



Sewerage Commission – Oroville Region



Wastewater Rate Study

January 2024



BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

Sewerage Commission – Oroville Region

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Prepared by:



Bartle Wells Associates
2625 Alcatraz Ave, #602
Berkeley, CA 94705
Tel: 510.653.3399
www.bartlewells.com



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INDEPENDENT PUBLIC FINANCE ADVISORS

2625 Alcatraz Ave, #602
Berkeley, CA 94705
Tel 510 653 3399
www.bartlewells.com

January 31, 2024

Glen Sturdevant
Plant Manager
Sewerage Commission-Oroville Region
2880 South 5th Avenue
Oroville, CA 95965

RE: Sewerage Commission – Oroville Region Wastewater Rate Study

Bartle Wells Associates is pleased to submit the Wastewater Rate Study. The study develops long-term financial projections and calculates wastewater rates designed to equitably recover the costs of providing service. The recommended rates are designed to meet SC-OR's operational and capital funding needs, comply with legal requirements, and be fair to all customers.

The proposed rates incorporate overall rate increases needed to maintain the wastewater enterprise's financial stability and meet future funding needs. An option to change the rates to reflect flow differentials between residential customer classes (Single Family, Multi-Family, and Mobile Home) is included. Rate increases are phased in over five years, with consistent annual increases.

We enjoyed working with SC-OR on this assignment and appreciate the ongoing assistance and input received throughout the project. Please contact us anytime if you have questions about the recommendations in this report or other related issues.

Sincerely,

BARTLE WELLS ASSOCIATES

Douglas Dove, PE, CIPFA
Principal/President

Michael DeGroot
Vice President

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1. Executive Summary

Purpose

The Sewerage Commission – Oroville Region (SC-OR) retained Bartle Wells Associates (“BWA”) to develop a financial plan and cost of service study for SC-OR’s wastewater rates to ensure financial stability over the next five years (FY 2023/24 to FY 2027/28).

SC-OR operates and maintains the Oroville area wastewater treatment plant under the authority of a Joint Powers Agreement between the City of Oroville (City), Lake Oroville Area Public Utility District (LOAPUD) and Thermalito Water and Sewer District (TWSD). The City, LOAPUD and TWSD bill wastewater customers for the cost of operating and maintaining the wastewater treatment plant and the cost of operating and maintaining each entity’s wastewater collection system. There are currently over 18,000 equivalent dwelling units (EDUs) connected to SC-OR’s wastewater treatment plant.

Legal Authority

The statutory authority for levying wastewater rates is included in Health and Safety Code section 5471 which states: “...any entity shall have power, by an ordinance or resolution approved by a two-thirds vote of the members of the legislative body thereof, to prescribe, revise and collect, fees, tolls, rates, rentals, or other charges for services and facilities furnished by it, either within or without its territorial limits, in connection with its water, sanitation, storm drainage, or sewerage system.”

(California Health and Safety Code 5471)

Proposition 218

Proposition 218, the “Right to Vote on Taxes Act”, was approved by California voters in November 1996 and is codified as Articles XIIC and XIID of the California Constitution. Proposition 218 establishes requirements for imposing any new or increasing any existing property-related fees and charges.

SC-OR tributary agencies must follow the procedural requirements of Proposition 218 for all wastewater rate increases. These requirements include:

- 1. Noticing Requirement:** SC-OR tributary agencies must mail a notice of the proposed rate increases to all affected property owners. The notice must specify the amount of the fee, the basis upon which it was calculated, the reason for the fee, and the date/time/location of a public rate hearing at which the proposed rates will be considered/adopted.

2. **Public Hearing:** SC-OR tributary agencies must hold a public hearing prior to adopting the proposed rate increases. The hearing must be held not less than 45 days after the required notices are mailed.
3. **Rate Increases Subject to Majority Protest:** At the public hearing, the proposed rate increases are subject to majority protest. If more than 50% of affected property owners submit written protests against the proposed rate increases, the increases cannot be adopted.

Proposition 218 also established several substantive requirements that apply to wastewater rates and charges, including:

1. **Cost of Service:** Revenues derived from the fee or charge cannot exceed the funds required to provide the service. In essence, fees cannot exceed the “cost of service.” Agencies may carry a prudent level of reserves and save cash for future projects or emergencies.
2. **Intended Purpose:** Revenues derived from the fee or charge can only be used for the purpose for which the fee was imposed.
3. **Proportional Cost Recovery:** The amount of the fee or charge levied on any customer shall not exceed the proportional cost of service attributable to that customer.
4. **Availability of Service:** No fee or charge may be imposed for a service unless that service is used by, or immediately available to, the owner of the property.
5. **General Government Services:** No fee or charge may be imposed for general governmental services where the service is available to the public at large.

Charges for water, wastewater, and refuse collection are exempt from additional voting requirements of Proposition 218, provided the charges do not exceed the cost of providing service and are adopted pursuant to procedural requirements of Proposition 218.

2. Current Wastewater Rates

Table 1 shows SC-OR's current monthly wastewater rates. SC-OR's last rate increase went into effect July 1, 2022, and there is one final adopted increase approved for July 1, 2023. All customers – residential and commercial – are billed a flat rate per equivalent dwelling unit (EDU).

Table 1
Sewerage-Commission, Oroville Region
Current and Approved Wastewater Rates

	(7/1/2022)	Approved
All Users	\$/Dwelling	(7/1/2023)
	Unit/Month	\$/Dwelling
		Unit/Month
Sewerage-Commission, Oroville Region	\$19.85	\$23.85
<i>% Increase</i>		<i>20.2%</i>

3. Wastewater Financial Plan

BWA developed a 5-year financial plan for SC-OR's wastewater enterprise designed to fund operating and capital needs, maintain adequate fund reserves, and meet debt service coverage requirements. The financial plan serves as a roadmap for funding operating and capital programs and maintaining long-term financial health and determines the revenue requirement for the wastewater rates.

Outstanding Debt Service

SC-OR does not have any existing outstanding debt.

Capital Improvement Program

SC-OR's capital improvement program primarily consists of an upgrade to its current wastewater treatment plant. The projected capital cost for the project amounts to \$44.5 MM. Projections assume the wastewater treatment plan will be funded through a \$38 MM bond issuance (4% interest, 30 years, 1.5% transaction costs). The remainder of the projected is estimated to be funded through District reserves.

Operating Expenses

Table 2 shows SC-OR's operating expenses. Operating costs are escalated by 7.5% per year for most items based on estimated cost inflation and potential additional operating costs from the treatment plant upgrade project. Cost inflation was estimated based on input from agency staff.

Table 2
Sewerage-Commission, Oroville Region
Wastewater Operating Expenses

Expenses	FY 2022/23		Projected				
	Adopted	Escalation	2023/24	2024/25	2025/26	2026/27	2027/28
	Budget	%					
Administration							
SALARIES & WAGES	\$209,334	7.5%	\$225,000	\$241,900	\$260,000	\$279,500	\$300,500
P.E.R.S.	42,050	7.5%	45,200	48,600	52,200	56,100	60,300
P.E.R.S. Unfunded Liability	70,367	7.5%	75,600	81,300	87,400	94,000	101,100
F.I.C.A.	16,203	7.5%	17,400	18,700	20,100	21,600	23,200
GROUP INSURANCE	60,626	7.5%	65,200	70,100	75,400	81,100	87,200
WORK COMP. INS.	745	7.5%	800	900	1,000	1,100	1,200
COMMISSIONERS' FEES	43,200	7.5%	46,400	49,900	53,600	57,600	61,900
COMMISSIONERS' F.I.C.A. WITHHC	3,305	7.5%	3,600	3,900	4,200	4,500	4,800
INSURANCE	97,000	7.5%	104,300	112,100	120,500	129,500	139,200
MEMBERSHIPS	10,000	7.5%	10,800	11,600	12,500	13,400	14,400
OFFICE EXPENSE	7,500	7.5%	8,100	8,700	9,400	10,100	10,900
ENGINEERING	35,000	7.5%	37,600	40,400	43,400	46,700	50,200
LEGAL	26,000	7.5%	28,000	30,100	32,400	34,800	37,400
AUDITING	16,000	7.5%	17,200	18,500	19,900	21,400	23,000
PERMITS	65,000	7.5%	69,900	75,100	80,700	86,800	93,300
OTHER	2,500	7.5%	2,700	2,900	3,100	3,300	3,500
PRINTING & PUBLICATION	3,000	7.5%	3,200	3,400	3,700	4,000	4,300
TRAINING & MEETINGS	3,000	7.5%	3,200	3,400	3,700	4,000	4,300
COMMUNICATIONS	1,500	7.5%	1,600	1,700	1,800	1,900	2,000
Total Administration	\$712,330		\$765,800	\$823,200	\$885,000	\$951,400	\$1,022,700
Treatment							
SALARIES & WAGES	\$656,046	7.5%	\$705,200	\$758,100	\$815,000	\$876,100	\$941,800
P.E.R.S.	61,665	7.5%	66,300	71,300	76,600	82,300	88,500
P.E.R.S. Unfunded Liability	140,734	7.5%	151,300	162,600	174,800	187,900	202,000
F.I.C.A.	51,146	7.5%	55,000	59,100	63,500	68,300	73,400
GROUP INSURANCE	169,270	7.5%	182,000	195,700	210,400	226,200	243,200
WORK COMP. INS.	61,803	7.5%	66,400	71,400	76,800	82,600	88,800
GAS, OIL, & FUEL	30,000	7.5%	32,300	34,700	37,300	40,100	43,100
OFFICE EXPENSE	1,000	7.5%	1,100	1,200	1,300	1,400	1,500
OPERATING SUPPLIES	195,000	15.0%	224,300	257,900	296,600	341,100	392,300
REPAIR & MAINTENANCE	105,000	7.5%	112,900	121,400	130,500	140,300	150,800
BIOSOLIDS DISPOSAL	40,000	7.5%	43,000	46,200	49,700	53,400	57,400
MONITORING & COMPLIANCE	75,000	7.5%	80,600	86,600	93,100	100,100	107,600
TRAINING & MEETINGS	13,000	7.5%	14,000	15,100	16,200	17,400	18,700
ELECTRIC POWER	500,350	7.5%	537,900	578,200	621,600	668,200	718,300
WATER	1,500	7.5%	1,600	1,700	1,800	1,900	2,000
COMMUNICATIONS	17,500	7.5%	18,800	20,200	21,700	23,300	25,000
REFUSE DISPOSAL	3,500	7.5%	3,800	4,100	4,400	4,700	5,100
Total Treatment	\$2,122,514	7.5%	\$2,296,500	\$2,485,500	\$2,691,300	\$2,915,300	\$3,159,500

Collection

SALARIES & WAGES	\$16,820	7.5%	\$18,100	\$19,500	\$21,000	\$22,600	\$24,300
P.E.R.S.	1,581	7.5%	1,700	1,800	1,900	2,000	2,200
P.E.R.S. Unfunded Liability	511	7.5%	500	500	500	500	500
F.I.C.A.	1,312	7.5%	1,400	1,500	1,600	1,700	1,800
GROUP INSURANCE	4,232	7.5%	4,500	4,800	5,200	5,600	6,000
WORK COMP. INS.	1,585	7.5%	1,700	1,800	1,900	2,000	2,200
REPAIR & MAINTENANCE	10,000	7.5%	10,800	11,600	12,500	13,400	14,400
ELECTRIC POWER	25,000	7.5%	26,900	28,900	31,100	33,400	35,900
WATER	650	7.5%	700	800	900	1,000	1,100
Total Collection	\$61,691	7.5%	\$66,300	\$71,200	\$76,600	\$82,200	\$88,400

Total Expenses	\$2,896,535	\$3,128,600	\$3,379,900	\$3,652,900	\$3,948,900	\$4,270,600
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Source: SCOR FY 2022/23 Budget

Revenue and Fund Reserve Estimates

Table 3 provides estimates of cash reserves balances and rate revenue. The District generates approximately \$4.45 MM of service charge revenue from 18,684 EDUs and \$85,000 from septic tank pumpers. Projected interest on funds is 0.92%. The District separates its funds into several restricted fund categories including: the Replacement Fund (WCRF), Regulatory and Capital Account, and Capital Outlay. Total unrestricted funds amounted to approximately \$5.4 MM as of July 1, 2022, and total cash reserves amounted to \$16.8 MM.

Table 3
Sewerage-Commission, Oroville Region
Unrestricted Funds and WW Rate Revenue Estimate 2022/23

Estimated balance-on-hand July 1, 2022	\$5,394,375	0.92%	\$49,628
Estimated Svc chrgs (\$19.85 /EDU x 12)* <i>*Estimated service charges on EDU's added through the year</i>	18,684	\$19.85	\$4,450,529
Septic Tank Pumpers			<u>\$85,000</u>
Total Estimated Operating Revenue			\$4,585,157
Contribution to WCRF from monthly swr svc chg (\$.35/EDU)			(\$78,306)
Contribution to R&CA from monthly sewer svc chg (\$5.75/EDU)			(\$1,286,459)
			(\$1,364,765)
Estimated Revenue			\$3,220,392
Budget Expenditures			\$2,896,535
Net Revenues			\$323,857
Estimated remaining balance on June 30, 2023			\$5,718,232

REPLACEMENT FUND (WCRF) - Restricted
Estimate 2022/23

Estimated balance-on-hand July 1, 2022	\$825,372	0.92%	\$7,593
Replacement Fund (WCRF) Income			
Contribution from monthly sewer service charges			<u>\$78,306</u>
			\$85,899
Total Replacement Fund (WCRF)			\$911,271
<u>Estimated Expenditures for Replacement</u>			
Vac Track from TWSD			(\$80,000)
Electric jackhammer			(\$3,000)
Mule UTV			(\$15,000)
Unknown Expenditures			<u>(\$40,000)</u>
			(\$138,000)
Estimated remaining balance on June 30, 2023			\$773,271

REGULATORY & CAPITAL ACCOUNT (R&CA) - Restricted
Estimate 2022/23

Estimated balance-on-hand July 1, 2022	\$2,382,360	0.92%	\$21,918
Contribution from monthly sewer service charges			1,286,459
Total Regulatory & Capital Account (RCA)			\$3,690,737
Salinity Study			(\$50,000)
Unknown			<u>(\$25,000)</u>
			(\$75,000)
Estimated remaining balance on June 30, 2023			\$3,615,737

CAPITAL OUTLAY FUND
Estimate 2022/23

Estimated balance-on-hand July 1, 2022	\$8,214,623	0.92%	\$75,575
Regional Facilities Charge (\$6,638 x 100)			<u>\$663,800</u>
Total Estimated Income			\$739,375
Total Capital and Expansion Fund			\$8,953,998
East Interceptor Design & Repair			(\$1,500,000)
Ruddy Creek (Engineering & Drawings)			(\$300,000)
Unknown Expenditures			<u>(\$40,000)</u>
			(\$1,840,000)
Estimated balance of fund on June 30, 2023			\$7,113,998

Total Estimated balance-on-hand July 1, 2022	\$16,816,730		
Total Estimated balance of fund on June 30, 2023			\$17,221,237

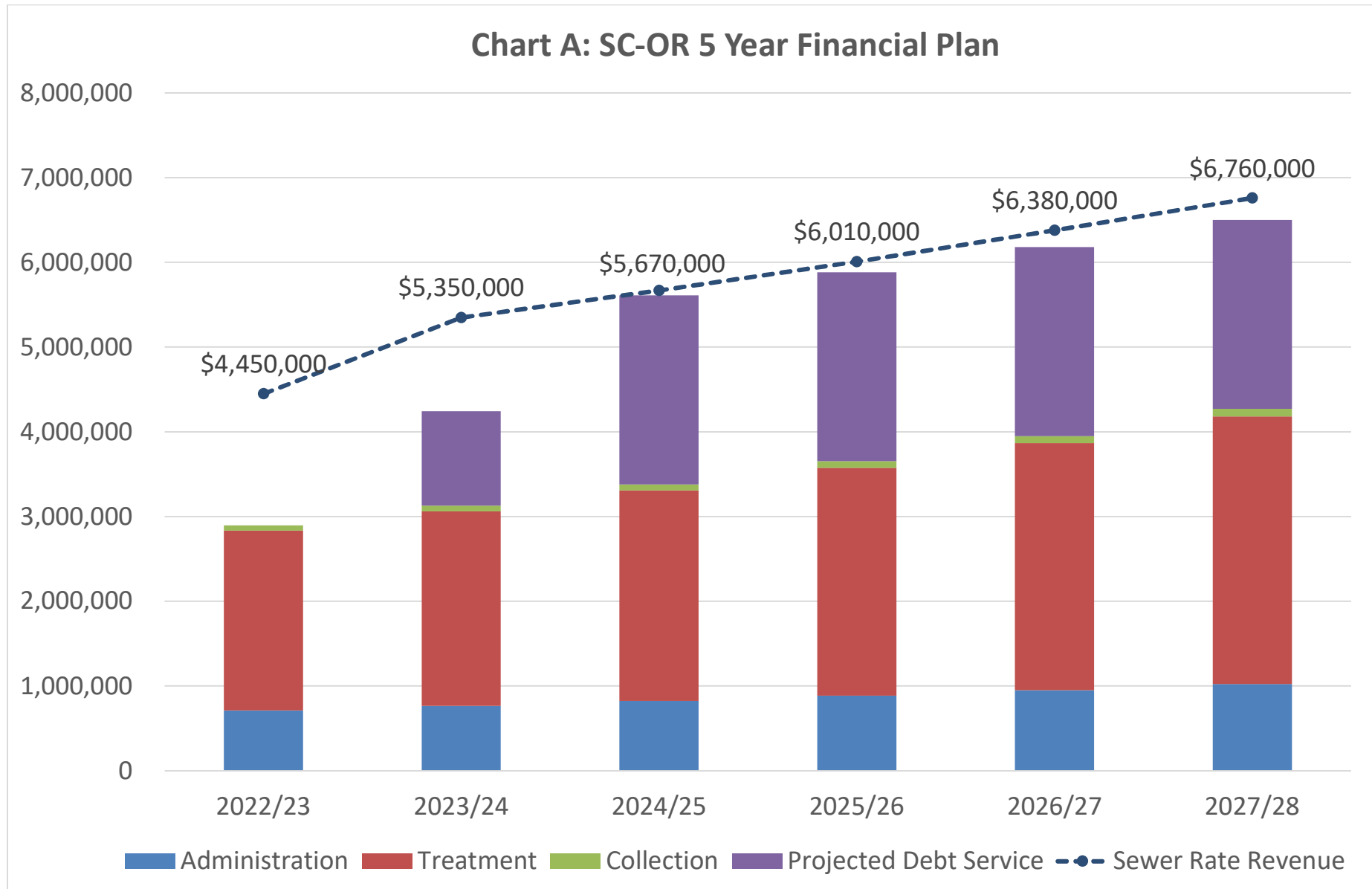
Wastewater Cash Flow Projection

Table 4 shows the wastewater cash flow projection. BWA projects that a wastewater rate increase of 20.15% is required for the first fiscal year (FY 2023/24) and 5% for the following four years (FY 2024/25 through FY 2027/28) to meet SC-OR's wastewater expenses. Projections estimate 1% annual growth in SC-OR's customer base beginning FY 2024/25.

Table 4
Sewerage-Commission, Oroville Region
Wastewater Cash Flow Projection

	2022/23	2023/24	2024/25	Projected		
				2025/26	2026/27	2027/28
Beg. Unrestricted & Capital Funds	\$13,608,998	\$12,832,229	\$6,232,294	\$6,301,917	\$6,440,943	\$6,647,809
% Rate Increase		20.15%	5.00%	5.00%	5.00%	5.00%
<i>Growth - %</i>		<i>0.0%</i>	<i>1.0%</i>	<i>1.0%</i>	<i>1.0%</i>	<i>1.0%</i>
<i>EDUs</i>	<i>18,684</i>	<i>18,684</i>	<i>18,871</i>	<i>19,060</i>	<i>19,250</i>	<i>19,443</i>
<i>\$/EDU</i>	<i>\$19.85</i>	<i>\$23.85</i>	<i>\$25.04</i>	<i>\$26.29</i>	<i>\$27.60</i>	<i>\$28.98</i>
REVENUES						
Operating Revenue						
Service Charges	\$4,450,529	\$5,347,361	\$5,670,876	\$6,013,964	\$6,377,809	\$6,763,666
Septic Tank Pumpers	85,000	85,000	85,000	85,000	85,000	85,000
Capacity Fees	663,800	0	1,240,244	1,252,646	1,265,173	1,277,825
Total Operating Revenues	\$5,199,329	\$5,432,361	\$6,996,120	\$7,351,610	\$7,727,982	\$8,126,491
Non Operating Revenue						
Projected Grant Funding	\$0	\$0	\$0	\$0	\$0	\$0
Projected Loan	0	38,000,000	0	0	0	0
<i>Interest Earned (est. 1%)</i>	<i>125,203</i>	<i>128,322</i>	<i>62,323</i>	<i>63,019</i>	<i>64,409</i>	<i>66,478</i>
Subtotal Operating Revenues	\$125,203	\$38,128,322	\$62,323	\$63,019	\$64,409	\$66,478
Total Revenues	\$5,324,531	\$43,560,683	\$7,058,443	\$7,414,630	\$7,792,391	\$8,192,969
EXPENSES						
Operating Expenses						
Administration	\$712,330	\$765,800	\$823,200	\$885,000	\$951,400	\$1,022,700
Treatment	2,122,514	2,296,500	2,485,500	2,691,300	2,915,300	3,159,500
Collection	61,691	66,300	71,200	76,600	82,200	88,400
Total Operating Expenses	\$2,896,535	\$3,128,600	\$3,379,900	\$3,652,900	\$3,948,900	\$4,270,600
Net Revenues	\$2,427,996	\$40,432,083	\$3,678,543	\$3,761,730	\$3,843,491	\$3,922,369
Non Operating Expenses						
Proj. Debt Service (4%, 30 Yr, 1.5% Fees)	\$0	\$1,115,253	\$2,230,507	\$2,230,507	\$2,230,507	\$2,230,507
Transfer Out - WCRF	78,306	78,306	79,089	79,880	80,679	81,486
Transfer Out - R&CA	1,286,459	1,286,459	1,299,324	1,312,317	1,325,440	1,338,694
<i>CIP / Depreciation</i>	<i>1,840,000</i>	<i>44,552,000</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Total Non Operating Expenses	\$3,204,765	\$47,032,018	\$3,608,920	\$3,622,704	\$3,636,626	\$3,650,687
Net Income	-\$776,769	-\$6,599,935	\$69,623	\$139,026	\$206,866	\$271,682
End Unrestricted & Capital Funds	\$12,832,229	\$6,232,294	\$6,301,917	\$6,440,943	\$6,647,809	\$6,919,491
<i>Days O&M (Min 365 Days)</i>	<i>1,617</i>	<i>727</i>	<i>681</i>	<i>644</i>	<i>614</i>	<i>591</i>
Debt Service Coverage (1.25x)		2.18	1.65	1.69	1.72	1.76
District Reserves Ending Balances, June 30						
Unrestricted Fund	\$5,718,232	\$5,599,156	\$5,537,458	\$5,531,447	\$5,579,298	\$5,677,724
Capital Outlay Fund	7,113,998	633,138	764,459	909,497	1,068,511	1,241,767
Replacement Fund (WCRF)	773,271	721,310	669,612	618,188	567,049	516,205
Regulatory & Capital Account (R&CA)	3,615,737	4,863,353	6,136,310	7,434,990	8,759,780	10,111,072
	\$17,221,237	\$11,816,957	\$13,107,840	\$14,494,122	\$15,974,638	\$17,546,768

Chart A shows a graphical presentation of the 5-year financial projections. Rate revenue increases are needed to cover projected wastewater treatment plant upgrade related debt service.



4. Wastewater Rates Derivation

Reduced Equivalent Dwelling Unit Calculation for Residential Categories

BWA calculated a reduced wastewater rate for multi-family units and mobile homes due to those accounts having on average less people per unit than a single-family residence, and therefore less flow. An equivalent dwelling unit (EDU) represents the amount of wastewater generated by a typical single-family residence. Table 5 defines the estimated flow and loadings per EDU.

Table 5
Sewerage-Commission, Oroville Region
Equivalent Dwelling Unit Flow & Loadings (Resolution 04-08)

Daily Flow	260 Gallons
Monthly Flow	7,908 Gallons
Peak Daily Flow Inc. I&I	1,040 Gallons
B. O. D.	0.299 Lbs/Day
Total Suspended Solids	0.327 Lbs/Day
Oils & Grease	0.065 Lbs./Day
B. O. D.	138 mg/l
Total Suspended Solids	151 mg/l
Oils & Grease	30 mg/l
Proration of Capital Cost on Flow Basis	53.90%
Proration of Capital Cost on B.O.D. Basis	33.50%
Proration of Capital Cost on T.S.S. Basis	10.70%
Proration of Capital Cost on Oils Basis	1.90%

Used in the calculation of Regional Facility Charges, Infiltration/Inflow Surcharges, and the equating of industrial discharges into Equivalent Dwelling Units.

In Table 6, BWA applied the EDU formula from Table 5 and the estimated flow per unit for each residential customer category based on the proportion of people per unit from regional census data (reference Appendix A). Table 6 estimates the number of EDUs for a multi-family unit, mobile home, and single-family residence.

Table 6
Sewerage-Commission, Oroville Region
Residential Equivalent Dwelling Unit Calculation

	<u>% EDU Weighting</u>	<u>Single Family</u>	<u>Multi Family</u>	<u>Mobile Home</u>
Flow (GPD)	53.90%	260	202	188
BOD (mg/l)	33.50%	138	138	138
TSS (mg/l)	10.70%	151	151	151
Oils & Grease (mg/l)	1.90%	30	30	30
	100.00%			
<u>Calculated EDU*</u>		1	0.880	0.850

**EDU Formula = 0.539*Flow(GPD)/260 + 0.335*(BOD mg/l)/138 + 0.107*(TSS mg/l)/151+ .019*(Oil & Grease mg/l)/30*

Table 7 calculates reduced rates for multi-family residences and mobile homes using the proposed EDUs calculated in Table 6.

Table 7
Sewerage-Commission, Oroville Region
Proposed Rate Calculation based on Census Household Data & Sewer Units

<u>2022/23 Billing Data</u>	<u>Residential Sewer Billing Units</u>	<u>2023/24 Rate</u>	<u>2023/24 Est. Res Revenue</u>
	12,979	\$23.85	\$3,714,590
	<u>Commercial Sewer Billing Units</u>		
	5,705	\$23.85	\$1,632,771
Totals	18,684		\$5,347,361

<u>Residential Category</u>	<u>% Units</u>	<u>Units</u>
Single Family Home	70.8%	9,189
Multi Unit	20.9%	2,719
Mobile Home	8.3%	1,071
	100.0%	12,979

<u>Residential Category</u>	<u>Proposed EDUs per Unit</u>	<u>Total Proposed EDUS</u>
Single Family Home	1.00	9,189
Multi Unit	0.8800	2,393
Mobile Home	0.8500	910
		12,492
Commercial Units		5,705
Totals		18,197

<u>Residential Category</u>	<u>\$/Unit</u>	<u>Sewer Billing Units</u>	<u>2023/24 Est. Revenue</u>
Single Family Home	\$24.49	9,189	\$2,700,264
Multi Unit	\$21.55	2,719	703,121
Mobile Home	\$20.81	1,071	267,514
Commercial	\$24.49	5,705	1,676,462
		18,684	\$5,347,361

5. Proposed Wastewater Rates

Table 8 shows a summary of BWA’s proposed rates from FY 2023/24 to 2027/28. Rates under Option 1: Status Quo maintains the current rate structure. Option 2: Reduced EDUs for Multifamily Unit & Mobile Home shows the increase in the rate per EDU from a reduction in multifamily and mobile home EDUs.

Table 8
Sewerage-Commission, Oroville Region
Proposed Monthly Rates

Option 1: Status Quo

	<u>7/1/2022</u>	<u>7/1/2023</u>	<u>1/1/2024</u>	<u>7/1/2024</u>	<u>7/1/2025</u>	<u>7/1/2026</u>	<u>7/1/2027</u>
<i>Monthly Rates</i>	<i>Current</i>	<i>Approved</i>			<i>Proposed</i>		
All Users (per EDU)	\$19.85	\$23.85	\$23.85	\$25.04	\$26.29	\$27.61	\$28.99

Option 2: Reduced EDUs For Multifamily & Mobile Home

	<u>7/1/2022</u>	<u>7/1/2023</u>	<u>1/1/2024</u>	<u>7/1/2024</u>	<u>7/1/2025</u>	<u>7/1/2026</u>	<u>7/1/2027</u>
<i>Monthly Rates</i>	<i>Current</i>	<i>Approved</i>			<i>Proposed</i>		
All Users (per EDU)	\$19.85	\$23.85	\$24.49	\$25.71	\$27.00	\$28.35	\$29.77

Table 9 shows the projected units and revenue with the rate increases under both options.

Table 9
Sewerage-Commission, Oroville Region
Projected Units and Revenues

Growth %	<u>Current</u>	<u>Projected</u>					
	<u>7/1/2022</u>	<u>7/1/2023</u>	<u>1/1/2024</u>	<u>7/1/2024</u>	<u>7/1/2025</u>	<u>7/1/2026</u>	<u>7/1/2027</u>
		0.00%	0.00%	1.00%	1.00%	1.00%	1.00%
<u>Units By Category</u>							
Single Family ¹	9,189	9,189	9,189	9,281	9,374	9,467	9,562
Multi Unit ²	2,719	2,719	2,719	2,746	2,774	2,801	2,829
Mobile Home ³	1,071	1,071	1,071	1,082	1,093	1,103	1,114
<u>Commercial</u>	<u>5,705</u>	<u>5,705</u>	<u>5,705</u>	<u>5,762</u>	<u>5,820</u>	<u>5,878</u>	<u>5,937</u>
Total	18,684	18,684	18,684	18,871	19,060	19,250	19,443

Option 1: Status Quo

Single Family	\$2,188,820	\$2,629,892	\$2,629,892	\$2,789,000	\$2,957,735	\$3,136,678	\$3,326,447
Multi Unit	647,666	778,178	778,178	825,258	875,186	928,134	984,286
Mobile Home	255,112	306,520	306,520	325,065	344,731	365,587	387,705
Commercial	1,358,931	1,632,771	1,632,771	1,731,554	1,836,313	1,947,410	2,065,228
	\$4,450,529	\$5,347,361	\$5,347,361	\$5,670,876	\$6,013,964	\$6,377,809	\$6,763,666

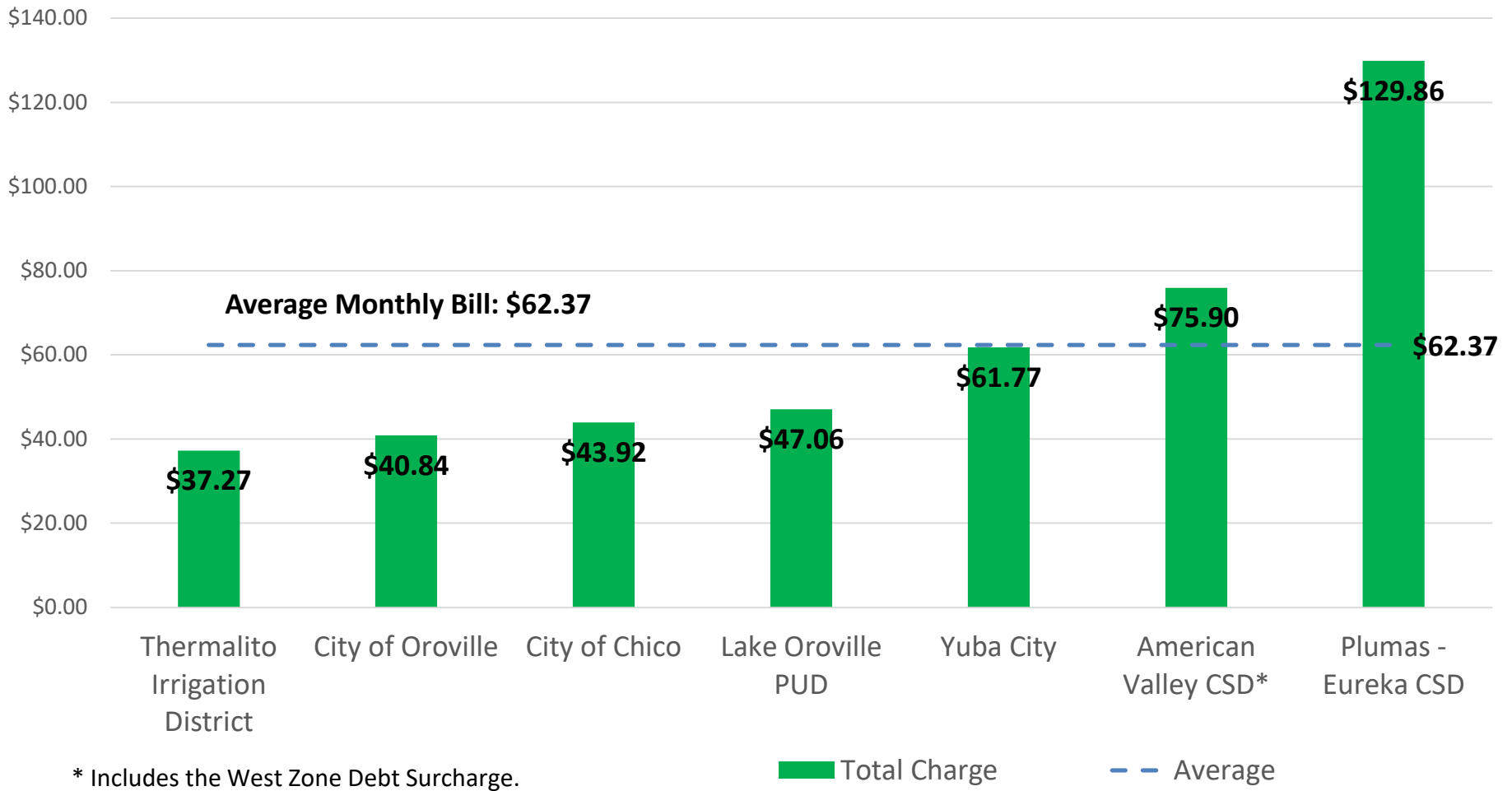
Option 2: Reduced EDUs For Multifamily Unit & Mobile Home

Single Family		\$2,700,264	\$2,863,630	\$3,036,880	\$3,220,611	\$3,415,458
Multi Unit		703,121	745,660	790,772	838,614	889,350
Mobile Home		267,514	283,699	300,862	319,064	338,368
Commercial		<u>1,676,462</u>	<u>1,777,888</u>	<u>1,885,450</u>	<u>1,999,520</u>	<u>2,120,491</u>
		\$5,347,361	\$5,670,876	\$6,013,964	\$6,377,809	\$6,763,666

-
- 1 - 1 Unit = 1 EDU
 - 2 - 1 Unit = 0.88 EDU
 - 3 - 1 Unit = 0.85 EDU

Chart B shows a regional wastewater rate survey for FY 2022/23. The surveyed average monthly wastewater bill for a single-family home per month is \$62.37. Wastewater agencies served by SC-OR compare favorably with regional agencies and are below the average range of \$62.37.

**Chart B: Monthly Single Family Residential Sewer Bills
Conducted December 2022**

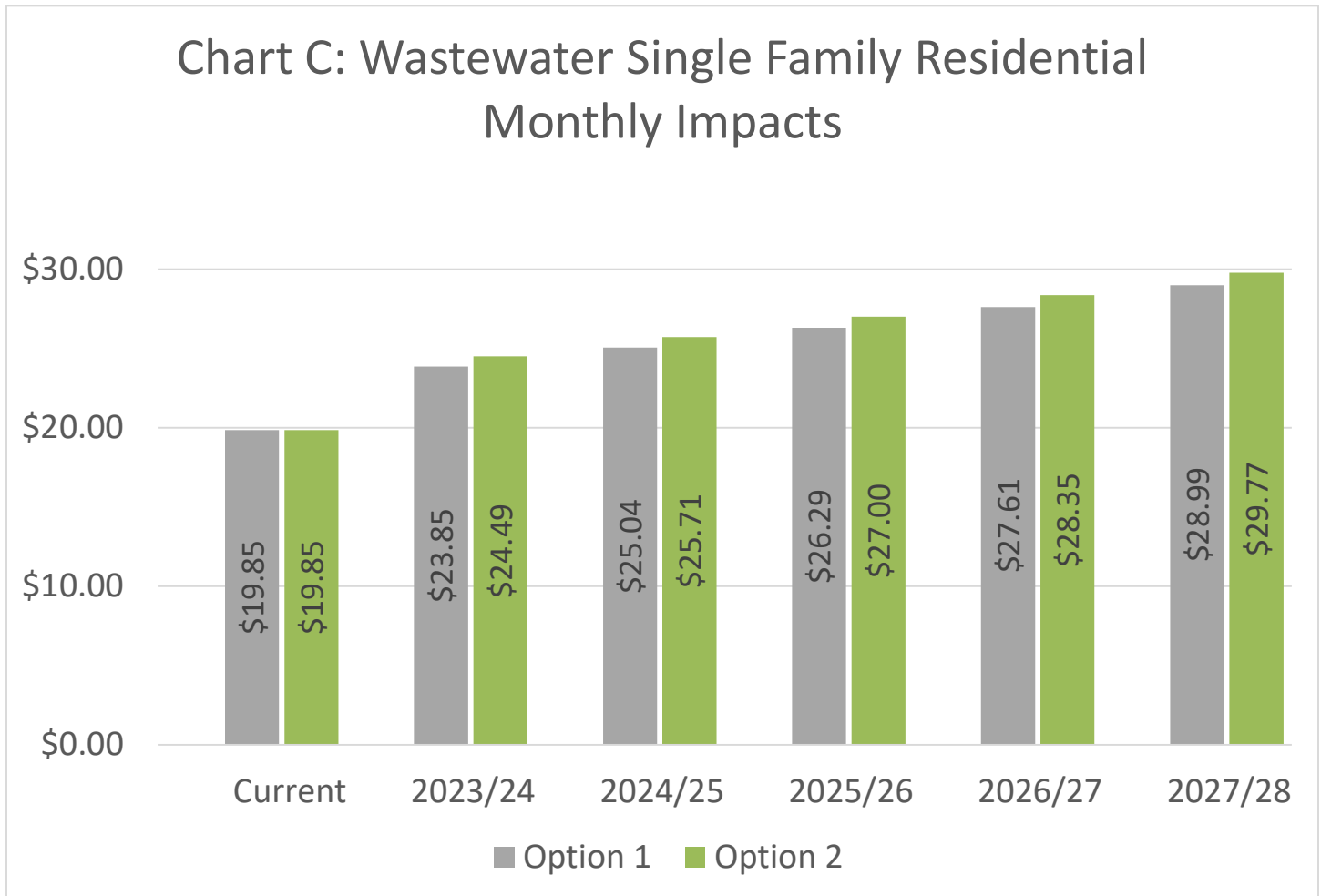


6. Wastewater Bill Impacts

Table 10 and Chart C shows the monthly impacts of the wastewater rate increase on single-family residential customers.

Table 10
Sewerage-Commission, Oroville Region
Monthly Bill Impacts

	<u>7/1/2022</u>	<u>7/1/2023</u>	<u>1/1/2024</u>	<u>7/1/2024</u>	<u>7/1/2025</u>	<u>7/1/2026</u>	<u>7/1/2027</u>
Option 1 Bill Impact	<i>Current</i>	<i>Approved</i>	<i>Projected Bills</i>				
All Users (per EDU)	\$19.85	\$23.85	\$23.85	\$25.04	\$26.29	\$27.61	\$28.99
<i>\$/Month Increase</i>		\$4.00	\$0.00	\$1.19	\$1.25	\$1.31	\$1.38
<i>% Increase</i>		20.2%	0.0%	5.0%	5.0%	5.0%	5.0%
Option 2 Bill Impact	<i>Current</i>	<i>Approved</i>	<i>Projected Bills</i>				
All Users (per EDU)	\$19.85	\$23.85	\$24.49	\$25.71	\$27.00	\$28.35	\$29.77
<i>\$/Month Increase</i>		\$4.00	\$0.64	\$1.22	\$1.29	\$1.35	\$1.42
<i>% Increase</i>		20.2%	2.7%	5.0%	5.0%	5.0%	5.0%



Appendix A – SCOR Census Data

Table 1 - 2021 Census Update
Sewerage Commission - Oroville Region - Census Data

Thermalito CDP	Thermalito CDP (Housing Units, DP04)	Thermalito (Population, B25033)	People Per Unit	% of Equivalent Single Family Home
Housing Type	2021	2021		
One-Unit, (Attached & Detached)	1,895	5,193	2.7	
Multi-Unit	145	333	2.3	84%
<u>Mobile Home</u>	<u>479</u>	<u>1,058</u>	<u>2.2</u>	81%
Total Housing Units	2,519	6,584	2.6	
Oroville East CDP	Oroville East CDP (Housing Units, DP04)	Oroville East CDP (Population, B25033)	People Per Unit	% of Equivalent Single Family Home
Housing Type	2021	2021		
One-Unit, (Attached & Detached)	2,787	6,815	2.4	
Multi-Unit	0	0	-	
<u>Mobile Home</u>	<u>500</u>	<u>807</u>	<u>1.6</u>	66%
Total Housing Units	3,287	7,622	2.32	
Boat, RV, Van, ETC	54	63		
South Oroville CDP	South Oroville CDP (Housing Units, DP04)	South Oroville CDP (Population, B25033)	People Per Unit	% of Equivalent Single Family Home
Housing Type	2021	2021		
One-Unit, (Attached & Detached)	1,074	2,111	2.0	
Multi-Unit	45	61	1.4	69%
<u>Mobile Home</u>	<u>115</u>	<u>386</u>	<u>3.4</u>	171%
Total Housing Units	1,234	2,558	2.1	
Boat, RV, Van, ETC	0	0		
Oroville City	Oroville City (Housing Units, DP04)	Oroville City (Population, B25033)	People Per Unit	% of Equivalent Single Family Home
Housing Type	2021	2021		
One-Unit, (Attached & Detached)	5,085	13,141	2.6	
Multi-Unit	2,612	5,038	1.9	75%
<u>Mobile Home</u>	<u>495</u>	<u>725</u>	<u>1.5</u>	57%
Total Housing Units	8,192	18,904	2.3	
Boat, RV, Van, ETC	0	0		
Kelly Ridge CDP	Kelly Ridge CDP (Housing Units, DP04)	Kelly Ridge CDP (Population, B25033)	People Per Unit	% of Equivalent Single Family Home
Housing Type	2021	2021		
One-Unit, (Attached & Detached)	999	2,012	2.0	
Multi-Unit	42	25	0.6	30%
<u>Mobile Home</u>	<u>613</u>	<u>965</u>	<u>1.6</u>	78%
Total Housing Units	1,654	3,002	1.8	

SCOR TOTALS	SCOR (Housing Units, DP04)	SCOR (Population, B25033)	People Per Unit	% of Equivalent Single Family Home
Housing Type	2021	2021		
One-Unit, (Attached & Detached)	11,840	29,272	2.47	
Multi-Unit	2,844	5,457	1.92	77.6%
<u>Mobile Home</u>	<u>2,202</u>	<u>3,941</u>	<u>1.79</u>	<u>72.4%</u>
Total Housing Units	16,886	38,670	2.29	

<u>Estimated Flow Characteristics</u>	<u>Gallons Per Day</u>
Single Family Home	260
Multi Unit	202
Mobile Home	188
