

# Capital Replacement Program Reserve Calculation

**Exhibit 1**

Date: 4/1/2015

System Number:

System Name: Clearlake Oaks County Water District

Service Connections: 1993

\*Enter information only in yellow cells.

Qty	Component	Unit Cost	Installed Cost	Existing Reserve	Avg. Life Rem.	Annual Reserve	Mon. Res.	Res. Per Cust.
<b>Capital Replacement Program</b>								
4	PC Computers	\$2,000	\$8,000	\$0	5	\$1,600.00	\$133.33	\$0.07
1	HACH Analyzer	\$2,500	\$2,500	\$0	10	\$250.00	\$20.83	\$0.01
1	HACH HQ 40 Probe	\$1,500	\$1,500	\$0	10	\$150.00	\$12.50	\$0.01
1	Scale	\$800	\$800	\$0	15	\$53.33	\$4.44	\$0.00
1	DO Meter	\$1,000	\$1,000	\$0	10	\$100.00	\$8.33	\$0.00
1	Pocket C12 Meter	\$1,000	\$1,000	\$0	10	\$100.00	\$8.33	\$0.00
1	HACH COD Reactor	\$2,500	\$2,500	\$0	10	\$250.00	\$20.83	\$0.01
1	Muffle Furnace	\$5,000	\$5,000	\$0	15	\$333.33	\$27.78	\$0.01
1	Honda 2500 Generator	\$1,000	\$1,000	\$0	10	\$100.00	\$8.33	\$0.00
3	LMI Metering Pumps	\$1,200	\$3,600	\$0	15	\$240.00	\$20.00	\$0.01
20	Submersible Pumps	\$5,000	\$100,000	\$0	10	\$10,000.00	\$833.33	\$0.42
6	PC Computers	\$2,000	\$12,000	\$0	5	\$2,400.00	\$200.00	\$0.10
15	PLCs	\$5,000	\$75,000	\$0	15	\$5,000.00	\$416.67	\$0.21
1	Server	\$2,500	\$2,500	\$0	5	\$500.00	\$41.67	\$0.02
12	Handheld Radios	\$400	\$4,800	\$0	10	\$480.00	\$40.00	\$0.02
3	Tremble Units	\$5,000	\$15,000	\$0	10	\$1,500.00	\$125.00	\$0.06
2	Laptop Computers	\$2,000	\$4,000	\$0	5	\$800.00	\$66.67	\$0.03
1	Vehicle	\$15,000	\$15,000	\$0	8	\$1,875.00	\$156.25	\$0.08
2	Safety harness	\$700	\$1,400	\$0	5	\$280.00	\$23.33	\$0.01
1	Portable Pump	\$2,000	\$2,000	\$0	10	\$200.00	\$16.67	\$0.01
1	Vactor Truck	\$30,000	\$30,000	\$0	15	\$2,000.00	\$166.67	\$0.08
1	CCTV Equipment	\$20,000	\$20,000	\$0	10	\$2,000.00	\$166.67	\$0.08
1	Dumptruck	\$30,000	\$30,000	\$0	15	\$2,000.00	\$166.67	\$0.08
1	Backhoe	\$30,000	\$30,000	\$0	15	\$2,000.00	\$166.67	\$0.08
1	Current Infrastructure Replacement Cost	\$30,000,000	\$30,000,000	\$0	50	\$0.00	\$0.00	\$0.00
<b>Subtotal New Capital Replacement Program</b>			\$30,368,600			\$34,211.67	\$2,850.97	\$1.43
<b>New Project Program</b>								
1	Wastewater System Improvement Loan payme	\$5,164,000	\$5,164,000	\$0	40	\$129,100.00	\$10,758.33	\$5.40
1	Reserve Account	\$516,400	\$516,400	\$0	40	\$12,910.00	\$1,075.83	\$0.54
1	CRP - Restricted Reserve	\$290,581	\$290,581	\$0	3	\$96,860.33	\$8,071.69	\$4.05
<b>Subtotal New project Program</b>			\$5,970,981	\$0		\$238,870.33	\$19,905.86	\$9.99
<b>Total Capital Programs</b>			\$36,339,581			\$273,082.00	\$22,756.83	\$11.42

**Budget**

**Exhibit 2**

**Clearlake Oaks Sewer Rate study**

Inflation Factor (%): 3.00%  
 Date: 4/1/2015  
 System Number: 0

<b>EXPENSES AND SOURCES OF FUNDS</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>OPERATIONS &amp; MAINTENANCE EXPENSES</b>					
Salaries and Employee Benefits	578,247.00	595,594.41	613,462.24	631,866.11	650,822.09
Equip -Field	5,750.00	5,922.50	6,100.18	6,283.18	6,471.68
Fuel & oil	12,000.00	12,360.00	12,730.80	13,112.72	13,506.11
Insurance	38,500.00	39,655.00	40,844.65	42,069.99	43,332.09
Interest	6,150.00	6,334.50	6,524.54	6,720.27	6,921.88
Lab	20,500.00	21,115.00	21,748.45	22,400.90	23,072.93
Milage Reimb	2,250.00	2,317.50	2,387.03	2,458.64	2,532.39
Small Tools & instruments	3,250.00	3,347.50	3,447.93	3,551.36	3,657.90
Supplies - Operating	49,000.00	50,470.00	51,984.10	53,543.62	55,149.93
Travel	3,250.00	3,347.50	3,447.93	3,551.36	3,657.90
Utilities	78,800.00	81,164.00	83,598.92	86,106.89	88,690.09
R&R - Buildings & Grounds	21,500.00	22,145.00	22,809.35	23,493.63	24,198.44
R&R - Damage Claims	5,000.00	5,150.00	5,304.50	5,463.64	5,627.54
R&R - Mains/service Lines	15,000.00	15,450.00	15,913.50	16,390.91	16,882.63
Waste disposal	69,313.00	71,392.39	73,534.16	75,740.19	78,012.39
<b>Total Operation and Maintenance Expenses:</b>	<b>908,510.00</b>	<b>935,765.30</b>	<b>963,838.26</b>	<b>992,753.41</b>	<b>1,022,536.01</b>
<b>GENERAL &amp; ADMINISTRATIVE EXPENSES</b>					
Advertising	1,500.00	1,545.00	1,591.35	1,639.09	1,688.26
Bank Fees	2,000.00	2,060.00	2,121.80	2,185.45	2,251.02
Communications & internet	4,500.00	4,635.00	4,774.05	4,917.27	5,064.79
Board Exp	0.00	0.00	0.00	0.00	0.00
Equip - Office	6,250.00	6,437.50	6,630.63	6,829.54	7,034.43
Memberships & Subscriptions	22,240.00	22,907.20	23,594.42	24,302.25	25,031.32
Postage & Shipping	6,650.00	6,849.50	7,054.99	7,266.63	7,484.63
Professional Services	17,150.00	17,664.50	18,194.44	18,740.27	19,302.48
Rents	5,700.00	5,871.00	6,047.13	6,228.54	6,415.40
Safety & Security	11,300.00	11,639.00	11,988.17	12,347.82	12,718.25
Supplies - Clothing & persona	2,750.00	2,832.50	2,917.48	3,005.00	3,095.15
Supplies - Office	5,200.00	5,356.00	5,516.68	5,682.18	5,852.65
Supplies - Other	1,600.00	1,648.00	1,697.44	1,748.36	1,800.81
Taxes - Licenses	2,500.00	2,575.00	2,652.25	2,731.82	2,813.77
Training	6,000.00	6,180.00	6,365.40	6,556.36	6,753.05
Miscellaneous	9,250.00	9,527.50	9,813.33	10,107.72	10,410.96
Capital Replacement Program	34,211.67	34,211.67	34,211.67	34,211.67	34,211.67
New Project Program	142,010.00	142,010.00	238,870.33	238,870.33	238,870.33
<b>Total General and Administrative Expenses:</b>	<b>280,811.67</b>	<b>283,949.37</b>	<b>384,041.53</b>	<b>387,370.32</b>	<b>390,798.97</b>
<b>TOTAL EXPENSES (Line 20+ Line 32):</b>	<b>1,189,321.67</b>	<b>1,219,714.67</b>	<b>1,347,879.79</b>	<b>1,380,123.72</b>	<b>1,314,775.00</b>
<b>SOURCE OF FUNDS / REVENUES RECEIVED</b>					
Cash Revenues (Water rates)	915,000.00	1,250,819.76	1,335,838.69	1,423,442.80	1,513,443.25
Client Reg Pmt	0.00	0.00	0.00	0.00	0.00
Connection Fees	0.00	0.00	0.00	0.00	0.00
Penalty & interest	5,000.00	5,150.00	5,304.50	5,463.64	5,627.54
Misc	6,000.00	6,180.00	6,365.40	6,556.36	6,753.05
Other - non s/w revenue	8,000.00	8,240.00	8,487.20	8,741.82	9,004.07
<b>TOTAL REVENUE (Lines 37 through 42):</b>	<b>934,000.00</b>	<b>1,270,389.76</b>	<b>1,355,995.79</b>	<b>1,444,204.62</b>	<b>1,534,827.92</b>
<b>NET LOSS OR GAIN:</b>	<b>-255,321.67</b>	<b>50,675.09</b>	<b>8,116.00</b>	<b>64,080.89</b>	<b>220,052.92</b>
<b>NET CASH FLOW (Contribution to Reserves)</b>	<b>-79,100.00</b>	<b>226,896.76</b>	<b>281,198.00</b>	<b>337,162.89</b>	<b>493,134.92</b>
Total non-water rates revenue	\$19,000.00	\$19,570.00	\$20,157.10	\$20,761.81	\$21,384.67

# Fixed Vs Variable Expenses



**Exhibit 3**

		% Fixed	\$ Fixed	\$ Variable
<b>OPERATIONS &amp; MAINTENANCE EXPENSES</b>				
Salaries and Employee Benefits	\$595,594.41	100%	\$595,594	\$0
Equip -Field	\$5,922.50	100%	\$5,923	\$0
Fuel & oil	\$12,360.00	100%	\$12,360	\$0
Insurance	\$39,655.00	100%	\$39,655	\$0
Interest	\$6,334.50	100%	\$6,335	\$0
Lab	\$21,115.00	100%	\$21,115	\$0
Milage Reimb	\$2,317.50	100%	\$2,318	\$0
Small Tools & instruments	\$3,347.50	100%	\$3,348	\$0
Supplies - Operating	\$50,470.00	100%	\$50,470	\$0
Travel	\$3,347.50	100%	\$3,348	\$0
Utilities	\$81,164.00	100%	\$81,164	\$0
R&R - Buildings & Grounds	\$22,145.00	100%	\$22,145	\$0
R&R - Damage Claims	\$5,150.00	100%	\$5,150	\$0
R&R - Mains/service Lines	\$15,450.00	100%	\$15,450	\$0
Waste disposal	\$71,392.39	100%	\$71,392	\$0
<b>Total Operation and Maintenance Expenses:</b>	<b>\$935,765.30</b>		<b>\$935,765</b>	<b>\$0</b>
<b>GENERAL &amp; ADMINISTRATIVE EXPENSES</b>				
Advertising	\$1,545.00	100%	\$1,545	\$0
Bank Fees	\$2,060.00	100%	\$2,060	\$0
Communications & internet	\$4,635.00	100%	\$4,635	\$0
Board Exp	\$0.00	100%	\$0	\$0
Equip - Office	\$6,437.50	100%	\$6,438	\$0
Memberships & Subscriptions	\$22,907.20	100%	\$22,907	\$0
Postage & Shipping	\$6,849.50	100%	\$6,850	\$0
Professional Services	\$17,664.50	100%	\$17,665	\$0
Rents	\$5,871.00	100%	\$5,871	\$0
Safety & Security	\$11,639.00	100%	\$11,639	\$0
Supplies - Clothing & persona	\$2,832.50	100%	\$2,833	\$0
Supplies - Office	\$5,356.00	100%	\$5,356	\$0
Supplies - Other	\$1,648.00	100%	\$1,648	\$0
Taxes - Licenses	\$2,575.00	100%	\$2,575	\$0
Training	\$6,180.00	100%	\$6,180	\$0
Miscellaneous	\$9,527.50	100%	\$9,528	\$0
Capital Replacement Program	\$34,211.67	100%	\$34,212	\$0
New Project Program	\$142,010.00	100%	\$142,010	\$0
<b>Total General and Administrative Expenses:</b>	<b>\$283,949.37</b>		<b>\$283,949.37</b>	<b>\$0.00</b>
<b>Total Expenses</b>	<b>\$1,219,714.67</b>		<b>\$1,219,714.67</b>	<b>\$0.00</b>
<b>Expense amount needed to be funded by rate revenue</b>	<b>\$1,200,144.67</b>		<b>\$1,200,144.67</b>	<b>\$0.00</b>
<b>Fixed-Variable as % of all Expenses</b>			<b>100.00%</b>	<b>0.00%</b>

Assume this relationship between fix/var expenses remains the same over the next five years.

# Sewer Rates

		Needed Revenue =	\$1,200,144.67	\$1,327,722.69	\$1,359,361.91	\$1,293,390.33
		Inflation rate				
		3.00%				
		Proposed 2015 Monthly Rate				
Dwelling Designation	Dwelling Type	Number of Dwellings	2016	2017	2018	2018
Residential	Residential	1581	\$53.30	\$60.61	\$64.42	\$64.42
Residential	Multi Family	90	\$53.30	\$60.61	\$64.42	\$64.42
Residential	Mobilehome SFD	138	\$53.30	\$60.61	\$64.42	\$64.42
Commercial	School (per Student)	208	\$1.68	\$1.78	\$1.84	\$1.84
Commercial	RV/Campsite	9	\$15.23	\$17.69	\$22.82	\$22.82
Commercial	Hotel/Motel (per room)	77	\$24.71	\$30.27	\$33.18	\$33.18
Commercial	Laundromat	15	\$33.84	\$34.86	\$36.98	\$36.98
Commercial	Church	2	\$52.28	\$59.52	\$63.31	\$63.31
Commercial	Servive/Gas Station	3	\$33.84	\$36.86	\$43.16	\$43.16
Commercial	Beauty/Barber Shop	1	\$52.28	\$59.52	\$63.31	\$63.31
Commercial	Restaurant	6	\$78.69	\$87.54	\$92.17	\$92.17
Commercial	Restaurant w/Bar	4	\$133.34	\$139.34	\$151.89	\$151.89
Commercial	Bar	1	\$76.18	\$84.88	\$89.43	\$89.43
Commercial	Bar w/Kitchen/Food Service	0	\$73.61	\$77.82	\$86.62	\$86.62
Commercial	Service Club	0	\$52.28	\$55.85	\$63.31	\$63.31
Commercial	Service Club w/Kitchen/Food Service	6	\$73.61	\$77.82	\$86.62	\$86.62
Commercial	Commerical Office Space	56	\$52.28	\$55.85	\$63.31	\$63.31
Commercial	Community Beach	4	\$52.28	\$59.52	\$63.31	\$63.31
Commercial	Fire Protection District	0	\$52.28	\$59.52	\$63.31	\$63.31
		<b>Total Yearly Revenue Generated =</b>	<b>\$1,250,819.76</b>	<b>\$1,335,838.69</b>	<b>\$1,423,442.80</b>	<b>\$1,513,443.25</b>