

County of Monterey

Resource Management Agency

Department of Public Works



PREPARED BY



WALLACE GROUP

County Service Area 75 – Chualar Consolidated (CSA 75) FINAL Wastewater Rate Study

November 2015, Updated August 2017

CERTIFICATION

In accordance with the provisions of Section 6735 of the Business and Professions Code of the State of California, this report was prepared by or under the direction of the following Civil Engineer, licensed in the State of California:

ENGINEER IN RESPONSIBLE CHARGE:



Kari Wagner, PE 66026
Director of Water Resources
Wallace Group

9/5/17

Date



Table of Contents

1.0	Purpose of Report	1
2.0	Community Recommendation	1
3.0	Wastewater System	1
4.0	Existing Revenues	1
5.0	Revenue Requirements.....	2
5.1	Operations and Maintenance (O&M).....	2
5.2	Reserves	2
	5.2.1 Operating / Emergency Reserve	2
	5.2.2 Capital Reserve	3
	5.2.3 Grant Revenues.....	3
5.3	Debt Service	3
6.0	Existing Rates	4
7.0	Proposed Revenue Adjustments.....	4
7.1	Alternative 1 – Rate Increase with no Payback to Monterey County	5
	7.1.1 Alternative 1A – No Phase-In	5
	7.1.2 Alternative 1B – Three Year Phase-In	5
7.2	Alternative 2 – Rate Increase with Payback to Monterey County.....	5
	7.2.1 Alternative 2A – No Phase-In	5
	7.2.2 Alternative 2B – Three Year Phase-In	6
8.0	Proposed Rates	6

Tables

Table 5-1: Projected Revenue Requirements	4
Table 7-1: Summary of Proposed Revenue Adjustments – SRF Rates	6
Table 8-1: Proposed Monthly Wastewater Rates (Not provided in draft report).....	7

Figures

Figure 8-1: Cash Flow Summary (Not provided in draft report).....	7
---	---

Appendices

Appendix 1: Existing Wastewater Service Charges and Connection Fees.....	A-1
--	-----

1.0 Purpose of Report

Wastewater service charges for County Service Area 75 – Chualar Consolidated (CSA 75) have remained unchanged since 2001, which has resulted in an inability to meet revenue requirements and its operating budget being supplemented by the County’s General Fund for many years. The purpose of this study is to review existing wastewater rates and to identify the levels of funding needed to sustain wastewater operations, accomplish capital improvements, and establish reasonable reserves over a five year period.

As noted above, the purpose of this Report is to assess revenue adequacy (“how much”): evaluating the current rate structure in apportioning costs and benefits among different types of ratepayers (who pays”) was not part of the work scope, and accordingly, no recommendations are provided regarding rate structure.

2.0 Community Recommendation

An increase in wastewater services rates is recommended in order to cover CSA 75 revenue requirements and eliminate subsidies from other sources. It is recommended that monthly service charges that result in revenues meeting expenses over the next five years, while retaining the current rate structure, be implemented. In addition to meeting revenue requirements over the five year planning period, the recommended alternative also results in the lowest monthly wastewater rate to the customers at the end of the five-year planning period.

3.0 Wastewater System

As part of County Service Area 75 – Chualar Consolidated (CSA 75) the County of Monterey Resource Management Agency – Public Works provides wastewater service through 173 connections, including residential and commercial. Wastewater is collected through approximately 2 miles of gravity sewer pipes, one sanitary sewer pump station and 2 miles of force main, and is treated at a primary treatment, aerated lagoon wastewater treatment plant.

4.0 Existing Revenues

CSA 75 – Chualar Consolidated provides sanitary sewer (wastewater), stormwater drainage and street lighting services. The County of Monterey Recommended Budget for Fiscal Year ending June 30, 2015, includes a budget for CSA 75 as follows:

Percentage of General Purpose \$1.00 Tax Rate	\$ 22,074
Special Assessments	\$ 78
Sanitation Service Charges	<u>\$ 44,000</u>
Total	\$ 66,152

This Report assumes stormwater drainage and street lighting services will be funded from its currently allocated share of the general purpose \$1.00 Tax Rate and Special Assessments, and the wastewater services will be funded from wastewater (sanitation) service charges. This Report presents rates that will be required to fund only the wastewater collection and treatment services of CSA 75.

In addition to the Budget Summary above, current year wastewater service charges by parcel number for CSA 75 was obtained from Monterey County billings and are estimated to be \$52,000. Because this amount is based on the actual parcel listing and associated charges, it is the amount used as the existing revenue basis for this Report. However, given the discrepancy between the charges by parcel number and projected revenues, it is recommended that the County work closely with its billing agent (Monterey Regional Water Pollution Control Agency).

5.0 Revenue Requirements

5.1 Operations and Maintenance (O&M)

For any utility to maintain its service obligations, the utility must recover its revenue requirements on an ongoing basis. These expenditures include the cost of operating and maintaining wastewater collection and treatment, such as power, chemicals and staffing. Additional expenses may include the costs of providing technical services, such as laboratory functions, administrative costs such as billing and accounting, small capital improvement projects (CIPs) and equipment replacement. Operations and maintenance (O&M) expenditures are the normal costs obligations of the wastewater system and are paid for by operating revenues as they are incurred. CSA 75's forecasted annual O&M expenditures are based on the budgeted expenditure projections for current year of \$140,829 plus a one-time \$5,000 expense for small CIPs. Expenses for future years are projected using an inflation factor of 3 percent per year based on the average Economic News-Record (ENR) Construction Cost index increases over the last five years.

5.2 Reserves

In addition to O&M, it is prudent business practice that CSA 75 maintains reserves funded from rate revenues. These reserves may be used to meet ongoing operating expenses as well as unexpected increases in costs. Rating agencies such as Moody, Standard & Poor are now suggesting that utilities have operating reserves between 180 and 360 days' worth of operating expenses. An alternative reserve policy approach is to maintain approximately 90 days of operating expenses together with a separate target for capital reserves and emergency replacements. The approach being recommended in this Report is to maintain 180 days' worth of operating expenses for both operating and emergency reserves, along with a separate target for capital reserves.

5.2.1 Operating / Emergency Reserve

Establish a minimum of 180 days of operating and maintenance expenditures in operating/emergency reserves by the end of the 5 year planning period based on FY 2015/16 operating expenses and inflated by 3% per year thereafter. Along with meeting cash flow requirements between when services are provided and revenues received, this provides a cash cushion for normal operations and helps maintain financial stability in the event of any unexpected short-term or emergency cash needs, as well as providing funding for emergency asset replacement and insurance deductibles. This Report assumes operating/emergency reserves not used would be carried over to the subsequent fiscal year.

5.2.2 Capital Reserve

In the case of capital reserves it is preferable to show some level of capital expenditures in the forecast based on a five to ten year capital improvement program. CSA 75 does not have a capital improvement program but two capital projects have been identified as follows:

\$250,000 for PS Control/SCADA
\$30,000 for second monitoring well at WWTP

These capital projects are proposed to be completed in year five of the planning period at an estimated cost of \$325,000 in Year 5 when inflated at 3% per year (or \$64,900 annually). It is recommended this level of reserves be continued beyond the planning period until a more formal capital improvement program can be developed.

5.2.3 Grant Revenues

It is possible that capital reserve requirements could be reduced by grant revenues. However, preliminary assessments have not surfaced any likely candidates. Nonetheless, the search for possible grant revenues should continue as a possible option in mitigating the need for future rate increases.

5.3 Debt Service

In the past there have been transfers from the Monterey County General Fund to CSA 75 to make up for their revenue deficit. County staff indicated that these were considered to be loans; however, no specific interest rate was quoted. In this Report, different scenarios are presented with and without a debt service requirement. The following is a list of these transfers:

<u>Date of Board Action</u>	<u>Amount Authorized for Transfer</u>
June 19, 2012	\$ 183,468
December 12, 2012	399,922
June 3, 2014	258,093
September 9, 2014	<u>325,000</u>
Total	\$1,166,483

Table 5-1 presents a comprehensive list of potential revenue requirement line items over the five year planning period, with and without repayment of \$1,166,483 in General Fund transfers over ten years. This table does not include any further subsidies that may be acquired after September 9, 2014, such as subsidies needed to cover initial years' revenue requirements until full adjusted rates are realized.

Table 5-1: Projected Revenue Requirements

Expenses	FY 1	FY 2	FY 3	FY 4	FY 5
O&M ⁽¹⁾	\$150,100	\$154,600	\$159,200	\$164,000	\$168,900
Operating/Emergency Reserves ⁽²⁾	16,700	16,700	16,700	16,700	16,700
Capital Reserves ⁽³⁾	64,900	64,900	64,900	64,900	64,900
Totals	\$231,700	\$236,200	\$240,800	\$245,600	\$250,500
Debt Service ⁽⁴⁾	116,648	116,648	116,648	116,648	116,648
Payback	0	0	18,536	18,536	18,536
Totals	\$348,348	\$352,848	\$375,984	\$380,784	\$385,684

⁽¹⁾ \$140,829 in Base FY (per Monterey County staff 04/01/15) plus \$5,000 for small day-to-day CIPs starting in FY 2015/16 such with 3% increase per fiscal year

⁽²⁾ Minimum 180 days of FY 2015/16 O&M expenditures, inflated by 3% per year thereafter, and spread out evenly over five years

⁽³⁾ \$250,000 for PS Control/SCADA and \$30,000 for second monitoring well at WWTP (\$325,000 in FY 19/20 When increased at 3%/year) and spread out evenly over five years

⁽⁴⁾ \$1,166,483 at 0% for 10 years = \$9,720.69/month or \$116,648.30/year

⁽⁵⁾ General Fund Contributions for FY 3 - Debt Service (0%) begins FY 4 for 8 years until FY 12 (\$148,287 or \$18,535.88/year)

6.0 Existing Rates

In accordance with County of Monterey Ordinance No. 03920, any person owning parcels containing building or plumbing fixtures from which discharges are made to the CSA 75 sewer, shall pay to the CSA 75 a monthly service charge as set forth in the Monterey County Fee resolution, as amended from time to time.

Existing sewer service charges and connection fees for CSA 75 were adopted by the County of Monterey Board of Supervisors via Resolution 01-042 on January 23, 2001, which amended Article 6 of the Monterey County Master Fee Resolution. This means that sewer service charges have remained unchanged since 2001. The wastewater service charges rate per “Equivalent Dwelling Unit” (EDU) is \$167.04 per year which equates to \$13.92 per month for a single-family residence (SFR). A comprehensive list of all current service charges and connection fees for CSA 75 are listed in Appendix 1.

7.0 Proposed Revenue Adjustments

The adequacy of the existing rate structure can be measured by comparing revenue requirement projections against revenue projections under existing rates. If revenue projections under existing rates do not meet forecasted requirements, rates need to be adjusted. Projections are established for a five year time frame (projections beyond five years are generally less reliable as conditions can rapidly change that affect service requirements and revenue generation).

As stated in Section 4.0 above, revenue received under the existing rates are estimated to be \$52,000, which is not enough to cover existing or projected revenue requirements, with or without debt service repayment.

There are many possible alternatives regarding cost, revenue and phase-in assumptions. This Report presents two basic alternatives in generating adequate revenues that meet forecasted requirements: rate requirements with and without paying back subsidies, with two phase-in options for each alternative. The following summarizes the rate adjustments required under each alternative:

7.1 Alternative 1 – Rate increases with no payback to Monterey County

There are two phase-in options under this alternative:

7.1.1 Alternative 1A: No Phase-In

This alternative adjusts monthly service charges to customers that results in revenues exactly meeting expenses over the next five years. The resulting monthly SFR service charge would be \$67.35, an increase of \$53.43 per month. It is anticipated the first year's adjusted service charges would not be implemented until February 1, 2018 which results in negative cash flow of \$104,957 and would most likely be funded from the County's General Fund. No subsidies would be required in subsequent years.

	FY 1	FY 2	FY 3	FY 4	FY 5	Total
Monthly Rate	\$62.30	\$63.51	\$64.74	\$66.03	\$67.35	--
Revenue	\$126,743	\$236,200	\$240,800	\$245,600	\$250,500	\$1,099,843
Expenses	\$231,700	\$236,200	\$240,800	\$245,600	\$250,500	\$1,204,800
Subsidy	\$104,957	\$ 0	\$ 0	\$ 0	\$ 0	\$104,957

7.1.2 Alternative 1B: Three-Year Phase-In

Under this alternative, rate adjustments would be phased in over the first three years of the planning period (FY 1 through 3) resulting in revenues matching expenses in the third year. SFR monthly rates would be \$23.24 in FY 1; \$38.79 in FY 2; and \$64.74 in FY 3. For the next two fiscal years, rates would be adjusted so that revenues match expenses. This results in negative cash balances in the first two years totaling \$257,431 and would most likely be funded from the County's General Fund. No subsidies would be required in subsequent years.

	FY 1	FY 2	FY 3	FY 4	FY 5	Total
Monthly Rate	\$23.24	\$38.79	\$64.74	\$66.03	\$67.35	--
Revenue	\$66,211	\$144,258	\$240,800	\$245,600	\$250,500	\$947,369
Expenses	\$231,700	\$236,200	\$240,800	\$245,600	\$250,500	\$1,204,800
Subsidy	\$165,489	\$91,942	\$ 0	\$ 0	\$ 0	\$257,431

7.2 Alternative 2 – Rate increase with payback to Monterey County

As with Alternative 1, there are two phase-in options under this alternative:

7.2.1 Alternative 2A: No Phase-In

Like Alternative 1A, this option adjusts monthly service charges to customers that results in revenues exactly meeting expenses over the next five years. The resulting monthly SFR service charge would be \$103.70, an increase of \$89.78 per month. However, like Alternative 1A, this would result in a negative cash flow of \$173,001 in the first year of the planning period, most likely funded from the County's General Fund. Repayment of the first year subsidy would begin in year three of the planning period. No subsidies would be required in subsequent years.

	FY 1	FY 2	FY 3	FY 4	FY 5	Total
Monthly Rate	\$93.66	\$94.87	\$101.09	\$102.38	\$103.70	--
Revenue	\$175,347	\$352,848	\$375,984	\$380,784	\$385,684	\$1,670,647
Expenses	\$348,348	\$352,848	\$375,984	\$380,784	\$385,684	\$1,843,648
Subsidy	\$173,001	\$ 0	\$ 0	\$ 0	\$ 0	\$173,001

7.2.2 Alternative 2B: Three-Year Phase-In

Like Alternative 1B, rate adjustments would be phased in over the first three years of the planning period (FY 1 through 3) resulting in revenues matching expenses in the third year. SFR monthly rates would be \$26.51 in FY 1; \$50.47 in FY 2; and \$96.10 in FY 3. For the next two fiscal years, rates would be adjusted so that revenues match expenses (\$114.23 in FY 4 and \$115.55 in FY 5). This results in negative cash balances in the first two years totaling \$442,198 and would most likely be funded from the County's General Fund. No subsidies would be required in subsequent years.

	FY 1	FY 2	FY 3	FY 4	FY 5	Total
Monthly Rate	\$26.51	\$50.47	\$96.10	\$114.23	\$115.55	--
Revenue	\$71,278	\$187,720	\$357,448	\$424,862	\$429,762	\$1,471,070
Expenses	\$348,348	\$352,848	\$357,448	\$424,862	\$429,762	\$1,913,268
Subsidy	\$277,070	\$165,128	\$ 0	\$ 0	\$ 0	\$442,198

Table 7-1 provides a comparison monthly rate summary of the alternatives outlined above for single family residences; other service types would be proportionately increased based on "equivalent dwelling units" (EDU). A single family residence is equal to one EDU.

Table 7-1: Summary of Proposed Revenue Adjustments – SFR Rates

	Current	FY 1	FY 2	FY 3	FY 4	FY 5
Alternative 1: No Repayment						
1A - No Phase-In	\$ 13.92	\$ 62.30	\$ 63.51	\$ 64.74	\$66.03	\$ 67.35
1B - 3-Yr Phase-In	\$ 13.92	\$ 23.24	\$ 38.79	\$ 64.74	\$ 66.03	\$ 67.35
Alternative 2: With Repayment						
2A - No Phase-In	\$ 13.92	\$ 93.66	\$ 94.87	\$ 101.09	\$ 102.38	\$ 103.70
2B - 3-Yr Phase-In	\$ 13.92	\$ 26.51	\$ 50.47	\$ 96.10	\$ 114.23	\$ 115.55

8.0 Proposed Rates

This Report recommends Alternative 1B as approved by the County Board of Supervisors on March 21, 2017 as the preferred rate adjustment. Significant rate increases will be required under any set of assumptions in meeting the system's revenue requirements. While catching-up on over 16 years of no rate increases is a key factor driving the need for rate increases, meeting CIP needs and setting reasonable reserves are also important drivers. The Board of Supervisors Actions include the following:

- a. Receive the County Service Area 75 - Chualar Consolidated Draft Wastewater Rate Study;
- b. Approve the Rate Alternative 1B - No Loan Payback, Three (3)-Year Phase-In;
- c. Approve the forgiveness of four (4) loans totaling \$1,166,483, and
- d. Find that the forgiveness of said loans constitutes a public benefit.

Table 8-1 summarizes the proposed rates for Alternative 1B. Rates per EDU increase from \$13.92 per month to \$67.35 per month over a 5-year period.

Table 8-1: Proposed Monthly Wastewater Rates By Category

	Current	Proposed FY 1	Proposed FY 2	Proposed FY 3	Proposed FY 4	Proposed FY 5
Single-Family, per dwelling unit	\$ 13.92	\$23.24	\$38.79	\$64.74	\$66.03	\$67.35
Multi-Family, per dwelling unit	\$ 11.90	\$19.87	\$33.16	\$55.35	\$56.45	\$57.58
Commercial (\$/EDU)	\$ 13.92	\$23.24	\$38.79	\$64.74	\$66.03	\$67.35
Industrial Discharge Per Million Gallons	\$470.90	\$786.19	\$1,31.23	\$2,190.09	\$2,233.73	\$2,278.38

Appendix 1: Existing Wastewater Service Charges and Connection Fees

Description	Amount	Unit/Time
1. Single-family residence	\$13.92	Each/Month
2. Multiple-family residence	11.90	Each/Month
3. Mobile home residences		
a. Single-width trailer, per trailer (connected)	11.90	Each/Month
b. Double-width trailer, per trailer (connected)	13.92	Each/Month
c. Travel trailer, per trailer (connected)	6.96	Each/Month
d. Mobile home park office & meeting room	22.27	Each/Month
4. Hotels and motels, per overnight guest room	3.48	Each/Month
5. Day schools, per preceding year's ADA		
a. Elementary grades K-9, incl. preschool & nursery	0.55	Each/Month
b. Secondary grades 7-12	0.55	Each/Month
1. Add for cafeteria	0.27	Each/Month
2. Add for athletic shower facilities	0.55	Each/Month
6. Fire Stations		
a. Day staff, per person	1.11	Each/Month
b. Overnight staff, person	3.34	Each/Month
7. Cafe or restaurant, per seat	4.45	Each/Month
8. Bar or taverns, per seat	0.55	Each/Month
9. Service stations		
a. Single pump	11.13	Each/Month
b. Duplex pump	16.70	Each/Month
10. Laundromat, per washer	16.70	Each/Month
11. Car wash, self-service, per wash station	11.13	Each/Month
12. Churches, per seat	0.27	Each/Month
13. Food markets, per 1,000 sq. ft	5.56	Each/Month
14. Barber shops, per station	1.11	Each/Month
15. Beauty shops, per station	2.78	Each/Month
16. Meeting halls, per 100 sq. ft.	2.78	Each/Month
17. Medical and dental offices, and laboratories, per employee	2.78	Each/Month
18. General offices, shops and stores, per employee	1.11	Each/Month
19. Industrial, domestic waste only, flat	13.92	Each/Month
20. Bakery, per oven	11.13	Each/Month
21. Industrial discharge per million gallons	1,412.70	Each/Quarter
22. Connection permit fee, residential (includes lateral construction & connection inspection)		
a. Residential, per dwelling unit`	500.00	Each
b. Commercial, institutional and industrial		
1. Per maximum million gallons per year to be discharged, or	4,186.00	Each
2. Minimum charge, per parcel to be connected	500.00	Each
23. Annexation Fee		Each
a. Residential, per dwelling unit	1,920.00	Each
b. Commercial, institutional and industrial	384.00	Each
24. Copies of Ordinance No.	0.10	Page

25.	Late Payment Penalty. A late payment penalty shall be charged as permitted in Section 5473.10 of the California Health and Safety Code		Each
	Penalty for nonpayment within 30 days of the due date	10% of unpaid charges	Basic Penalty
	Penalty per month for nonpayment of charges and for nonpayment of basic penalty within 30 days	1-½ % of unpaid charges and 1-½ % of unpaid basic penalty	Per Month