

Sewer Rate Discussion

1. Need

- a. Last Increase July 2002
- b. Costs Escalation/Operating Losses
- c. CVWRF Capital Improvement Program
- d. Current Inequities
- e. Other CVWRF Member Entities Have Increased Rates
- f. Depreciation of System Is Not Funded

2. Process

- a. Commissioned Rate Study
- b. Review of Current Rates Based on Winter Averages
- c. Internal Evaluations
- d. Staff Recommendations

3. Proposal

- a. Increase the Rate Based on Water Use
- b. Introduce "Across the Board" Strength Component

4. Result

- a. Increase In Revenue To Fund Operating and Capital Expenses
- b. Equalize Strength Assessments
- c. Reduction Of CVWRF Pre-Treatment Costs/Internal Sampling
- d. Better Positioned To React To CVWRF Increases/Needs
- e. Improve the City's Waste Water Infrastructure

Central Valley Water Reclamation Facility
2016 Proposed Budget

(Sept 2014 thru Aug 2015)	monthly flows	* monthly flows	* monthly flows	* monthly flows	* 3yr history avg	int/8 stations	* monthly flows	* monthly flows	* monthly flows	board/7	Bond	TOTAL
O & M	O & M	Administration	Laboratory	Pretreatment	Field	Interceptor	Engineering	Capital	Emergency	Board	Payment	
Percent	O & M	Administration	Laboratory	Pretreatment	Field	Monitoring	Engineering	Outlay	Contingency	Expenses		
Cottonwood	19.81%	\$1,978,542	\$281,955	\$161,163	\$50,745	\$5,625	\$198,643	\$1,117,471	\$59,429	\$12,764		\$3,866,337
Mt. Olympus	22.71%	\$2,268,136	\$323,224	\$184,752	107,718	11,250	\$227,718	\$1,281,032	\$68,128	\$12,764		4,484,721
Granger-Hunter	23.91%	\$2,387,838	\$340,282	\$194,502	163,661	5,625	\$239,735	\$1,348,639	\$71,723	\$12,764		4,764,771
Kearns	10.32%	\$1,030,281	\$146,822	\$83,922	67,501	5,625	\$103,439	\$581,897	\$30,947	\$12,764	\$463,038	2,526,235
Murray	8.49%	\$848,105	\$120,860	\$69,083	68,648	5,625	\$85,149	\$479,006	\$25,475	\$12,764	235,760	1,950,474
South Salt Lake	5.07%	\$506,366	\$72,160	\$41,246	142,955	5,625	\$50,838	\$285,993	\$15,210	\$12,764	32,466	1,165,624
Taylorville-Bennion	9.70%	\$968,427	\$138,007	\$78,883	20,971	5,625	\$97,229	\$546,963	\$29,089	\$12,764	223,556	2,121,514
TOTAL	100.00%	\$9,987,695	\$1,423,310	\$813,550	\$622,200	\$45,000	\$1,002,750	\$5,641,000	\$300,000	\$89,350	\$954,820	\$20,879,675

% flow reflects Sept flow
The 2016 budget will use
the Oct 2015 flow

Oper Revenue	(287,000)
Admin Revenue	(145,000)
Lab Revenue	(55,000)
Field Revenue	(160,000)
Emer Cont	(300,000)
Capital	(5,641,000)
Bond	(954,820)
(Projected to Budget sheet total)	\$13,336,855

3yr history avg
table
Field %

Cottonwood	8.16%	Pretreatment Field hours are billed as actual time worked in the field Vacation, Holiday, Haulers and all other misc time will be billed according to the 3yr history avg % table.
Mt. Olympus	17.31%	
Granger-Hunter	26.30%	
Kearns	10.85%	
Murray	11.03%	
South Salt Lake	22.98%	
Taylorville-Bennion	3.37%	
TOTAL	100.00%	

2016
operating = \$ 662,963 16 % Increase over FY2015 EXPENDITURES

2016
CAPITAL = \$ 285,993 38 % Increase over FY2015 EXPENDITURES

Sewer Fund Operating Losses & Depreciation Expense - Past Five Fiscal Years

	FY 2011 *	FY 2012	FY 2013	FY 2014	FY 2015
Operating Loss	(\$126,085)	(\$86,407)	(\$50,082)	(\$188,344)	(\$184,159)
Depreciation Expense	\$333,290	\$339,741	\$355,670	\$373,390	\$388,533

* In FY 2011 there was a gain on the sale of Central Valley Property which offset the operating loss

Central Valley Water Reclamation Facility

5 Year Capital Plan (10/14/2015)

Field	Project or Item Name	2016 revised	2017	2018	2019	2020	2021	Total
	Coltonwood/Murray (South of 3300 South) Sliplining	\$ 2,000,000			\$ 600,500		\$ 2,000,000	\$ 4,000,000
	South Salt Lake Force Main (Interceptor) Rehabilitation/Replacement		\$ 2,000,000	\$ 2,000,000				\$ 600,500
	Influent Box Channel (Rehab., Gates, Vent.)					\$ 1,332,000		\$ 4,000,000
	GHID Siphon Lining/Rehabilitation							\$ 1,332,000
	Bypass Box and Piping to Mill Creek Lining/Rehabilitation							\$ -
	GHID Siphon Structures and Meter Station Sulfide Control Systems	\$ 200,000						\$ 200,000
	General Collection System Manhole Rehabilitation (as needed basis)		\$ 50,000				\$ 50,000	\$ 100,000
Liquid Treatment Process								
	Plantwide HVAC Evaluation			\$ 300,000				\$ 300,000
	Plantwide Seismic Evaluation				\$ 300,000			\$ 300,000
	Replace (7) Grit pumps	\$ 89,000	\$ 60,000					\$ 149,000
	3/8-inch Barscreen Rack Replacement	\$ 150,000						\$ 150,000
	Screenings and Grit System Replacement					\$ 2,250,000	\$ 2,250,000	\$ 4,500,000
	Headworks HVAC Upgrade/Replacement					\$ 500,000		\$ 500,000
	Influent Pump Right Angle Gear Drive Rebuild	\$ 40,000				\$ 45,000		\$ 85,000
	Scum Tipping Trough Replacement East PC Inlet Channel	\$ 35,000						\$ 35,000
	Trickling Filters No. 1 -6 Windows Repair				\$ 125,000	\$ 125,000	\$ 125,000	\$ 375,000
	Trickling Filter No. 6 Feedwell Repair & TF No. 3 Hydrodock					\$ 300,000		\$ 300,000
	Primary Clarifier Launder and Pump Replacement, Drive Rebuild and Scraper Coating/Recondition	\$ 130,000	\$ 130,000	\$ 130,000	\$ 770,000	\$ 770,000	\$ 770,000	\$ 2,700,000
	Rebuild Trickling Filter Pump				\$ 40,000		\$ 40,000	\$ 80,000
	Replace RSS Pumps	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 300,000
	Secondary Clarifier Coating/Recondition	\$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000	\$ 100,000	\$ 575,000
	Rebuild Secondary Clarifier Drives	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 180,000
	Secondary Clarifier No. 1-8 Gate Repair/Replacement (8 units)	\$ 150,000						\$ 150,000
	3W/Cooling Pump Station and Hypochlorite System			\$ 2,500,000	\$ 2,500,000			\$ 5,000,000
	GBT Building Electrical and HVAC upgrades to meet code			\$ 500,000				\$ 500,000
	UV System SCADA Programing		\$ 75,000					\$ 75,000
	UV Gate Structure Enclosure		\$ 150,000					\$ 150,000
	UV Pass No. 2 Equipment			\$ 500,000				\$ 500,000
	UV System Channel Cleaning					\$ 50,000		\$ 50,000
Biosolids Treatment and Disposal								
	Raw Primary Sludge Surge Tank and Strain Press Feed Pumps		\$ 150,000					\$ 150,000
	Recondition strain presses and purchase new presses	\$ 45,000		\$ 45,000			\$ 150,000	\$ 240,000
	Egg Shaped Digester Recoating/New Exterior Sheathing (2)					\$ 750,000	\$ 750,000	\$ 1,500,000
	Waste Gas Burner Replacement			\$ 200,000				\$ 200,000
	Digester No. 1-4 Circulation Pump Replacement (choppers)	\$ 45,000	\$ 45,000					\$ 90,000
	Digester No. 6-7 Circulation Pump Replacement (choppers)			\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 180,000
	Sludge Cake and Polymer Pump Rebuild	\$ 150,000						\$ 150,000
	Dry Polymer Feed System					\$ 65,000		\$ 65,000
	Refurbish Filtrate Tanks				\$ 150,000			\$ 150,000
	Refurbish Equalization and Blend tanks				\$ 400,000	\$ 400,000		\$ 800,000
	Compost Covers (six)		\$ 420,000					\$ 420,000
	Dewatering Building Ventilation Replacement/Upgrades					\$ 500,000		\$ 500,000

CURRENT FEES

Winter Average (*November – April Water Usage*)
Multiplied by Sewer Rate (*Currently \$3.30*) =
Monthly Billing (*July 1 – June 30*)
Unless classified as an Industrial Waste User

**Winter Average x Sewer Rate =
Monthly Billing (FLOW)**

PROPOSED FEES

1. Rate increases from \$3.30 to \$5.00
2. Addition of a STRENGTH component
3. Covers Short Fall
4. Covers Anticipated Capital Renovations

STRENGTH

7 Classifications Determined by Rate Study

1. Residential.
2. General Business.
3. Large Grocery.
4. Manufacturing.
5. Nursing Home.
6. Prepared Foods.
7. High-Strength Contributor.

Strength Classifications include a Multiplier

1. Residential = 1
2. General Business = 1
3. Large Grocery = 1.22 (meat/bakery = high strengths)
4. Manufacturing = 1
5. Nursing Home = 1.23
6. Prepared Foods = 1.34
7. High-Strength Contributor = Individual Samples

CLASSIFICATIONS	RATE	MULTIPLIER	AVERAGE	COUNT	FLOW	STRENGTH	TOTAL
RESIDENTIAL	\$ 5.00	1.00	4481	1905	\$ 72,105.00	\$ -	\$ 72,105.00
GENERAL BUSINESS	\$ 5.00	1.00	3788	587	\$ 31,255.00	\$ -	\$ 31,255.00
LARGE GROCERY	\$ 5.00	1.22	201	1	\$ 1,005.00	\$ 1,226.10	\$ 2,231.10
MANUFACTURING	\$ 5.00	1.00	765	19	\$ 3,930.00	\$ -	\$ 3,930.00
NURSING HOME	\$ 5.00	1.23	282	2	\$ 346.86	\$ 79.78	\$ 426.64
PREPARED FOODS	\$ 5.00	1.34	970	53	\$ 6,060.00	\$ 2,060.40	\$ 8,120.40
PREPARED FOOD - ACTUAL	\$ 5.00	1.34	298	4	\$ 1,490.00	\$ 1,996.60	\$ 3,486.60
HIGH STRENGTH CONTRIBUTOR	\$ 5.00	TBD	TBD	11	\$ 16,185.00	\$ 17,498.40	\$ 33,683.40
INDUSTRIAL PARKS-GENERAL	\$ 5.00	1.00	816	58	\$ 4,080.00	\$ -	\$ 4,080.00
INDUSTRIAL PARKS- FOODS	\$ 5.00	1.34	312	6	\$ 1,560.00	\$ 530.40	\$ 2,090.40
TOTALS			11913	2646	\$ 138,016.86	\$ 23,391.68	\$ 161,408.54
ANNUAL SEWER REVENUE			142956	31752	\$ 1,656,202.32	\$ 280,700.13	\$ 1,936,902.45

COMPARISON BETWEEN CURRENT RATES AND PROPOSED RATES

WINTER AVERAGE x RATE = FLOW
 FLOW x CLASSIFICATION MULTIPLIER = STRENGTH
 FLOW + STRENGTH = MONTHLY RATE

PROPOSED SEWER RATE \$5.00

CLASSIFICATION	DESCRIPTION	FLOW	STRENGTH	BREAKDOWN	TOTAL	CURRENT	MONTHLY INCREASE
		WINTER AVERAGE	MULTIPLIER				
Residential User	HOUSE	2	1	2 x \$5 = \$10; \$10 x 1 - 10 = \$0; \$10 + 0 = \$10	\$ 10.00	\$ 6.60	\$ 3.40
Residential User	HOUSE	4	1	4 x \$5 = \$20; \$20 x 1 - 20 = \$0; \$20 + 0 = \$20	\$ 20.00	\$ 13.20	\$ 6.80
Residential User	HOUSE	6	1	6 x \$5 = \$30; \$30 x 1 - 30 = \$0; \$30 + 0 = \$30	\$ 30.00	\$ 19.80	\$ 10.20
Residential User	HOUSE	8	1	8 x \$5 = \$40; \$40 x 1 - 40 = \$0; \$40 + 0 = \$40	\$ 40.00	\$ 26.40	\$ 13.60
Residential User	HOUSE	10	1	10 x \$5 = \$50; \$50 x 1 - 50 = \$0; \$50 + 0 = \$50	\$ 50.00	\$ 33.00	\$ 17.00
Residential User	DUPLEX	12	1	12 x \$5 = \$60; \$60 x 1 - 60 = \$0; \$60 + 0 = \$60	\$ 60.00	\$ 39.60	\$ 20.40
Residential User	FOUR PLEX	15	1	15 x \$5 = \$75; \$75 x 1 - 75 = \$0; \$75 + 0 = \$75	\$ 75.00	\$ 49.50	\$ 25.50
Residential User	12 UNITS	73	1	73 x \$5 = \$365; \$365 x 1 - 365 = \$0; \$365 + 0 = \$365	\$ 365.00	\$ 240.90	\$ 124.10
Residential User	80+ UNIT APTS	983	1	983 x \$5 = \$4915; \$4915 x 1 - 4915 = \$0; \$4915 + 0 = \$4915	\$ 4,915.00	\$ 3,243.90	\$ 1,671.10
Commercial User	OFFICE BUILDING	5	1	5 x \$5 = \$25; \$25 x 1 - 25 = \$0; \$25 + 0 = \$25	\$ 25.00	\$ 16.50	\$ 8.50
Commercial User	OFFICE BUILDING	10	1	10 x \$5 = \$50; \$50 x 1 - 50 = \$0; \$50 + 0 = \$50	\$ 50.00	\$ 33.00	\$ 17.00
Commercial User	CITY HALL	56	1	56 x \$5 = \$280; \$280 x 1 - 280 = \$0; \$280 + 0 = \$280	\$ 280.00	\$ 184.80	\$ 95.20
Commercial User	MANUFACTURING	118	1	118 x \$5 = \$590; \$590 x 1 - 590 = \$0; \$590 + 0 = \$590	\$ 590.00	\$ 389.40	\$ 200.60
Commercial User	LAUNDROMAT	140	1	140 x \$5 = \$700; \$700 x 1 - 700 = \$0; \$700 + 0 = \$700	\$ 700.00	\$ 462.00	\$ 238.00
Commercial User	RESTAURANT	68	1.34	68 x \$5 = \$340; \$340 x 1.34 - 340 = \$115.6; \$340 + 115.6 = \$455.6	\$ 455.60	\$ 224.40	\$ 231.20
Commercial User	BAKERY	4	1.34	4 x \$5 = \$20; \$20 x 1.34 - 20 = \$6.8; \$20 + 6.8 = \$26.8	\$ 26.80	\$ 13.20	\$ 13.60
Commercial User	FAST FOOD	9	1.34	9 x \$5 = \$45; \$45 x 1.34 - 45 = \$15.3; \$45 + 15.3 = \$60.3	\$ 60.30	\$ 29.70	\$ 30.60
Commercial User	FAST FOOD	30	1.34	30 x \$5 = \$150; \$150 x 1.34 - 150 = \$51; \$150 + 51 = \$201	\$ 201.00	\$ 99.00	\$ 102.00
Commercial User	FAST FOOD	35	1.34	35 x \$5 = \$175; \$175 x 1.34 - 175 = \$59.5; \$175 + 59.5 = \$234.5	\$ 234.50	\$ 115.50	\$ 119.00
Commercial User	GROCERY	57	1.22	57 x \$5 = \$285; \$285 x 1.22 - 285 = \$62.7; \$285 + 62.7 = \$347.7	\$ 347.70	\$ 188.10	\$ 159.60
Commercial User	NURSING HOME	203	1.23	203 x \$5 = \$1015; \$1015 x 1.23 - 1015 = \$233.45; \$1015 + 233.45 = \$1248.45	\$ 1,248.45	\$ 669.90	\$ 578.55