Sustainable Financial Management Planning for Water Utilities Webinar

August 5, 2021



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WATER INFRASTRUCTURE AND RESILIENCY FINANCE CENTER

EPA's Water Finance Center provides information that can be used to make **drinking water**, **wastewater**, and **stormwater** infrastructure decisions.



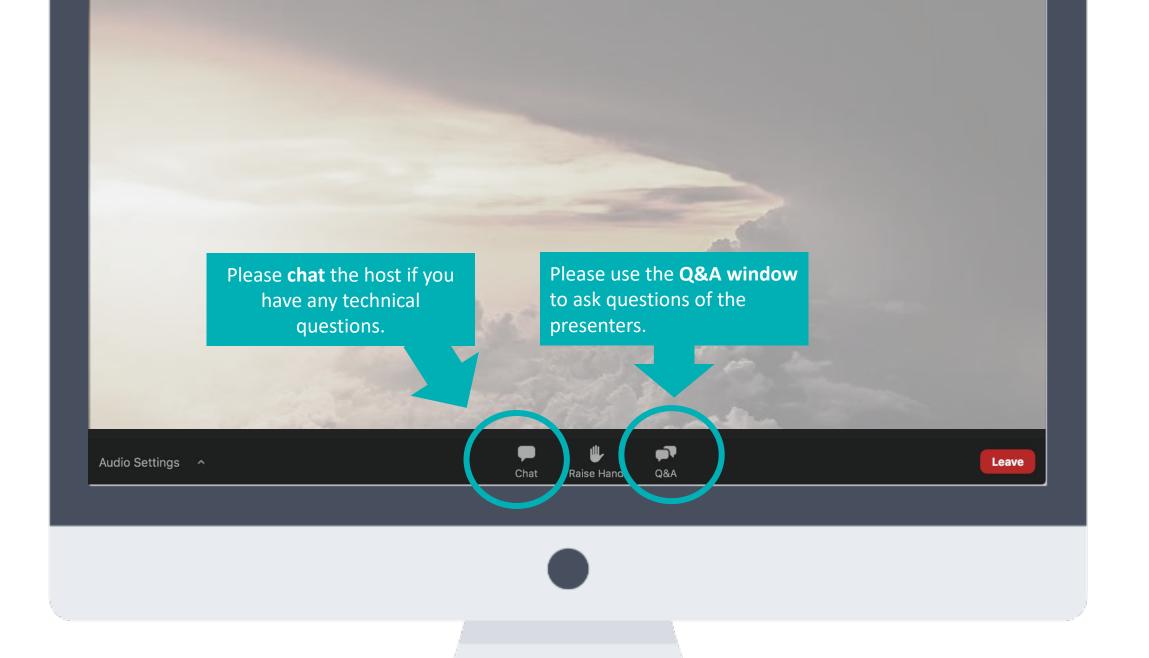
https://www.epa.gov/waterfinancecenter

Zoom Controls



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AGENDA

August 5th, 2021

Welcome, Agenda Overview, and Zoom Logistics

Speakers

- Alex Hinton, CPA, Senior Vice President of Financial Services Columbus Water Works
- Paul Eldredge, P.E., General Manager, Union Sanitary District
- Mark Carlson, CPA, CFO/Business Services Manager, Union Sanitary District

Questions and Answers

Panelists



Alex Hinton, CPA
Senior Vice President of Financial Services
Columbus Water Works



Paul Eldredge, P.EGeneral Manager, Union Sanitary District



Mark Carlson, CPA CFO/Business Services Manager, Union Sanitary District



NORTH COLUMBUS WATER RESOURCE FACILITY



FORT BENNING WATER TREATMENT FACILITY



SOUTH COLUMBUS WATER RESOURCE FACILITY



Combined Sewer Overflow Treatment



OUR CORE VALUES:

Wow Customers by listening, caring and responding to their concerns and ideas.

A ct With Integrity by being honest and sincere in everything we do.

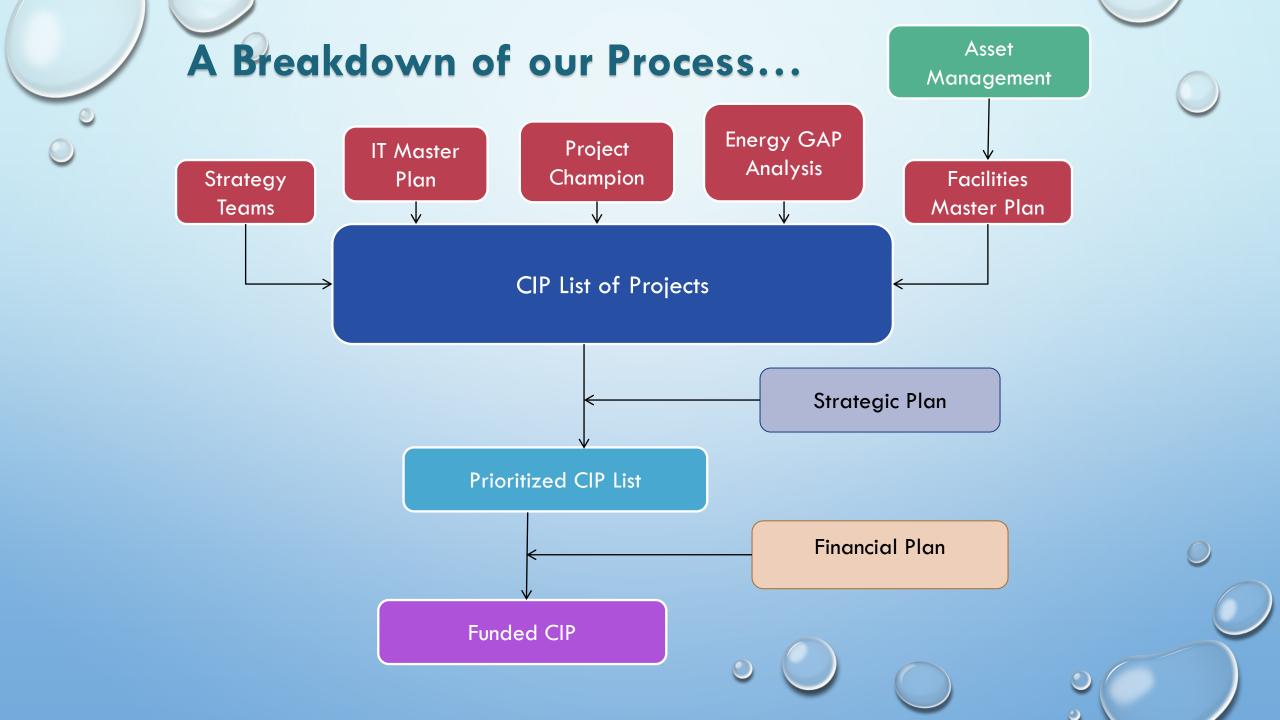
Trusted Community partner by being engaged to improve the quality of life.

E nergize Employees by celebrating, encouraging, developing and rewarding their diverse capabilities and contributions.

R esource Protection by being an innovative leader in watershed management, protection and education.

CAPITAL IMPROVEMENT PLANNING PROCESS





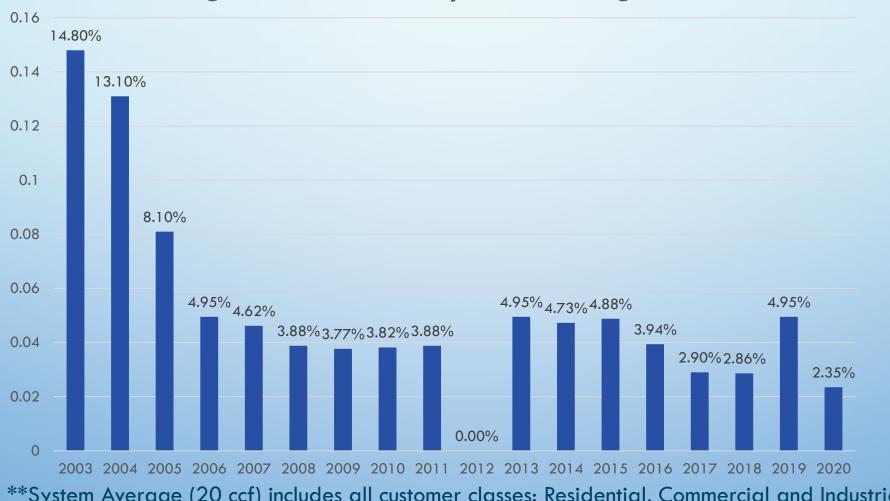


SECURE FUNDING

- RATE INCREASES
 - ANNUAL RATE ASSESSMENTS AVOID LARGE RATE SPIKES BY LEVELING SMALLER INCREASES
 - RATES CONTINUE TO BE AMONG LOWEST IN GEORGIA
- BOND FUNDING
- STATE REVOLVING FUNDS
- GRANTS
- PAY GO FUNDING
- LONG TERM FINANCIAL ANALYSIS

HISTORIC RATE INCREASES

Average Rate Increase System Average **



RATE CHANGES - 10 YEARS

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
	Actual	Actual	Actual	Actual	Actual	Recomm	Recomm	Recomm	Recomm	Recomm
National Average*	6.12%	6.12%	6.50%	6.50%	6.00%	6.00%	+-6.00%	+-6.00%	+-6.00%	+-6.00%
Model Projection**	4.95%	4.95%	3.95%	6.63%	4.95%	4.95%	3.86%	3.87%	3.99%	4.17%
Actual /Proposed System Average **	3.94%	2.90%	2.86%	4.95%	2.35%	3.75%	3.86%	3.87%	3.99%	4.17%

10-yr actual average/recommended rate increase with 2021 recommendation: 3.66%

^{*}AWWA/RFC National Water and Wastewater Rate Survey, the national average bill increase has been approx. 6.5% annually from 2009 through 2021. This trend is expected to continue in future years. If we estimate the trend to continue at approximately a 6.00% increase for the next 5 years. The average 5 year look back and 5 year look forward would average approximately 6.2%

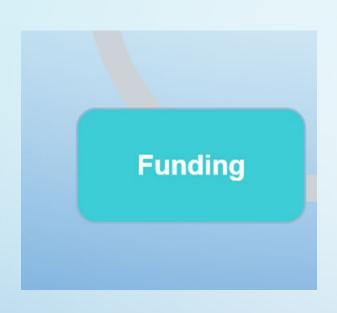
^{**}System Average (20 ccf) includes all customer classes: Residential, Commercial and Industrial

REGIONAL BILL COMPARISON

3,000 gallons residential bill – Proposed CWW Rates



Note: Rates for comparison communities are current as of October 2020, but do not include increases they may implement in 2021. Columbus Affordability includes increase of \$1.00 to Low Income Credit proposed for current year or \$8.50 total credit.



CONTINUED...

- BOND FUNDING
- STATE REVOLVING FUNDS
- PAY GO FUNDING
- LONG TERM FINANCIAL ANALYSIS AND PLANNING















Customer Profile

- 60 Square mile service area
- Serving Fremont, Newark, and Union City
- 357,000 residents
- 3,000 businesses
- 117,000 service connections





District Profile

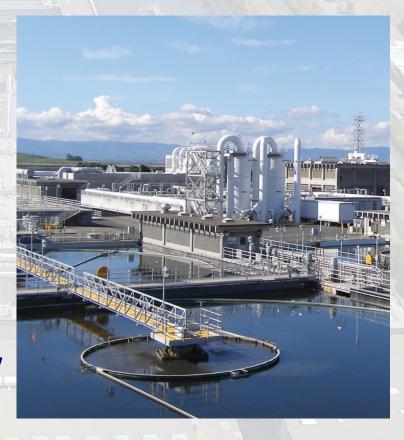
- Established 1918
- Governed by a 5-member Board
- 143 FTE's
- Fiscal year 21/22 budget \$112 million (including capital)
- Discharge secondary treated wastewater into the deep waters of San Francisco Bay via a JPA





District Profile

- 839 miles of pipeline
- 7 pump stations, 1 physical plant
- 8 billion gallons annual treatment
- Daily average 21.25 MGD
- Permitted capacity 33 MGD
- 20,000 wet tons of beneficially reusable biosolids





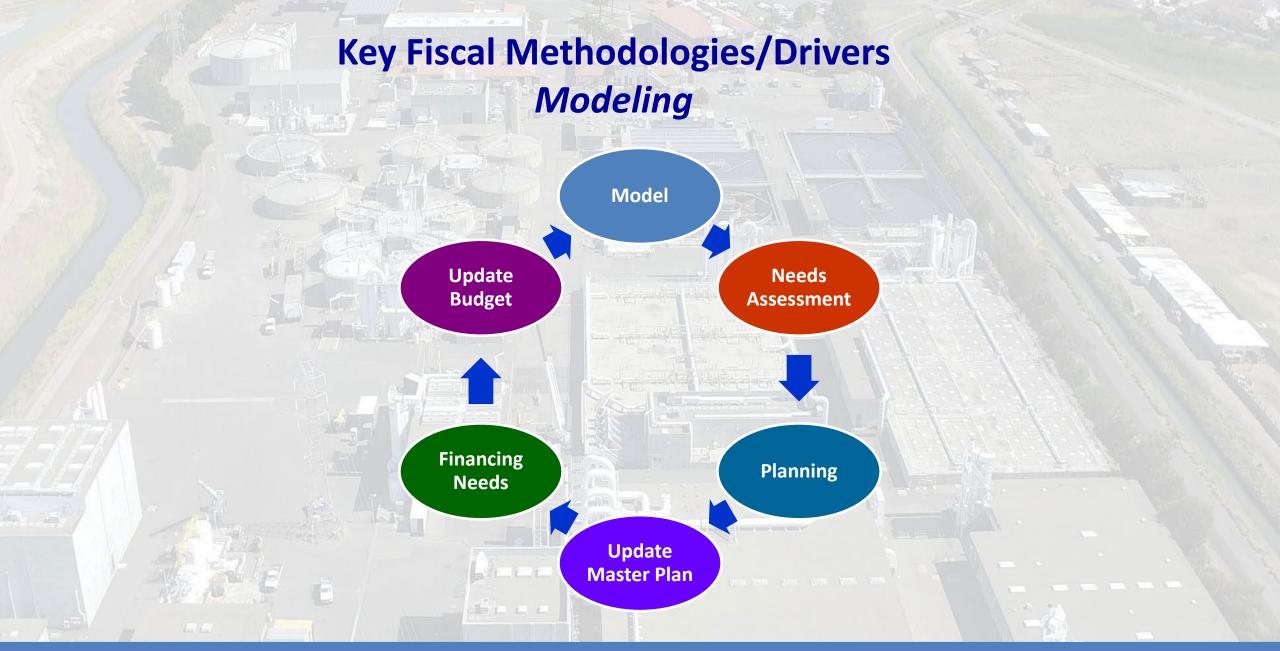




Key Fiscal Methodologies/Drivers *Modeling*

- USD utilizes a comprehensive modeling software for both short and long-term forecasting
- The model is the focal point for District decisionmaking







Key Fiscal Methodologies/Drivers CIP Forecasting

- CIP includes plant, pump station, collection system and transport system expansion, component replacement, and major routine maintenance
- Proper cost indexing over time
- 20-year horizon
- Realistic estimates (updated annually)



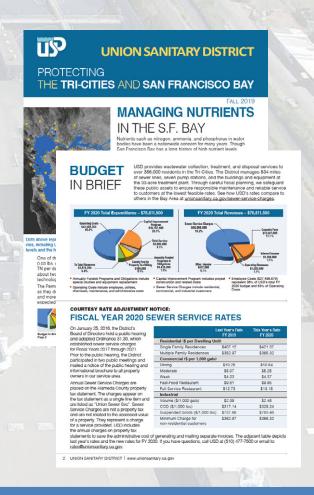
Key Fiscal Methodologies/Drivers *Information Gathering*

- Facts/Information are crucial to success
- Studies as needed
- Rate studies California Proposition 218
 - Cost of Service Analysis (COSA)
 - Written notice to all customers notifying of rate increase and public hearing
 - Conduct public hearing
 - Majority protest (50%+1)

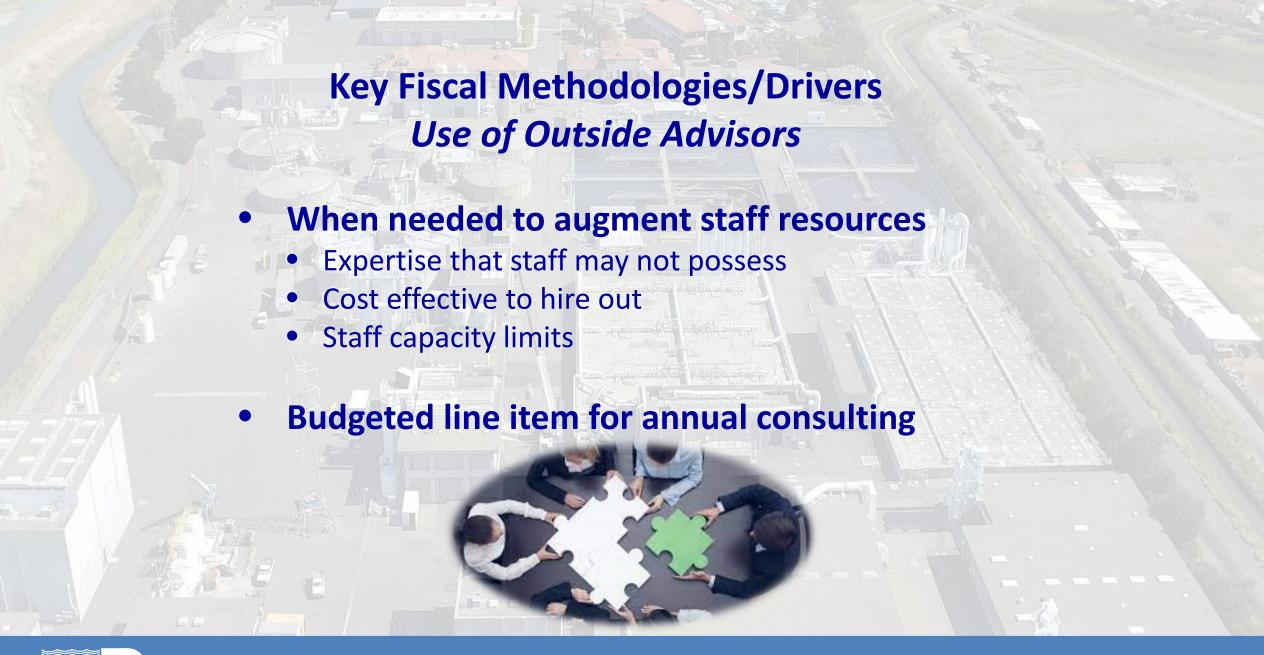


Key Fiscal Methodologies/Drivers Communications

- Between Departments
 - Finance/Engineering/Operations
- Board
 - Board updated regularly on budget, CIP and Model
 - Avoid overly technical jargon (not easy, Finance and Engineering centric staff)
 - Updating Board establishes and maintains credibility
 - Responding to Board inquiries promptly
- Rate Payers
 - Regular outreach













District Fiscal Model

- Developed by HF&H Consultants for USD
 - Excel Based
 - Roughly 20 tabs hundreds of inputs
 - Comprehensive
- Key driver is fund balance
 - Cash & Investments less short-term liabilities
- 20-year horizon



Model Summary Page Primary Interface with Staff and Board





Model Summary Page Primary Interface with Staff and Board

4	A	В	С	D	Е	F	G	Н	1
1	Union Sanitary District								
2	Financial Model	Rates in Feb Mod	8.0%	8.0%	7.5%	7.3%	6.5%	5.5%	5.0%
3	Table 1A. Summary								
4		<u>Adopted</u>	Projected						
5	Fiscal Year	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
6	Fiscal Year End	2021	2022	2023	2024	2025	2026	2027	2028
7	Rate Increases		8.0%	8.0%	7.5%	7.3%	2.0%	3.0%	3.0%
8	Cumulative Increase		8.0%	16.0%	23.5%	30.8%	32.8%	35.8%	38.8%
9	Chg in Rate Percentageto Feb Rate N	lodel	0.0%	0.0%	0.0%	0.0%	-4.5%	-2.5%	-2.0%
10	Debt Coverage Ratio	2.63	2.82	3.22	2.30	2.70	2.58	1.56	1.58
11									
12									
10			.54	J100 GL (M) 17 17 17 17 17 17 17 1					



Model Assumptions

	A B	С	D	E	F	G	Н	1	J	K	L	М	N	0	Р	Q	R	S	T	U	V
1 U	nion Sanitary District																				
2 F	inancial Model																				
3 T	able Table 11. COS - Rate Calculations				ı																
4 S	ource: USD Fund Balances 063018.xls																				
5 0	ost of Service Year (Table 9)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
6			Projected		ı																
7 <u>l</u>	<u>ndex</u>	2020/21	2021/22	2022/23	023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40 1
8																					
9	1 General Inflation	Per Budget	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.0%	3.5%	3.5%	3.5%	3.5%	3.5% 1
10	2 Salary Increases	Per Budget	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0% 1
11	3 Benefit Increases	Per Budget	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0% 1
12	4 Chemicals	Per Budget	3.8%	4.0%	4.3%	4.5%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	4.8% 1
13	5 Utilities	Per Budget	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0% 1
14	6 Interest on Earnings	0.60%	1.3%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6% 7
15	7 Capital	Per Budget	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0% 1
16	8 % Change in Water Demand	Estm. Actual	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0% 1
17	9 Growth in Accounts	Estm. Actual	0.8%	0.6%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5% 1
18	10 % of CIP Funding	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%	90% 1
19	11 Capacity Fee Revenue	\$5,712,200	\$3,000,000	\$3,000,000 \$,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000 1
20	12 PERS Retirement as a % of salaries	Per Budget	9.8%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5% 1
21	13 Health & Welfare	Per Budget	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0% 1
22	14 Bridge Loan/LOC interest rate	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0% 1
23	15 Growth in Residential Accounts	Estm. Actual	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
24	16 Growth in Commercial Accounts	Estm. Actual	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0% 1
25	17 OPEB Expense escalator	Per Budget	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
26	18 Blank																				



Model Assumptions

	1	Α	В	С	D	E
	1	Union	Sanitary District			
	2	Financ	cial Model			
	3	Table	Table 11. COS - Rate Calculations			
	4	Source	: USD Fund Balances 063018.xls			
	5	Cost o	f Service Year (Table 9)	1	2	3
	6				Projected	
	7	Index		2020/21	2021/22	2022/23
	8					
	9	-	General Inflation	Per Budget	3.5%	3.5%
3	10	1	Salary Increases	Per Budget	4.0%	
	11	-	Benefit Increases	Per Budget	0.0%	
	12		Chemicals	Per Budget	3.8%	
	13	-	Utilities	Per Budget	4.0%	······•
	14	1	Interest on Earnings	0.60%	1.3%	1.6%
	15	1	Capital	Per Budget	0%	0%
	16	1	% Change in Water Demand	Estm. Actual	0%	0%
	17	-	Growth in Accounts	Estm. Actual	0.8%	
	18	1	% of CIP Funding	90%	90%	90%
	19	1	Capacity Fee Revenue	\$5,712,200		\$3,000,000
	20		PERS Retirement as a % of salaries	Per Budget	9.8%	
	21		Health & Welfare	Per Budget	4.0%	······•
	22	1	Bridge Loan/LOC interest rate	5.0%	5.0%	5.0%
	23	-	Growth in Residential Accounts	Estm. Actual	0.5%	0.5%
	24		Growth in Commercial Accounts	Estm. Actual	0.0%	0.0%
84 0 -	25	-	OPEB Expense escalator	Per Budget	3.0%	3.0%
	26	18	Blank			N. C.



Detailed Line-Item Budget Information

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Output		(Tab 1B)	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40
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9 S20 Development & Galaction \$5,000 S5175 S5.56 S5.54 S5.54 S5.73 S5.56 S5.54 S5.73 S5.75 S5.		i																				\$47,83
9 500 Development & Education 1 1 10 10 10 10 10 10 10 10 10 10 10 10		1																				\$9.56
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38 588 Soil Committee		i																				\$19.132
90 590 Employee Assistance Program 1 \$10,000 \$10,350 \$10,72 \$11,087 \$11,087 \$11,087 \$11,087 \$13,089 \$12,233 \$12,233 \$12,233 \$13,188 \$15,009 \$15,184 \$15,055 \$15,556 \$15,578 \$15,000 \$16,000 \$10,000 \$1		1																				\$5,740
15 5420 Travel - MilesgeParking 1 \$3.875 \$3.804 \$3.373 \$4.075 \$4.277 \$4.275		1																				\$19,132
12 5490 Commercial Orivers Program 1 \$8,000 \$16,200 \$6,270 \$6,852 \$8,895 \$7,706 \$7,376 \$7,536 \$7		1																				\$7,031
13 5505 Safety Internal Training 1 \$300 \$331 \$321 \$333 \$344 \$556 \$589 \$389 \$382 \$395 \$4409 \$423 \$438 \$4453 \$4489 \$4408 \$5500 \$5760 \$5760 \$4760		1																			\$11.091	\$11,479
## 5550 Sefety Resurred Training		1	\$300	\$311	\$321	\$333	\$344	\$356	\$369	\$382	\$395	\$409	\$423	\$438	\$453	\$469	\$483	\$500	\$518	\$536	\$555	\$574
Second Control Library 1 \$800 \$821 \$865 \$888 \$715 \$738 \$750 \$788 \$750 \$470 \$896 \$897 \$490 \$897 \$490		1	\$9,000	\$9,315	\$9,641		\$10,328	\$10,689	\$11,063	\$11,451	\$11,851	\$12,266	\$12,695	\$13,140	\$13,600	\$14,076	\$14,498	\$15,005	\$15,530	\$16,074	\$16,637	\$17,219
47 5540 Safety Employee Felations 1 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0		1	\$600	\$621	\$643	\$665	\$689	\$713	\$738	\$763	\$790	\$818	\$846	\$876	\$907	\$938	\$967	\$1,000	\$1,035	\$1,072	\$1,109	\$1,148
## 5541 Sefety Incentive Program 1 \$15,000 \$15,525 \$16,088 \$16,531 \$17,213 \$17,915 \$18,439 \$19,052 \$20,443 \$21,69 \$22,169 \$22,468 \$22,459 \$22,600 \$22,507	5530 Safety Development & Training	1	\$3,000	\$3,105	\$3,214	\$3,326	\$3,443	\$3,563	\$3,688	\$3,817	\$3,950	\$4,089	\$4,232	\$4,380	\$4,533	\$4,692	\$4,833	\$5,002	\$5,177	\$5,358	\$5,546	\$5,740
## 5541 Sefety Incentive Program 1 \$15,000 \$15,525 \$16,088 \$16,531 \$17,213 \$17,915 \$18,439 \$19,052 \$20,443 \$21,69 \$22,169 \$22,468 \$22,459 \$22,600 \$22,507	5540 Safety Employee Relations	1																			\$0	\$0
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Second Description Second		1	\$12,210	\$12,637	\$13,080	\$13,537	\$14,011	\$14,502	\$15,009	\$15,535	\$16,078	\$16,641	\$17,223	\$17,826	\$18,450	\$19,096	\$19,669	\$20,357	\$21,070	\$21,807	\$22,570	\$23,360
25580 Sefety Equipment Maintenance 1 \$1,000 \$1,005 \$1,007 \$1,109 \$1,148 \$1,148 \$1,148 \$1,129 \$1,272 \$1,317 \$1,363 \$1,411 \$1,154 \$1,151 \$1,554 \$1,511 \$1,514 \$1,511 \$1,51		1																				\$3,82
38 5580 Sefely Professional Services 1 \$47,500 \$77,763 \$8,004 \$8,205 \$8,006 \$8,908 \$9,219 \$2,325 \$2,459 \$2,256 \$2,275 \$2,681 \$2,200 \$3,002 \$		1																			\$1,109	\$1,14
## 5590 Sefety Professional Services		1																			\$1,849	\$1,91
55 5500 Temp Helip		1																				\$14,349
86 S900 Tution Perintbursement 1 \$18,000 \$19,520 \$19,527 \$19,000 \$10,520 \$19,527 \$19,000 \$10,520 \$19,527 \$19,000 \$10,520 \$19,527 \$19,000 \$10,520 \$19,527 \$19,000 \$10,527 \$10,000 \$10,0		1																			\$3,697	\$3,82
77 5900 District Wide Training 1 \$55,000 \$67,275 \$49,930 \$72,067 \$74,589 \$77,000 \$79,902 \$482,589 \$49,559 \$49,589 \$49,589 \$49,589 \$49,589 \$49,489 \$49,		1																			\$103,055	\$106,66
8 SUBTOTAL -5000 PERSONNEL EXPENSE \$30.579.429 \$32.508,165 \$34.379.578 \$35.960.259 \$37.916.757 \$39.256.003 \$44.062.91 \$42.894,613 \$44.665.200 \$46.557.189 \$45.575.024 \$45.575.024 \$46.03.799 \$49.404.339 \$47.040.359 \$47.040.3		1																				\$34,43
\$\frac{6}{0}\frac{6}{0}\frac{FPAIR & MAINTENANCE}{\frac{1}{0}}\$\$1 \frac{1}{0}\$1		1																				\$124,35
0 6:00 Parts & Meterials 1 \$1411/200 \$14,80/582 \$1,517/31 \$15,64 \$22 \$1,517/31 \$1,546 \$23 \$1,578,60 \$1,725 \$1,725 \$1,725 \$1,90 \$23,220 \$1,90 \$23,220 \$2,272,266 \$2,272,268 \$2,272,266 \$2,272,272,266 \$2,272,272,266 \$2,272,272,266 \$2,272,272,266 \$2,272,272,266 \$2,272,272,266 \$2,272,272,272,272,272,272,272,272,272,2		Ė	\$30,579,429	\$32,508,165	\$34,379,578	\$35,990,255	\$37,916,757	\$39,256,003	\$41,062,841	\$42,834,613	\$44,665,300	\$46,557,189	\$45,515,024	\$46,531,271	\$48,043,799	\$49,404,393	\$51,016,057	\$52,640,707	\$54,160,036	\$55,960,520	\$57,830,048	\$59,845,38
1 \$200 Contractors 1 \$320.00 \$546.60 \$999.382 \$1003.325 \$1069.491 \$1105.924 \$1145.666 \$1127.266 \$1270.220 \$1314.678 \$1320.682 \$1409.316 \$14.476.07 \$15.01.325 \$1503.882 \$1508.288 \$1564.557 \$17.255 \$2 \$22.255 \$1.250.00 \$1.200 \$1		-	e1 411 000	#1.400.E00	#1 E11 740	61 EC4 C22	#1 C10 3C4	61 C7C OC2	#1 704 70F	#1.70E.440	#1.0E0.201	#1 000 201	#1 000 C27	#2 0C0 200	#3 133 430	#2 207 OFF	#3 373 3cc	#3 3E3 034	#3 43E 400	#1 E10 444	#2 C00 C2C	\$2,699,92
2 625 SCADA Maintenance 1 \$5,000 \$5,175 \$5,365 \$5,544 \$5,738 \$5,938 \$6,146 \$5,351 \$5,554 \$5,738 \$5,938 \$6,146 \$5,351 \$5,544 \$7,053 \$7,00 \$7,055 \$7,820 \$8,054 \$8,336 \$8,828 \$8,930 \$8,224 \$1,971 \$1,009 \$1,148 \$1,188 \$1,229 \$1,177 \$1,353 \$1,111 \$1,400 \$1,141 \$1,400 \$1,411 \$1,41		4	\$1,411,200	\$1,460,092	\$1,011,713	\$1,064,623 \$1,000,000		\$1,676,063	\$1,734,725 \$1,145,000	\$1,730,440	\$1,808,281	\$1,323,321 \$1,370,330		\$4,060,309 \$1,000,000	\$4,134,42U \$1,400,010	\$4,207,000 \$1,457,007	\$4,273,266 \$1,501,205	\$4,304,831	\$4,430,180			\$2,699,92
3 6300 Repairs & Maintenance 1 \$1,000 \$1,035 \$1,037 \$1,109 \$1,108 \$1,108 \$1,108 \$1,126		1				φ1,033,323 Φ5 544				\$1,100,764 \$6,001		\$6,270,220 \$6,914		\$1,350,632 \$7,300							\$1,722,017 \$9,242	\$1,783,11
4 6390 Coelings 1 \$2,0000 \$21,321 \$2,2007 \$22,840 \$23,839 \$24,466 \$25,323 \$26,209 \$27,105 \$28,0075 \$31,08 \$32,217 \$33,104 \$34,345 \$35,548 \$36,782 \$38,0004 \$10,355 \$10,004 \$10,004 \$10		· · · · · · · · · · · · · · · · · · ·																				\$1,9
5 64/0 Equipment Contractors 1 \$5,000 \$6,210 \$6,427 \$5,652 \$8,865 \$7,126 \$7,376 \$7,534 \$7,901 \$8,977 \$8,464 \$8,760 \$9,066 \$3,384 \$9,665 \$10,004 \$10,354 \$10,716 \$11,004 \$10,354 \$10,000 \$10,354 \$10,000 \$10,354 \$10,000 \$10,00		· · · · · · · · · · · · · · · · · · ·																				\$39.4
5 64.0 Equipment Maint Agreements 1 \$5,000 \$5,175 \$5,366 \$5,544 \$5,738 \$5,738 \$5,938 \$6,146 \$5,361 \$5,554 \$5,561 \$6,014 \$7,053 \$7,820 \$9,054 \$8,336 \$9,824 \$8,930 \$9,245,735 \$1,820 \$9,054 \$1,926 \$1,9		i																			\$11.091	\$11,47
7 6430 Equipment Parts and Materials 1 \$10,200 \$10,577 \$10,926 \$11,399 \$11,705 \$12,114 \$12,598 \$12,977 \$13,431 \$13,902 \$14,398 \$14,892 \$15,413 \$15,952 \$16,431 \$17,006 \$17,001 \$18,217 \$18,855 610 Radio Repair & Maint. 1 \$24,600 \$25,461 \$26,352 \$27,274 \$28,229 \$23,217 \$30,240 \$31,298 \$23,234 \$33,527 \$34,701 \$35,915 \$37,772 \$36,473 \$36,626 \$41,014 \$42,450 \$43,936 \$43,473 \$46		1																			\$9,243	\$9,56
9 6620 Telephone Repair & Maint. 1 \$800 \$828 \$857 \$887 \$918 \$950 \$983 \$1,018 \$1,053 \$1,090 \$1,128 \$1,158 \$1,209 \$1,251 \$1,289 \$1,334 \$1,380 \$1,429 \$1,479		1	\$10,200					\$12,114			\$13,431	\$13,902	\$14,388		\$15,413	\$15,952	\$16,431		\$17,601	\$18,217	\$18,855	\$19,5
		1																				\$47,06
		1																				\$1,53
70 SUBTOTAL - 6000 REPAIR 8. MAINTENANCE \$2,416,400 \$2,500,974 \$2,598,508 \$2,679,106 \$2,772,875 \$2,869,925 \$2,970,373 \$3,074,336 \$3,181,937 \$3,233,305 \$3,408,571 \$3,527,871 \$3,551,346 \$3,779,143 \$3,892,518 \$4,028,756 \$4,169,762 \$4,315,704 \$4,466,754	SUBTOTAL - 6000 REPAIR & MAINTENAN	VICE .	\$2,416,400	\$2,500,974	\$2,588,508	\$2,679,106	\$2,772,875	\$2,869,925	\$2,970,373	\$3,074,336	\$3,181,937	\$3,293,305	\$3,408,571	\$3,527,871	\$3,651,346	\$3,779,143	\$3,892,518	\$4,028,756	\$4,169,762	\$4,315,704	\$4,466,754	\$4,623,090



Detailed Line-Item Budget Information

4	Α	В	С	D	Е	F	G	Н	1
1	Union Sar	nitary District							
2	Financial	Model							
5				1	2	3	4	5	Е
6			Index	Budget	Projected				
7			(Tab 1B)	2020/21	202 1/ 22	2022/23	2023/24	2024/25	2025/26
8	OPERAT	TING EXPENSES							
9	5000 PE	RSONNEL EXPENSE							
10	5010	Fees, Board of Directors	1	\$78,735	\$81,491	\$84,343	\$87,295	\$90,350	\$93,512
11	5020	Salaries, Reg	2	\$18,932,646	\$19,689,952	\$20,477,550	\$21,296,652	\$22,148,518	\$23,034,459
12		Additional ETSU Staff	2	\$215,507	\$1,198,243	\$1,556,021	\$1,764,994	\$2,273,418	\$2,364,355
13	5030	Vacation Liability	3	\$0	\$0	\$0	\$0	\$0	\$0
14	5040	Buyback - Vacation & MAL	2	\$213,000	\$221,520	\$230,381	\$239,596	\$249,180	\$259,147
15	5060	Overtime	2	\$459,011	\$477,371	\$496,466	\$516,325	\$536,978	\$558,457
16	5080	Other Compensation	2	\$155,500	\$161,720	\$168,189	\$174,916	\$181,913	\$189,190
17	5099	Vacancy Factor (Budget Only)	2	(\$885,524)	(\$920,945)	(\$957,783)	(\$996,094)	(\$1,035,938)	(\$1,077,375)
18	5105A	PERS Retirement - Normal Costs	2	\$2,040,167	2,037,910	2,088,956	2,141,078	2,150,839	2,203,632
19	5105B	PERS Retirement - Unfunded Liab	1	\$4,158,694	4,144,704	4,606,710	4,915,842	5,242,255	5,312,760
	L-AMERICANIA		<u>-</u>	- I - I - I - I - I - I - I - I - I - I	11-		-	100	



CIP Information

Α	В	С	D	E	F	G	Н	- 1	J	К	L	М	N	0	P	Q	R	S	T	U	٧	٧	X	Υ	Z	AA
IC	IP						2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2029/29	2029/30	2030/31	203¶32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	20394
P	roject -	Category	- Structural (- Capacity (90) - Type of Fund	- Total -	2021 -	2022 -	2023 -	2024 -	2025 -	2026 -	2027 -	2028 -	2029 -	2030 ~	2031 -	2032 -	2033 ~	2034 ~	2035 ~	2036 -	2037 -	2038 -	2039 -	- 2040
1Fi	ield Ops Bldg, Sesmic Upgrade and Leak Repairs		100%	0%	PAYGo	3.300,000					200,000		1,500,000	1,600,000												
	dditional CS (Vehicle) Storage	Admin Facilities	100%	0%	PAYG ₀	250,000									250,000											
	MC Storage	Admin Facilities	100%	0%	PAYGo	300,000				300,000																
	lant Paving	Admin Facilities	100%	0%	Future SRF1	1.750.000			250.000					500,000		200,000		200,000		200,000		200,000		200,000		
1B	adio Repeater Antenna Replacement	Admin Facilities	100%	0%	PAYGo	150,000									150,000								······			**********
	olar Panel Replacement at Alvarado	Admin Facilities	50%	50%	PAYGo	300,000														300,000					•••••	
	olar Panel Replacement at Carport	Admin Facilities	50%	50%	PAYGo	700,000	100,000										600,000						······································			·· •
	olar Panel Replacement at Irvington	Admin Facilities	50%	50%	PAYGo	2,100,000		300,000										1,800,000								
	ast Iron/Pipe Lining	Collection System	100%	0%	PAYGo	5,518,000	500,000		532,000		500,000		566,000		602,000		640,000		681,000		725,000		772,000			
	entral Avenue Sanitary Sewer Relocation	Collection System	100%	0%	WIFIA Loan 1	1,050,000	50,000	1,000,000			550,555		550,555				0.10,000									
	ravity Sewer Rehab/Replacement	Collection System	100%	0%	WIFIA Loan 1	19.946.000	1,000,000	400,000	1,495,000	1698 000		1807.000		1.922.000		2.046.000		2.176.000		2.316.000		2 464 000		2 622 000		
	CP Sewer Rehab (Alvarado Basin)	Collection System	100%	0%	WIFIA Loan 1	3,850,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	100,000	,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	350.000	3,500,000		,022,000		2,010,000		2,110,000				2,101,000				
	CP Sewer Rehab (Irvington Basin)	Collection System	100%	0%	WIFIA Loan 1	3,300,000	300,000	3,000,000		•	550,550	0,000,000														
	CP Sewer Rehab (Newark Basin)	Collection System	100%	0%	WIFIA Loan 1		300,000	3,000,000					350,000	3,500,000												
	lameda Creek Crossing Lift Station	Transport	50%	50%	Future Bond								330,000	3,300,000	750.000		6.000.000	4.250.000								
	athodic Protection Improvements - Transport	Transport	100%	0%	Future Bond		300,000	500.000			150,000			150,000	1 30,000		150,000	4,200,000		150,000			150,000			
	herry Street Pump Station (Predesign)	Transport	0%	100%	Grant 1	3,150,000	150,000	1,500,000	1,500,000		130,000			130,000			130,000			100,000			130,000			
Ľ	rieny Sireer unity Station (i redesign)	Hanspur	U/6	100/6	:Ulaik I	3,130,000	130,000	1,300,000	223,000																	
ŀ	qualization Storage @ Newark	Transport	40%	60%	WIFIA Loan 1	25 700,000	30,000	000,000	220,000				2 300 000	7,000,000	16 400 000											
	orcemain Corrosion Repairs - Phase 3	Transport	100%	0%	PAYGo	1,000,000	500,000	500,000					2,300,000	7,000,000	10,400,000											
	orcemain Corrosion Repairs - Phase 4	Transport	100%	0%	PAYGo	1,050,000	300,000	550,000	500.000																	
	orcemain Rehab	Transport	100%	0%	Future SRF25	53,000,000		330,000	300,000								1,000,000	13.000.000	13.000.000	13.000.000	13.000.000					
	arverd Marsh Equipment Decom.	Transport	100%	0%	PAYGo	1,100,000		100.000	1,000,000								1,000,000	13,000,000	13,000,000	13,000,000	13,000,000					
	vington PS Pumps and VFDs	Transport	50%	50%	PAYGo	17,000,000		100,000	1,000,000	2.140.000	10.340.000	4.520.000														
	vingson F5 Fumps and VFDs lewark & Irvington P5 Chemical Sustem Improvemen		50%	50%	PAYGo	6.150,000	600,000	3,600,000	1,950,000	2,140,000	10,340,000	4,020,000														
	ewark PS Pumos and VFDs	Transport	50%	50%	PAYGo	9.926.000	000,000	3,000,000	1,300,000	1300.000	4.326.000	4.300.000														
	ump Station Asset Condition Assessment R&R	Transport	100%	0%	PAYGo	22,450,000			1,500,000	1,300,000	3,850,000	1,000,000	200.000			4.600.000				100,000	5.800.000		5.400,000			
	ransport System Misc. Projects	Transport	100%	0%	PAYGo	4.750,000		250.000		250.000	250,000	250.000	250,000	250.000	250.000	4,600,000 250,000	250.000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000)
			50%	50%	PAYGo	4,750,000	500,000	230,000	200,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	
	/et Weather Flow Management	Transport					2.175.000	2.000.000																		
	eration Blower 11 Replacement (high speed)	Treatment	100%	0%	PAYGo	4,175,000	2,1/5,000																			
	eration Internal Lift Pumps	Treatment	50%	50%	PAYGo	3,000,000		500,000	2,500,000																	
	Ivarado Influent PS Improvements	Treatment	80%	20%	Issued Debt	9,800,000	4,000,000	5,800,000																		
	Ivarado Influent Valve Box Gate Valves 1-2	Treatment	100%	0%	PAYGo	300,000	300,000																			
	athodic Protection Improvements - Plant	Treatment	100%	0%	PAYGo	2,450,000	900,000			500,000		150,000		150,000		150,000		150,000		150,000		150,000		150,000		
	entrifuge Building Improvements	Treatment	50%	50%	PAYGo	6,200,000	3,000,000	3,200,000		8.222222																
	entrifuge Replacement	Treatment	50%	50%	Future SRF24	16,500,000		700,000		7,400,000	7,400,000															
	entrifuge Sys. Equip Replacement	Treatment	80%	20%	PAYG ₀	8,200,000			900,000	3,650,000	3,650,000															
	ogen Engine No. 1 Block 60k Replacement	Treatment	80%	20%	PAYGo	2,400,000					1,100,000								1,300,000							
	ogen Engine No. 2 Block 60k Replacement	Treatment	80%	20%	PAYGo	3,700,000		1,000,000								1,200,000								1,500,000		
	ogen Retrofit	Treatment	50%	50%	PAYGo	2,200,000							200,000	2,000,000												
	ontrol Box No. 1 Improvements	Treatment	100%	0%	PAYG ₀	7,000,000							650,000	4,400,000	1,950,000											
	egritter @ Headworks	Treatment	50%	50%	PAYGo	17,300,000							1,900,000	10,800,000	4,600,000											
	egritter Building Roof (Seismic) Replacement	Treatment	100%	0%	PAYGo	5,400,000										600,000	3,400,000	1,400,000								
	iffuser Replacement	Treatment	100%	0%	PAYGo	1,700,000													950,000	750,000						
	igester Additional Capacity	Treatment	0%	100%	PAYGo	- 1																				
	igester No. 1 Insp & Rehab	Treatment	100%	0%	PAYG ₀	10,300,000	400,000	3,600,000													600,000	5,700,000				
D	igester No. 2 Insp & Rehab	Treatment	100%	0%	PAYG ₀	7,400,000	1,500,000												600,000	5,300,000						
	igester No. 3 Insp & Rehab	Treatment	100%	0%	PAYGo	4,600,000											450,000	4,150,000						·····		1
	igester No. 4 Insp & Rehab	Treatment	100%	0%	PAYGo	4,550,000					450,000	4,100,000														
	igester No. 5 Insp & Rehab	Treatment	100%	0%	PAYGo	4.750.000							450,000	4,300,000						·····i			·····	·····		·
	ingester No. 6 map & Nortab	T	10076	00/	DAVC-	F 700,000			500,000	X C00 000			100,000	1,000,000												

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CIP Information

4	4 В	С	D	Е	F	G	Н	1	J
7									
8	CIP						2020/21	2021/22	2022/23
9	Project -	Category -	Structural 🔄	Capacity (90) 🕝	Type of Fun	Total 🔄	2021 🚽	2022 🔄	2023 -
10	Field Ops Bldg. Sesmic Upgrade and Leak Repairs	Admin Facilities	100%	Ä	PAYGo	3,300,000			
11	Additional CS (Vehicle) Storage	Admin Facilities	100%		PAYGo	250,000			
12	FMC Storage	Admin Facilities	100%		PAYGo	300,000			
13	Plant Paving	Admin Facilities	100%	Å	Future SRF1	1,750,000			250,000
14	Radio Repeater Antenna Replacement	Admin Facilities	100%	Å	PAYGo	150,000			
15	Solar Panel Replacement at Alvarado	Admin Facilities	50%		PAYGo	300,000			
16	Solar Panel Replacement at Carport	Admin Facilities	50%		PAYGo	700,000	100,000		
17	Solar Panel Replacement at Irvington	Admin Facilities	50%		PAYGo	2,100,000		300,000	
18	Cast Iron/Pipe Lining	Collection System	100%		PAYGo	5,518,000	500,000		532,000
19	Central Avenue Sanitary Sewer Relocation	Collection System	100%		WIFIA Loan 1	1,050,000	50,000	1,000,000	
20	Gravity Sewer Rehab/Replacement	Collection System	100%	ž	WIFIA Loan 1	19,946,000	1,000,000	400,000	1,495,000
21	RCP Sewer Rehab (Alvarado Basin)	Collection System	100%	A	WIFIA Loan 1	3,850,000			
	RCP Sewer Rehab (Irvington Basin)	Collection System	100%	Å	WIFIA Loan 1	3,300,000	300,000	3,000,000	
23	RCP Sewer Rehab (Newark Basin)	Collection System	100%	0%	WIFIA Loan 1	3,850,000			
24	Alameda Creek Crossing Lift Station	Transport	50%		Future Bond 1	11,000,000			
25	Cathodic Protection Improvements - Transport	Transport	100%		Future Bond 1	1,550,000	300,000	500,000	
26	Cherry Street Pump Station (Predesign)	Transport	0%	100%	Grant 1	3,150,000	150,000	1,500,000	1,500,000
		A SAN THE REAL PROPERTY.							



District Fiscal Model

Other Items

- Calculates all debt payments by type of loan
- Set rate by borrowing
- Will handle short term/interim financing
- Tracks interest earnings on fund balance
- Can track multiple funds
- Can be modified to add in additional lines for revenue and expenditures
- Data from model supports proforma's for borrowings



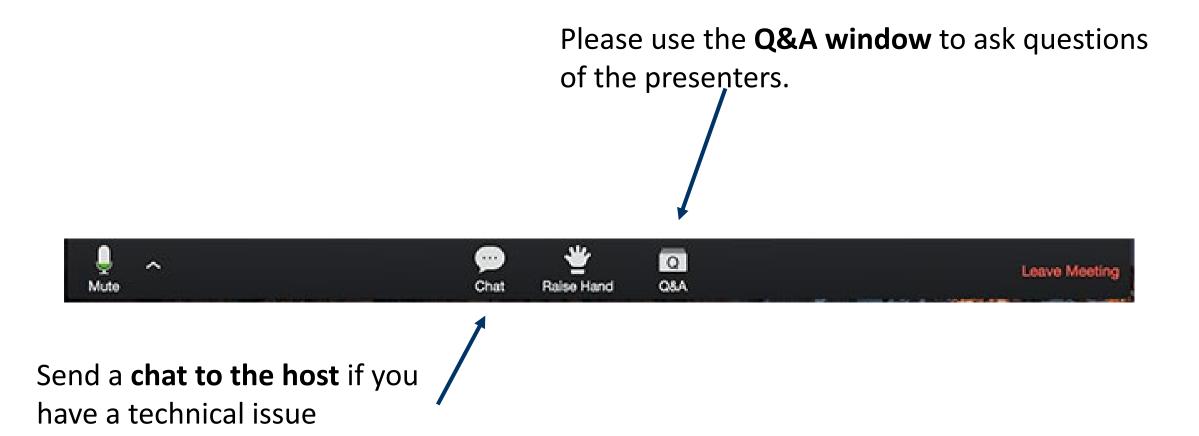
District Fiscal Model

- Modeling Outcomes
 - No surprises
 - Organized and methodical work environment
 - Teams know what's expected of them now and in the future
 - Efficient use of resources (planned buildout)
 - Stabilization of rates over time





Questions and Answers



U.S. EPA Water Finance Center www.epa.gov/waterfinancecenter

