%
	550	\$ 607.98	\$ 819.21	\$ 211.23	34.7%
	600	\$ 662.48	\$ 912.39	\$ 249.91	37.7%
	650	\$ 716.98	\$ 1,005.58	\$ 288.60	40.3%
	700	\$ 771.48	\$ 1,098.76	\$ 327.28	42.4%
	750	\$ 825.98	\$ 1,191.95	\$ 365.97	44.3%
	800	\$ 880.48	\$ 1,285.13	\$ 404.65	46.0%

# Capitalization Fee



## Capitalization Fee Overview

- ◆ **One-time fee for new connections, not ongoing rates**
  - Properties which are already connected do not pay cap fees unless they “redevelop” and require increased capacity
- ◆ **Fee represents the value of the share of system capacity that the new user, or redeveloping user, will utilize**
- ◆ **Fees to be used for capital related obligations only**

## Methodology

- ◆ Follows methodology identified in Idaho Supreme Court ruling

NIBCA v. City of Hayden Methodology	
	Gross Present Day Replacement Value of System
Less:	Bond Principal
Less:	Unfunded Depreciation
=	Net System Replacement Value for the Current Year
÷	Number of Users Current System Can Support (EDUs)
=	<b>Total Capitalization Fee per Equivalent Unit</b>

*Notes: NIBCA = North Idaho Building Contractors Association*

## Key Calculations

- ◆ **Net present day replacement value of system**
  - Inventory of assets from City's accounting system
- ◆ **Less: outstanding bond principal**
  - Represents the unpaid value of the system
  - No outstanding bond principals for the water utility
- ◆ **Less: unfunded depreciation**
  - Calculation not provided in Supreme Court decision
  - City elected to use original cost accumulated depreciation
  - Most conservative (largest deduction)



## Net System Present Day Replacement Value

System Replacement Value	Total
Supply & Treatment	\$13,611,644
Pumping	\$3,562,869
Storage	\$13,621,990
Transmission & Distribution	\$194,014,599
General	\$8,915,234
<b>Total Gross Replacement Value</b>	<b>\$233,726,336</b>
Less: Bond Principal (outstanding)	\$0
Less: Original Cost Accumulated Depreciation	-\$41,824,321
<b>Net System Present Day Replacement Value</b>	<b>\$191,902,015</b>



## System Capacity

- ◆ System capacity determines the number of users the system can support
- ◆ Overall system capacity was determined by City review
- ◆ City has 23,335 existing EDUs connected to the system
- ◆ City estimates the existing system could accommodate 7,721 additional EDUs
  
- ◆ System capacity = 31,056 EDUs

*Notes: EDU = Equivalent Dwelling Unit*

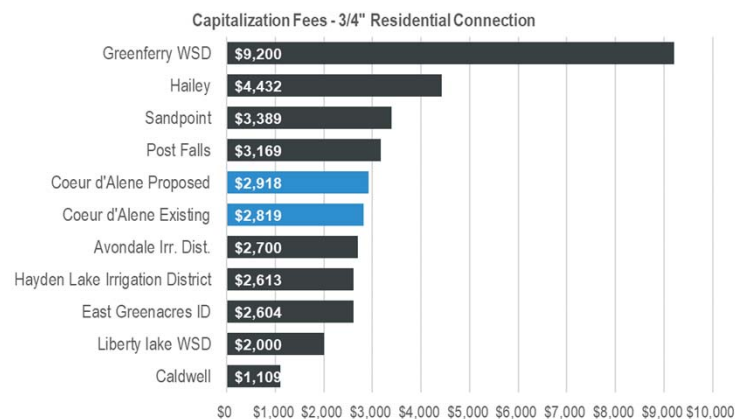


## Capitalization Fee

System Replacement Value	Total
Supply & Treatment	\$13,611,644
Pumping	\$3,562,869
Storage	\$13,621,990
Transmission & Distribution	\$194,014,599
General	\$8,915,234
<b>Total Gross Replacement Value</b>	<b>\$233,726,336</b>
Less: Bond Principal (outstanding)	\$0
Less: Original Cost Accumulated Depreciation	-\$41,824,321
<b>Net System Present Day Replacement Value</b>	<b>\$191,902,015</b>
System EDU Capacity	31,056
<b>Total Capitalization Fee per EDU</b>	<b>\$6,179</b>

- ◆ Current fee = \$2,819 per EDU
- ◆ City may charge anything up to the maximum calculated
- ◆ Recommendation: 3.5% increase over existing fee
- ◆ Proposed 2019 Cap Fee: \$2,918

## Capitalization Fee Comparison



## Staff Recommendations

- ◆ Implement annual 3.5% rate increases
- ◆ Expand existing classes to include a low and high commercial class
- ◆ Addition of third tier to residential and irrigation classes
- ◆ Tiered structure for non residential low class
- ◆ Capitalization Fee proposed at \$2,918
- ◆ New rates effective April 1<sup>st</sup>, 2019 and every January thereafter

