TEHAMA COUNTY SANITATION DISTRICT NO. 1

Mineral Wastewater Rate Study

Board of Directors Study Session

November 10, 2020







Review Rate Study assumptions and recommendations:

- Discuss possible alternatives to consider.
- Update on influent wastewater treatment plant (WWTP) flows.
- Discuss grant funding opportunities.
- Discuss suggested updates to District Ordinance 15 (Ordinance) language and fees.

Wastewater Rate Study Assumptions

- All planning grant deliverables had to be completed by December 2019.
- Assumed worst-case funding scenario for future capital improvement projects:
 - 100% loan, no grant.
- Focused on the next five years.
- Funded 50% depreciation.
- Funded a part-time Grade 3 Chief Plant Operator salary of \$50,000.

Wastewater Rate Study Assumptions Cont.

- Maintained historic fixture-based HE counts and adjustments for non-residential users.
- Funded ~\$1M of collection and treatment improvements:
 - About two-thirds of improvements are for collection system deficiencies.
 - About one-third are replacement of WWTP aging infrastructure with a useful service life of less than 20 years.
 - All improvements to be paid for via 100% low-interest loan @ 3% market rate with USDA Rural Development (RD).

Wastewater Rate Study Recommendations

Existing Rate = <u>\$43.00/month</u>:

- Since 2009 (>10 years).
- 1% of current median household income (MHI).

Proposed Rate = <u>\$82.56/month</u>:

2% of current MHI.

• One 92% increase over the next five years:

 More gradual multi-year increases would result in higher rates and less reserves at the end of five years.

		TABLE 6					
	Tehama County Sa	anitation District	t No. 1 Mineral				
	2019 Was	stewater Rate S	Study		_		
	Summary of Wastewater Enterpris			eciation Fund	ed		
				8			
		Budgeted	Projected	Projected	Projected	Projected	Projected
lo.		(FY 19-20)	(FY 20-21)	(FY 21-22)	(FY 22-23)	(FY 23-24)	(FY 24-25)
1	WASTEWATER RATES						
2	Single-Family Annual Service Charge:	\$516.00	\$990.72	\$990.72	\$990.72	\$990.72	\$990.7
3	Single-Family Annual Increase:		\$474.72	\$0.00	\$0.00	\$0.00	\$0.0
4	Single-Family Monthly Increase:		\$39.56	\$0.00	\$0.00	\$0.00	\$0.0
5							
6	ESTIMATED NUMBER OF SINGLE-FAMILY CONNECTION EQUIVALENTS						
7	Beginning of Year Hes:		251	251	251	252	253
8	Estimated Additional HEs Due to Growth ^{(1);}		0	1	1	1	
9	Estimated Year-End Hes:	251	251	251	252	253	254
10		1900 - 19		- Th.		1.280	
11	BEGINNING FUNDS AVAILABLE BALANCE	: \$0	\$14,805	\$98,304	\$178,384	\$254,441	\$29,23
12							
13	REVENUES						
14	Fixed Service Charges:	\$129,260	\$248,180	\$248,920	\$249,670	\$250,420	\$251,17
15	1995 Assessment:	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,00
16	Total Revenues	: \$169,260	\$288,180	\$288,920	\$289,670	\$290,420	\$291,17
17		<u> </u>	4 ,		+,	+,	
18	EXPENDITURES						
19	County Budget:	\$120,960	\$151,954	\$156,512	\$161,208	\$166,044	\$171,02
20	Improvement Projects Paid by Rates:	\$0	\$0	\$0	\$0		\$11 1,02
21	Existing Debt Service:	\$33,495	\$33,118	\$32,718	\$32,795	\$32,828	\$32,81
22	New Debt Service on USDA RD Loan:	\$0	\$0	\$0	\$0	\$42,700	\$42,70
23	Depreciation:	\$0	\$19,610	\$19,610	\$19,610	\$19,610	\$19,61
24	Total Expenditures ⁽²⁾	\$154,455	\$204,681	\$208,840	\$213,613	\$515,623	\$266,15
25		φ154,455	¥204,00 I	4200,040	ψ215,015	ψ 313,02 3	ψ200, 15
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26	YEAR-END BALANCE/OPERATING RESERVE	: \$14,805	\$98,304	\$178,384	\$254,441	\$29,238	\$54,25
27							
28	YEAR-END CAPITAL IMPROVEMENT FEES ⁽³⁾ :	\$0	\$0	\$8,417	\$16,859	\$25,326	\$33,81
29							
30	YEAR-END OPERATING RESERVE ⁽⁴⁾	9.6%	48.0%	85.4%	119.1%	11.2%	20.4%
31							
32	YEAR-END DEPRECIATION/EXTRAORDINARY O&M RESERVE ⁽⁵⁾	\$0	\$19,610	\$39,220	\$58,830	\$78,440	\$98,05
33							
34	ANNUAL INCREASE IN USER CHARGE:		92.0%	0.0%	0.0%	0.0%	0.0%
	d on annual growth rate of 0.3%.						
	ding unfunded 50% depreciation expense.						
	al Improvement Fees are for growth-related improvements and are not used for operating expenses.						
	an improvement rees are for grown related improvements and are net ased for operating expenses. entage operating reserve is based on the year-end Operating Reserve Fund Balance divided by Total Expendi	tures less Capital Proie	ects.				
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Summary of Wastewater Enterprise Financial Plan STEWATER RATES Single-Family Annual Service Charge: Single-Family Annual Increase: Single-Family Monthly Increase: Single-Family Monthly Increase: IMATED NUMBER OF SINGLE-FAMILY CONNECTION EQUIVALENTS nning of Year HEs nated Additional HEs due to Growth ⁽¹⁾ mated Year-End HEs	- 50% Deprec Budgeted (FY 19-20) \$516.00	rojected (FY 20-21) \$619.20 \$103.20 \$8.60 251 0 251	Projected (FY 21-22) \$743.04 \$123.84 \$10.32 251 1	Projected (FY 22-23) \$854.50 \$111.46 \$9.29 251 1	Projected (FY 23-24) \$982.67 \$128.17 \$10.68 252 1	(FY 24-25) \$1,080.94 \$98.27 \$8.19 253 1
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Single-Family Annual Service Charge: Single-Family Annual Increase: Single-Family Monthly Increase: IMATED NUMBER OF SINGLE-FAMILY CONNECTION EQUIVALENTS nning of Year HEs mated Additional HEs due to Growth ⁽¹⁾ mated Year-End HEs	(FY 19-20) \$516.00 251	(FY 20-21) \$619.20 \$103.20 \$8.60 251 0 251	(FY 21-22) \$743.04 \$123.84 \$10.32 251 1	(FY 22-23) \$854.50 \$111.46 \$9.29 251 1	(FY 23-24) \$982.67 \$128.17 \$10.68 252 1	(FY 24-25) \$1,080.94 \$98.27 \$8.19 253 1
Single-Family Annual Service Charge: Single-Family Annual Increase: Single-Family Monthly Increase: IMATED NUMBER OF SINGLE-FAMILY CONNECTION EQUIVALENTS nning of Year HEs mated Additional HEs due to Growth ⁽¹⁾ mated Year-End HEs	251	\$103.20 \$8.60 251 0 251	\$123.84 \$10.32 251 1	\$111.46 \$9.29 	\$128.17 \$10.68 252 1	\$98.27 \$8.19 253 1
Single-Family Annual Increase: Single-Family Monthly Increase: IMATED NUMBER OF SINGLE-FAMILY CONNECTION EQUIVALENTS nning of Year HEs mated Additional HEs due to Growth ⁽¹⁾ mated Year-End HEs	251	\$103.20 \$8.60 251 0 251	\$123.84 \$10.32 251 1	\$111.46 \$9.29 	\$128.17 \$10.68 252 1	\$98.27 \$8.19 253 1
Single-Family Monthly Increase: IMATED NUMBER OF SINGLE-FAMILY CONNECTION EQUIVALENTS nning of Year HEs mated Additional HEs due to Growth ⁽¹⁾ mated Year-End HEs	2000 I.0000	\$8.60 251 0 251	\$10.32 251 1	\$9.29 251 1	\$10.68 252 1	\$8.19 253 1
IMATED NUMBER OF SINGLE-FAMILY CONNECTION EQUIVALENTS nning of Year HEs nated Additional HEs due to Growth ⁽¹⁾ mated Year-End HEs	2000 I.0000	251 0 251	251	251	252	253 1
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nning of Year HEs nated Additional HEs due to Growth ⁽¹⁾ nated Year-End HEs	2000 I.0000	0 251	1	1	1	1
nated Additional HEs due to Growth ⁽¹⁾ nated Year-End HEs	2000 I.0000	0 251	1	1	1	1
nated Year-End HEs	2000 I.0000	251	1 251	1 252	1 253	1 254
	2000 I.0000	dow ^{and} ow	251	252	253	254
INNING FUNDS AVAILABLE BALANCE:	\$0	\$14.805				2.54
INNING FUNDS AVAILABLE BALANCE:	\$0	\$14 805				
		φ14,000	\$5,234	\$23,084	\$64,811	\$18,098
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	and the second second second	and the second		an same company		\$274,040
						\$40,000
Total Revenue:	\$169,260	\$195,110	\$226,690	\$255,340	\$288,380	\$314,040
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						\$171,025 \$0
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						\$51,800
						\$19,610
	AND REAL PROPERTY.					
	\$154,455	\$204,081	\$208,840	\$213,013	\$330,093	\$275,250
	A	45.001	400.004	*****	A10.000	450 000
YEAR-END BALANCE/OPERATING RESERVE:	\$14,805	\$5,234	\$23,084	\$64,811	\$18,098	\$56,888
YEAR-END CAPITAL IMPROVEMENT FEES ⁽³⁾ :	\$0	\$0	\$8,417	\$16,859	\$25,326	\$33,819
YEAR-END OPERATING RESERVE ⁽⁴⁾ :	9.6%	2.6%	11.1%	30.3%	6.7%	20.7%
YEAR-END DEPRECIATION/EXTRAORDINARY O&M RESERVE ⁽⁶⁾ :	\$0	\$19,610	\$39,220	\$58,830	\$78,440	\$98,050
ANNUAL INCREASE IN USER CHARGE:		20.0%	20.0%	15.0%	15.0%	10.0%
nnual growth rate of 0.3%.						
	YEAR-END OPERATING RESERVE ⁽⁴⁾ : YEAR-END DEPRECIATION/EXTRAORDINARY O&M RESERVE ⁽⁵⁾ : ANNUAL INCREASE IN USER CHARGE:	Service Charges \$129,260 Assessment \$129,260 Assessment \$40,000 Total Revenue: \$169,260 INDITURES IV Budget \$120,960 Vement Projects Paid by Rates \$0 Ing debt service \$33,495 Iebt service on USDA RD Loan \$0 Icitation \$0 Icitat	Service Charges \$129,260 \$155,110 Assessment \$40,000 \$40,000 Total Revenue: \$169,260 \$195,110 INDITURES ivy Budget \$120,960 \$1151,954 vement Projects Paid by Rates \$0 \$0 ing debt service \$33,495 \$33,118 iebt service on USDA RD Loan \$0 \$0 icition \$0 \$0 relation \$0 \$0 vertice \$154,455 \$204,681 YEAR-END BALANCE/OPERATING RESERVE: \$14,805 \$5,234 YEAR-END CAPITAL IMPROVEMENT FEES ⁽⁹⁾ : \$0 \$0 YEAR-END OPERATING RESERVE: \$14,805 \$5,234 YEAR-END OPERATING RESERVE: \$16,80 \$19,610 YEAR-END OPERATING RESERVE ⁽⁴⁾ : \$0 \$19,610 YEAR-END DEPRECIATION/EXTRAORDINARY O&M RESERVE ⁽⁶⁾ : \$0 \$19,610 ANNUAL INCREASE IN USER CHARGE: 20.0% \$19,610	Service Charges \$129,260 \$155,110 \$186,690 Assessment \$40,000 \$40,000 \$40,000 \$40,000 Total Revenue: \$169,260 \$195,110 \$226,690 INDITURES ************************************	Service Charges \$129,260 \$155,110 \$188,680 \$215,340 Assessment \$40,000 \$40,010 \$19,610 \$19,610	Service Charges \$129,280 \$155,110 \$186,690 \$215,340 \$248,380 Assessment \$40,000 \$40,801 \$32,718 \$32,718 \$32,718 \$32,718 \$32,718 \$32,718

3. Capital Improvement Fees are for growth related improvements and are not used for operating expenses.

4. Percentage operating reserve is based on the year end Operating Reserve Fund Balance divided by Total Expenditures less Capital Projects.

5. Depreciation/Extraordinary O&M reserve fees are for aging infrastructure replacement and are not used for operating expenses. 50% of depreciation will be funded as part of this rate increase.

Alternatives to Consider

- Do not pay down loan with rates:
 - Will allow for a gradual five-year rate increase.
 - Still results in same overall increase and year-end operating reserve.
 - Larger loan amount and more interest paid long-term.

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	20 <mark>19 Wa</mark> a	stewater Rate 6	Hudy				
	Summary of Wastewater Enterprise Financial Plan - 50%	Depreciation	Funded - 5-Ye	ear Gradual R	ate Increase, L	arger Loan	
		Budgeted	Projected	Projected	Projected	Projected	Projected
lo.		(FY 19-20)	(FY 20-21)	(FY 21-22)	(FY 22-23)	(FY 23-24)	(FY 24-25)
1	WASTEWATER RATES						
2	Single-Family Annual Service Charge:	\$516.00	\$619.20	\$712.08	\$818.89	\$900.78	\$990.8
3	Single-Family Annual Increase:		\$103.20	\$92.88	\$106.81	\$81.89	\$98.8
4	Single-Family Monthly Increase:		\$8.60	\$7.74	\$8.90	\$6.82	\$7.5
5							
6	ESTIMATED NUMBER OF SINGLE-FAMILY CONNECTION EQUIVALENTS			international and			(1.1025.1
7	Beginning of Year HEs		251	251	251	252	25
8	Estimated Additional HEs due to Growth ⁽¹⁾		0	1	1	1	
9	Estimated Year-End HEs	251	251	251	252	253	25
10							
11	BEGINNING FUNDS AVAILABLE BALANCE:	\$0	\$14,805	\$5,234	\$15,304	\$48,061	\$42,45
12							
13	REVENUES	T 1	1				
14	Fixed Service Charges	\$129,260	\$155,110	\$178,910	\$206,370	\$227,680	\$251,20
15	1995 Assessment	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,00
16	Total Revenue:	: \$169,260	\$195,110	\$218,910	\$246,370	\$267,680	\$291,20
17						and a second	
18	EXPENDITURES						
19	County Budget	\$120,960	\$151,954	\$156,512	\$161,208	\$166,044	\$171,02
20	Improvement Projects Paid by Rates	\$0	\$0	\$0	\$U	\$0	\$(
21	Existing debt service	\$33,495	\$33,118	\$32,718	\$32,795	\$32,828	\$32,81
22	New debt service on USDA RD Loan	\$0	\$0	\$0		\$54,800	\$54,80
23	Depreciation	\$0	\$19,610	\$19,610	\$19,610	\$19,610	\$19,61
24	Total Expenditures ⁽²⁾ :	\$154,455	\$204,681	\$208,840	\$213,613	\$273,282	\$278,25
25							
26	YEAR-END BALANCE/OPERATING RESERVE	: \$14,805	\$5,234	\$15,304	\$48,061	\$42,459	\$55,40
27					· / · ·		
28	YEAR-END CAPITAL IMPROVEMENT FEES ⁽³⁾ :	\$0	\$0	¢0 447	¢46.950	\$25 22c	¢22.04
28		. ֆՍ	φU	\$8,417	\$16,859	\$25,326	\$33,81
		0.001	0.001	7.004	00.50	45.50	40.00
30	YEAR-END OPERATING RESERVE ⁽⁴⁾ :	9.6%	2.6%	7.3%	22.5%	15.5%	19.9%
31							
32	YEAR-END DEPRECIATION/EXTRAORDINARY O&M RESERVE ⁽⁵⁾ :	\$0	\$19,610	\$39,220	\$58,830	\$78,440	\$98,05
33							
34	ANNUAL INCREASE IN USER CHARGE:		20.0%	15.0%	15.0%	10.0%	10.0%
Base	d on annual growth rate of 0.3%.						
Exclu	uding unfunded 50% depreciation expense.						

4. Percentage operating reserve is based on the year end Operating Reserve Fund Balance divided by Total Expenditures less Capital Projects.

5. Depreciation/Extraordinary O&M reserve fees are for aging infrastructure replacement and are not used for operating expenses. 50% of depreciation will be funded as part of this rate increase.

Alternatives to Consider Cont.

Do not fund depreciation:

- 80% increase to rates required rather than 92%.
- Not recommended.
- Delay collection and/or treatment improvements and only update rates to include new WWTP operator, depreciation, etc.:
 - Perhaps consider delaying collection system improvements given decreased WWTP influent flows.
 - Not recommended.

Alternatives to Consider Cont.

- Delay Rate Study Update and associated rate increase until State grant funding eligibility is determined:
 - Rate Study Update would be an eligible grant cost.
 - Most recommended of all alternatives.

WWTP Influent Flows Update

Before Park Service Improvement Project (2015-2017 flows):

- ADWF = 0.037 MGD (52% of design ADWF).
- PWWF = 0.31 MGD (42% of design PWWF).

After Park Service Improvement Project (Winter 2019/2020):

- ADWF = 0.014 MGD (19% of design ADWF).
- PWWF = 0.14 MGD (19% of design PWWF).
- Average 59% decrease in flows.*
 - *Dryer than average winter.

WWTP Influent Flows Update Cont.

Recommendations:

- Continue monitoring flows to ensure they remain lower during future wet winters.
- Utilize flow monitor to identify future higher infiltration and inflow (I&I) areas.

Grant Funding Opportunities

- Clean Water State Revolving Fund (CWSRF)
 - Must have more than 50% of homes occupied at least six months of the year – questionable.
 - CWSRF has yet to provide a definitive answer if Mineral will be eligible for construction funding.
 - Currently considering more residents now since COVID-19.
 - Latest update as of October 15 Mineral has been allocated funding by the end of the fiscal year, and the project has been moved forward to reviews.

CWSRF Cont.

- MHI is updated every year around January/February.
- Must have an MHI of <80% of that of the State and wastewater rates must be at least 1.5% of current MHI:
 - 75% grant eligible up to a \$6M project cost.
 - Mineral MHI fell into this category during 2019, but rates would not qualify.
- If MHI is <60% of that of the State, rates are not considered:
 - 100% grant eligible up to a \$6M project cost.
 - Right now, according to recent changes as of two months ago, Mineral currently falls under this category!

USDA RD

- Does not have a minimum permanent occupancy requirement to be eligible for funding.
- Must have an MHI of at least <80% of that of the State and wastewater rates close to about 1.5 to 2% MHI.
- Utilizes MHI from 2006-2010 until the 2020 census data is finalized, which will then be utilized.
 - Mineral does not currently qualify for any <u>grant</u> funding from USDA RD due to MHI being too high for those five years.

HUD Community Development Block Grant (CDBG)

- Tehama County can apply for funding for Mineral.
- Typically, Notice of Funding Availability (NOFA) released yearly around January/February.
- Program recently changed from competitive to over-the-counter for public improvement projects.
- Limited to available grant funding County-wide for all programs (housing, economic development, etc.).
- Must meet low- to moderate-income requirements .

- Integrated Regional Water Management (IRWM) Grant Program
 - No income requirements.
 - Competitive application process typically prioritize projects with water quality/quantity issues.
 - Regional group (Northern Sacramento Valley) must apply as a whole for funding.
 - Limited to available region-wide grant funding.
 - It is questionable if the program will continue after this next year.

General Rate Study Recommendations

- For future rate increases beyond this next one, raise rates more frequently but in smaller increments if for no other reason than to keep up with inflation.
- Eventually fund 100% depreciation.
- Verify the assumed operations and maintenance increase of 3% inflation is correct, and if not, make adjustments to rates accordingly.

General Rate Study Recommendations Cont.

- Adjust improvement-related fees/projects every year by the Engineering News Record Construction Cost Index.
- Review basis of determining household equivalent (HE) counts:
 - Fixture counts versus flow-based.
- Update the Rate Study every five years.

District Ordinance and District Fees

- 2019 Wastewater Master Plan (WWMP) recommended Ordinance language updates:
 - Ordinance currently references outdated manual or very general codes for required materials and procedures to follow for required cleanouts:
 - Suggest referring to specific County Standard sections and/or specific Building and/or Plumbing Codes (i.e., current edition of Uniform Building Code or California Plumbing Code, specific section(s), etc.).
 - Or, include language from those standards directly in Ordinance.
 - Ordinance does include specific infiltration leakage testing limits:
 - Suggest adding how, how often, and when leakage tests are required to be conducted. For example, remodel a building; change use of house, building, property, etc.; repair/replace sewer; addition to structures (i.e., building permit required); sale of property, etc.

District Ordinance and District Fees Cont.

- Implement a Capacity Charge Table 13 from WWMP:
 - New users pay for their fair share of the system.
 - Suggest updating based on how the future capital improvement project is funded.
- Update all District fees based on current office staff time, charge rate, etc.:
 - Existing Connection Fee charge of \$200 for the connection permit and inspection fee.
 - Delinquent Payment Fee.
 - Are any others needed? Plan Review Fee, Credit Card Convenience Fee, Return Check Fee, Door Tag Fee (if late payments), After-Hours Call-Out Fee, etc.
 - Or just add language in Ordinance to point to Tehama County associated fees?

District Ordinance and District Fees Cont.

- Sewer Lateral Inspection Program (SLIP):
 - Still very much in draft form.
 - Suggest finalizing and implementing language into District Ordinance, building permit forms, etc.

Closing Recommendations

- Wait to complete rate increase and Prop 218 process until CWSRF determines if Mineral will be eligible for construction funding:
 - If determined to NOT be eligible for grant funding, consider alternatives.
 - Update Rate Study upon final determinations:
 - Eligible project cost to be included with construction funding.

Closing Recommendations Cont.

Update District Ordinance language for more definitive codes/standards and lateral language.

Update District fees:

- Implement a Capacity Charge.
- Update other fees based on office staff time, charge rate, etc.
- Finalize and implement SLIP:
 - Eligible project cost to be included with construction funding.

Questions?

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