



Harris & AssociatesSM

SHAPING THE FUTURE ONE PROJECT AT A TIMESM

Rate Analysis Report

for the

City of Los Altos Sewer Service Charge

Prepared by:



Harris & Associates

May 8, 2013

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Introduction

The City of Los Altos retained Harris & Associates to review the financial needs for the City's sewer system and recommend a new rate structure that will:

- Provide the revenues needed for sewer operations and maintenance, treatment, and capital projects as identified in the Sewer Master Plan;
- Proportion the costs to ratepayers in an equitable manner consistent with the requirements of Proposition 218;
- Respond to the changing economic and environmental factors in which the system operates; and
- Reduce revenue volatility and future rate increases needed to meet the financial obligations of the City's Sewer Fund

In 2008 the City modified its sewer rate from a flat rate per dwelling unit to a commodity rate structure based upon the quantity of sewer discharged using winter water usage to estimate sewer flows. Over the last several years, annual revenues from sewer rates have been declining as a result of reduced winter water usage. The result is that annual revenues from sewer service charges have not been adequate to fully cover annual operating and maintenance costs, and capital project expenditures.

Based upon the estimated expenditures for Fiscal Year 2013-14 and the succeeding four years, revenues from sewer user fees would need to increase by 7% to maintain an adequate sewer fund reserve.

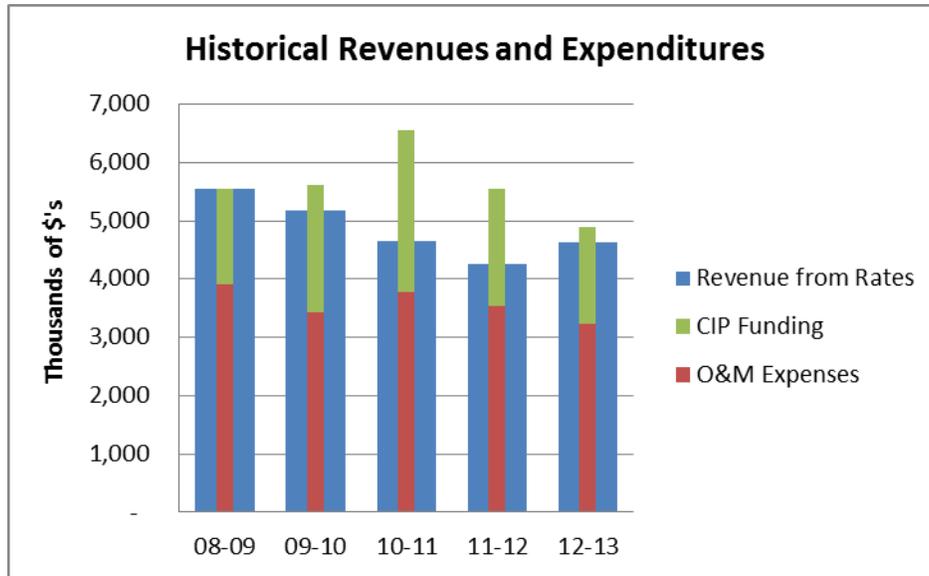
Existing Fee Structure

Parcels connected to the City's sewer collection system are billed for sewer use based upon estimated discharge to the City's collection system. Since sewer discharge is not metered, each parcel's estimated sewer discharge is calculated based upon the 3 lowest months of water consumption within the City for the prior year. If there are multiple water accounts on a parcel, the consumption is aggregated for all water accounts on the parcel to calculate the sewer charge. Sewer charges are collected on the County Property Tax roll.

The existing rate structure was adopted in 2008 and parcels connected to the City's collection system are charged the adopted rate per Unit (1 Unit equals 100 cubic feet of sewer discharged). The current rate structure allowed the City to adjust the rate annually (for a period of 5 years) based upon the annual change in the Consumer Price Index for All Urban Consumers for the San Francisco Bay Area for the prior year (January to January). The annual rate per unit adopted in 2008 was \$3.05 per unit and for 2013 the adopted rate was \$3.25 per unit. Since Fiscal Year 2012/13 is the end of the five-year period, no further adjustments in the sewer rate may be made without complying with the requirements of Proposition 218.

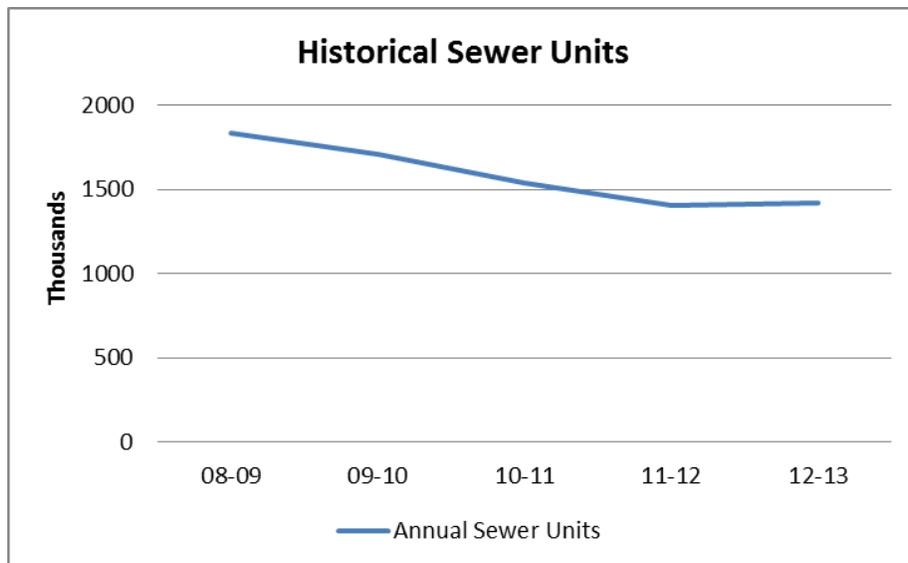
Figure 1 shows the historical annual revenue from sewer rates and the annual expenditures for O&M (operations and maintenance including sewage treatment) plus annual Capital Improvement Program (CIP) expenditures. As seen in the figure, annual expenditures have exceeded the revenue from rates in each year except for the first year following the adoption of the commodity based sewer charge (fiscal year ending June, 2009). As a result of the revenue shortfall, the City has used a portion of the Sewer Fund's fund balance to meet the annual shortfall in revenues.

Figure 1
HISTORICAL REVENUES AND EXPENDITURES



One of the reasons for this shortfall in revenue was the result of declining water usage during the winter months, which translates into reduced sewer flows. Figure 2 shows the annual sewer units for the past 5 years. As seen, the total sewer units have declined annually, except for FY 12/13 when there was a slight increase based upon slightly higher winter water use during calendar year 2011.

Figure 2
HISTORICAL SEWER UNITS

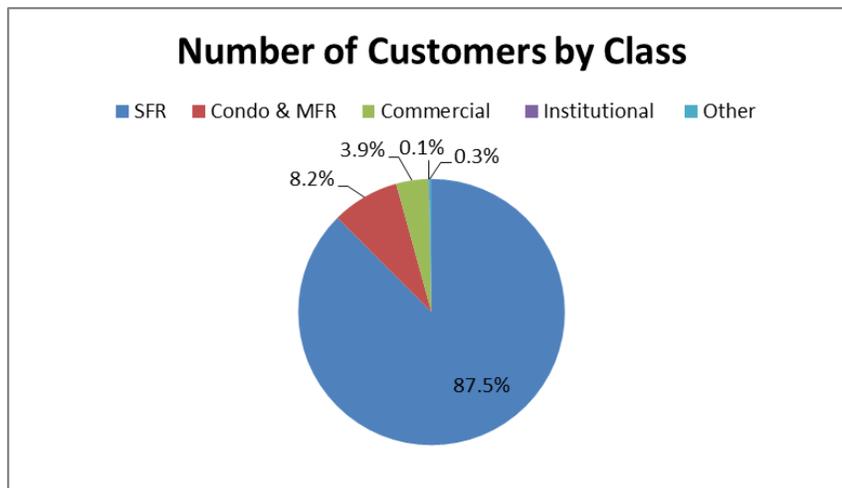


Since the current rate structure is based on each parcel’s sewer units discharged, the total revenue from sewer rates mirrors the trend in sewer units discharged. As the total number of sewer units

discharged increases, revenue from sewer rates increases. Conversely, as the total number of sewer unit discharged declines, then revenue from rates decreases.

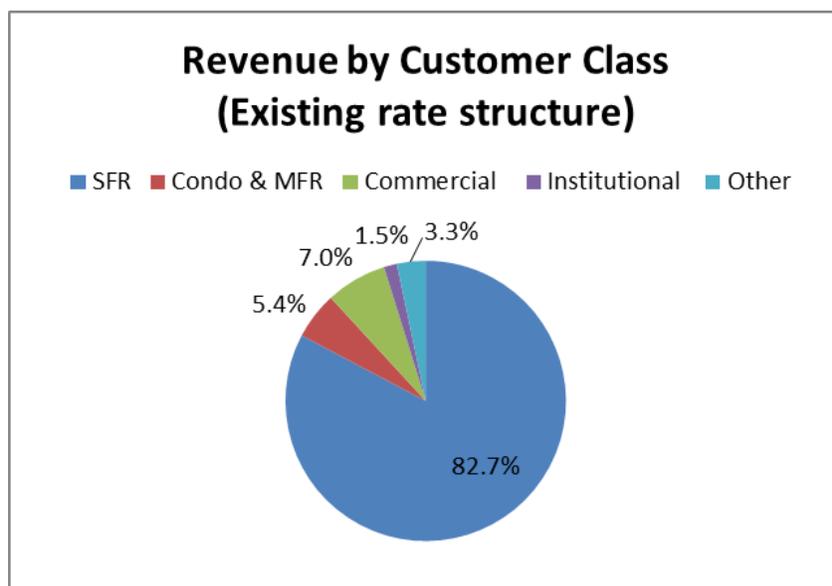
Figure 3 shows the number of customers for Fiscal Year 2012-13 by customer class. As seen, 88% of the City’s sewer customers are parcels with a single family residential home located on it.

Figure 3
DISTRIBUTION OF SEWER CUSTOMERS BY LAND USE (FISCAL YEAR 2012/13)



Even though single family homes accounted for 88 percent of the City’s sewer customers, they only accounted for 83% of the total sewer units discharged as shown in Figure 4 for the last fiscal year. Since the current rate structure is based upon sewer units discharged, single family residential units also accounted for 83% of the total revenues last year.

Figure 4
REVENUE BY CUSTOMER CLASS (FISCAL YEAR 2012/13)



One reason for this is that there are a number of single family residential units that have very low winter water usage. This could be due to several factors, including homes that are not occupied on a year around basis; homeowners modify their outside irrigation during the rainy months to reduce their winter water usage, or overall water use is very low. Figure 5 shows the number of single family residential parcels by Sewer Units charged for FY 2012/13. The average Annual Sewer Charge for parcels within each category is also shown.

**Figure 5
 SUMMARY OF SINGLE FAMILY RESIDENTIAL ACCOUNTS
 FISCAL YEAR 2012/13**

Annual Sewer Units	Number of Parcels	Avg Annual Sewer Charge
0-30	709	\$ 63.17
31-60	2,450	\$ 157.15
61-90	2,501	\$ 247.18
91-120	2,386	\$ 342.47
121-150	1,109	\$ 438.52
151-180	768	\$ 536.40
181-210	413	\$ 634.32
211-240	292	\$ 730.40
241-270	154	\$ 826.09
>270	473	\$ 1,303.08
Totals	11,255	

For FY 2012/13, the average annual sewer service charge for single family residences was \$363 (111 sewer units @ \$3.25 per sewer unit). This compares to an average annual sewer service charge of \$454 (150 sewer units @ \$3.03 per sewer unit) in FY 2008/09 due to the higher winter water usage. The reason for the reduction in the average annual sewer service charge is that water use City-wide has declined by approximately 26% during the wet season months from calendar year 2007 to 2011 which are used to estimate the annual sewer units as shown earlier in Figure 2.

Since the City’s current sewer service charge is based only upon winter water usage, the annual sewer charge applied to single family residences varies between parcels based upon each parcel’s water usage, and varies from year to year on a parcel as its water use changes. This has resulted in a significant variation in the sewer charge on single family residential parcels under the current rate structure as winter water use changes as seen below and the revenue generated by the sewer charges.

**Figure 6
 COMPARISON OF SEWER CHARGES FY 2008/09 AND FY 2012/13
 FOR SINGLE FAMILY RESIDENCE**

	<u>Lowest</u>	<u>Median</u>	<u>Average</u>	<u>Highest</u>	<u>Sewer Charge per Unit</u>	<u>Total Revenue</u>
FY 2008/09	\$12	\$364	\$454	\$6,848	\$3.03	\$5,600,000
FY 2012/13	\$14	\$300	\$363	\$6,027	\$3.25	\$4,508,000

However, for the 2012 calendar year winter water use did increase during the wet season months for the first time over the last several years.

Revenue Requirements

The following section looks at the projected annual revenue requirements for the operation and maintenance of the City's sewer collection system, treatment costs, and future capital expenditure requirements. A "cash basis" approach was used for establishing revenue requirements. This approach conforms to most public utility budgetary requirements. The calculation is easy to understand and is based upon:

- Identifying the total cash expenditures needed for operations and maintenance, and treatment costs for a period of time to determine required revenues; and
- Calculating the capital costs by adding debt service payments (principal and interest) and the costs of any capital improvements financed with rate revenues.

Figure 7 on the following page shows the projected annual expenses for Fiscal Years 2013/14 through 2017/18. As shown in Figure 7, the costs included within each category include:

- **Administration** – Personnel costs for non-maintenance staff, miscellaneous costs for utilities, telephones, staff training and meetings, enterprise administration, and miscellaneous expenses related to management of the Sewer Enterprise fund.
- **Maintenance** – Personnel costs for maintenance personnel, electricity for operation of pump stations, water used for sewer flushing, personnel training and certification, vehicle and equipment operating and maintenance costs, materials and supplies, contract sewer repairs, and other supplies and expenses directly related to sewer system maintenance and operations.
- **Treatment Cost** – City's portion of costs associated with the Palo Alto sewage treatment plant
- **Capital Improvements** – Annual estimated contributions towards capital projects based upon the Sewer Master Plan
- **Debt Service** – City's share of current and future debt service for the expansion/upgrading of the Palo Alto sewage treatment plant.

As seen in Figure 7, annual expenditures are projected to increase an average of 6.9% per year over the next 4 years from FY 2013/14 revenue needs.

In developing the forecast of future costs shown in Figure 7, the City's adopted budget for FY 2012/13 served as the starting point as well as the recently adopted Sewer Master Plan. Costs in future years were increased based upon the assumptions shown in Figure 8.

Figure 7
ANNUAL SEWER RESOURCE REQUIREMENTS

DESCRIPTION	PROJECTED REVENUE NEEDS				
	ESTIMATED FY 13-14	ESTIMATED FY 14-15	ESTIMATED FY 15-16	ESTIMATED FY 16-17	ESTIMATED FY 17-18
Administration					
Personnel Services	\$ 206,504	\$ 210,634	\$ 214,847	\$ 219,144	\$ 223,527
Services and Supplies	587,314	599,060	611,041	623,262	635,728
Capital Costs	-	-	-	-	-
Maintenance					
Personnel Services	581,576	593,208	605,072	617,174	629,517
Services and Supplies	250,474	255,484	260,593	265,805	271,121
Capital Costs	-	-	-	-	-
Treatment Cost					
STP-Palo Alto	2,250,000	2,317,500	2,387,025	2,458,636	2,532,395
Less Los Altos Hills	(370,500)	(370,500)	(370,500)	(370,500)	(370,500)
Treatment Costs	1,879,500	1,947,000	2,016,525	2,088,136	2,161,895
Capital Improvements					
Contribution for Future Sewer CIP	1,534,000	1,626,040	1,723,602	1,827,019	1,936,640
Debt Service					
90/Plant Expansion	22,400	22,400	22,400	22,400	22,400
99/Incinerator	51,700	51,700	51,700	51,700	51,700
New Debt - Plant Expansion	42,837	42,837	564,393	660,040	773,798
Total Annual Sewer Resource Requirements	\$ 5,156,306	\$ 5,348,363	\$ 6,070,174	\$ 6,374,679	\$ 6,706,325

Notes:

1. **Maintenance** -Personnel Services – Does not include \$100k annually for the addition of Sewer Lead Worker shown in Sewer Master Plan
2. **Treatment Costs** - Cost shown for future years were reduced based upon historical cost from levels shown in the Sewer Master Plan
3. **Capital Improvements** - Annual funding for CIP projects were reduced \$200k per year for fiscal years 2014/15 through 2017/18 from levels shown in Sewer Master Plan.

**Figure 8
 KEY MODELING ASSUMPTIONS**

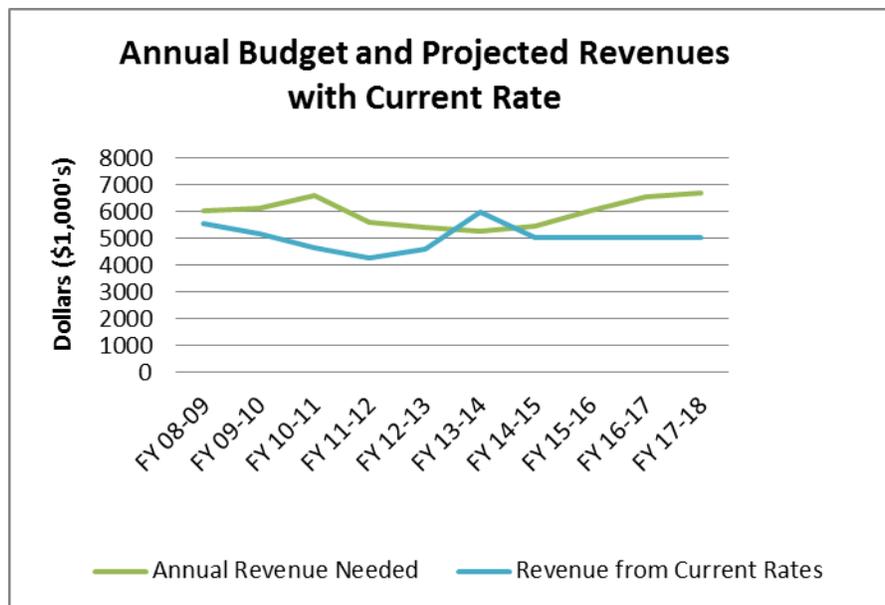
Cost Category	FY 13-14	FY 14-15	FY15-16	FY 16-17	FY 17-18
Personnel Services	2.0%	2.0%	2.0%	2.0%	2.0%
Services and Supplies	2.0%	2.0%	2.0%	2.0%	2.0%
Treatment Costs - Palo Alto	3.0%	3.0%	3.0%	3.0%	3.0%
Increase in accounts	0.3%	0.3%	0.3%	0.3%	0.3%
Increase in sewer flows	0.0%	0.0%	0.0%	0.0%	0.0%
Interest on fund balance	1.0%	1.5%	2.0%	2.0%	2.0%

Revenue from Existing Rates

Figure 9 below shows the estimated revenues based upon the current rate of \$3.25 per Sewer Unit and the projected annual revenue needs shown in Figure 7. Since water usage during the wet season months fluctuates year to year and had declined approximately 26% from calendar year 2008 through 2011 and then increased for calendar year 2012, future revenue was estimated by averaging the annual sewer flow based upon the water usage during the wet season for the last 3 calendar years (2010-2012) and using the current rate of \$3.25 per unit to estimate future revenues.

As seen, the estimated revenues under the current rate will not be sufficient to meet budgeted expenditures for each of the years shown except for the first year as a result of the significant increase in winter water usage for calendar year 2012 as a result of the unusually dry winter and the resulting increase in irrigation watering during the winter months. Based upon the expenditures shown in Figure 7 and estimated revenues at the current rate of \$3.25 per sewer unit, the projected shortfall in revenue will be more than \$3.4 million over the next 5 fiscal years (Fiscal Years 2013/14 through 2017/18).

**Figure 9
 SUMMARY OF CURRENT REVENUE AND FUTURE COSTS**



Under the current commodity based rate structure, the current rate per Sewer Unit would need to increase to \$3.31 per Sewer Unit for Fiscal Year 2012/13 using the 3 year average quantity of sewer units and increase to \$4.41 per Sewer Unit by Fiscal Year 2017/18 to meet anticipated revenue needs. This would represent an average annual increase of 6% per year to the Existing Sewer Charge per 100 cf.

Rate Structure Analysis

In developing a recommended rate structure, the main objective was to develop a rate structure that is fair and equitable to all sewer users and which will provide the level of revenue needed to meet projected revenue needs during the analysis period. The rate structure should also provide a stable level of revenue that will meet the Sewer Fund's financial obligations and is not overly impacted by changes in annual sewer flows that would result in the need for significant rate changes to maintain the level of funding needed on an annual basis.

In analyzing the annual revenue needs of the City's Sewer Enterprise Fund, costs were identified as either "fixed" or "variable". Fixed costs are those expenditures that are generally stable and are not directly influenced by the volume of wastewater discharged and do not change in direct proportion to sewer flows. Fixed costs are more closely related to the number of sewer customers or accounts that are connected to the system. As a result, each sewer customer should bear their "fair share" of these fixed costs which are directly related to the availability of sewer service regardless of the number of sewer units used.

Variable costs include the costs of sewage treatment and other costs which vary based upon flow including utilities, equipment rental costs, and capital project costs associated with increasing system capacity that are directly related to the flow discharged into the system. These costs should be paid by the City's sewer customers in proportion to their use of the sewer system based upon the quantity of sewer units used. Those customers who discharge greater volumes of flow should pay a proportionately greater amount of those costs that vary based upon flow.

Costs have been allocated between fixed costs and variable costs as shown in Figure 10. This allocation of costs is based upon Harris's experience and the findings of other agencies, and represents a reasonable allocation of costs based upon the City's budgeted expenditures. The objective in allocating expenditures between "fixed" and "variable" costs is to have a rate structure that will meet the "proportionality" requirements of Proposition 218 and provide a stable revenue stream to meet the financial obligations of the Sewer Fund. Although costs will change annually, the percentage allocations used, as described below, are reasonable estimates of the allocation of costs between "fixed" and "variable" cost over time.

The administration costs shown in Figure 7 (Annual Sewer Resource Requirements) were assigned 100% as fixed cost since they are directly related to the costs of administering the City's sewer system, regulatory compliance, and other fixed costs that are not directly impacted by sewage flow and do not vary during the year as the volume of sewage changes. The maintenance costs shown in Figure 7 were allocated equally between fixed and variable cost since a portion of the those costs are associated with performing routine inspections and maintenance activities as identified in the Sewer Master Plan, while other costs will vary based upon the volume of sewage discharged to the City's sewer system or for maintaining the hydraulic capacity of the collection system. Based upon the Sewer Master Plan, capital improvement costs shown in Figure 7 were allocated equally between fixed and variable costs, since the costs of the identified projects included a mix of projects to correct existing system deficiencies and projects to increase system capacity. Treatment costs shown in

Figure 7 were allocated 30% fixed/70% variable. A review of the annual budget for the Palo Alto treatment plant shows that administration, environmental compliance and debt service account for approximately 30% of the annual treatment plant cost. Plant operations, which includes plant personnel, electricity, chemicals and other operating costs for daily operation of the sewage treatment plant, account for the balance of the annual treatment plant costs. Those costs will vary in proportion to flow through the treatment plant. Debt service costs were also allocated 30% fixed/70% variable. This was based upon a review of the debt service costs associated with replacing existing facilities and the costs of plant upgrades to meet new regulatory requirements.

Figure 10
ALLOCATION OF COSTS

LINE ITEM DESCRIPTION	COSTS ALLOCATION	
	FIXED	VARIABLE
Administration		
Personnel Services	100%	0%
Services and Supplies	100%	0%
Capital Costs		
Maintenance		
Personnel Services	50%	50%
Services and Supplies	50%	50%
Capital Costs	50%	50%
Treatment Cost		
STP-Palo Alto	30%	70%
Capital Improvements		
Contribution for Future CIP	50%	50%
Debt Service		
90/Plant Expansion	30%	70%
99/Incinerator	30%	70%
Plant Expansion	30%	70%

Based upon the allocation of costs as shown in Figure 10, Figure 11 shows the total costs allocations for the Annual Revenue Needs shown in Figure 7.

Figure 11
FIXED AND VARIABLE COST ALLOCATIONS

DESCRIPTION	PROJECTED REVENUE NEEDS				
	ESTIMATED FY 13-14	ESTIMATED FY 14-15	ESTIMATED FY 15-16	ESTIMATED FY 16-17	ESTIMATED FY 17-18
Fixed Costs	\$ 2,575,775	\$ 2,666,241	\$ 2,917,028	\$ 3,044,088	\$ 3,180,831
Variable Costs	\$ 2,580,531	\$ 2,682,122	\$ 3,153,147	\$ 3,330,592	\$ 3,525,494

Rate Calculation

The recommended rate structure makes a structural improvement to the City’s sewer rates which will help reduce revenue volatility as sewer use varies in future years, and more equitably allocates costs to each class of sewer user by improving the distribution of costs across customer classes as well as within each class.

Sewer Base Charge

The annual Sewer Base Charge rate is calculated by dividing the total annual Fixed Cost budget by the total estimated number of residential dwelling units plus the number of equivalent dwelling units (EDU’s) for the non-residential sewer accounts. The Sewer Base Charge for FY 2013/14 is calculated as follows:

Annual Fixed Cost Budget	÷	Total number of residential units plus non-residential accounts	=	Sewer Base Charge
\$2,575,775	÷	11,054 residential dwelling units plus 1,246 non-residential EDU’s	=	\$209.00

The Sewer Base Charge will be applied to each residential parcel based upon the number of residential dwelling units (including multi-dwelling residential units) which discharge into the City’s sanitary sewer collection system.

For non-residential parcels, the Sewer Base Charge shall be calculated based upon the number of equivalent residential dwelling units connected to the City’s sanitary sewer system which will be calculated by dividing the total parcel’s estimated annual sewer usage for the calendar year by the estimated average annual sewer usage for single family residential units (110 sewer units). This increase in the Sewer Base Charge is based upon the fact that non-residential parcels with higher sewer discharges than residential development require additional hydraulic capacity in the City’s sewer collection system. A minimum of 1.0 EDU will be assigned to each non-residential account.

Sewer Use Charge

The annual Sewer Use Charge rate is calculated by dividing the total annual Variable Cost budget by the total estimated annual sewer units (based upon the average of the estimated annual sewer use using the three lowest total water usage months in the City for each of the past 3 years). Since the City is largely build-out, changes in annual water use during the winter months are primarily due to changes in irrigation usage rather than as a result of growth. Using the average winter water usage for the prior 3 years will reduce the volatility in rates and help maintain the stability of the revenue stream. The Sewer Use Charge for FY 2013/14 is calculated as follows:

Annual Variable Cost Budget	÷	Total estimated number of sewer units based upon average of 3 prior year’s winter water usage	=	Sewer Use Charge
\$2,580,531	÷	1,556,310 sewer units	=	\$1.66

Therefore, for each parcel, the Sewer Use Charge will be calculated based on average monthly individual water consumption for the three lowest total water usage months in the City during the prior calendar year, and multiplied by 12 to calculate the total estimated annual sewer usage for the calendar year.

The total Annual Sewer Charge for a parcel will be the sum of the Sewer Base Charge plus the Sewer Use Charge which is based upon estimated annual sewer usage.

ANNUAL SEWER CHARGE = SEWER BASE CHARGE + SEWER USE CHARGE

To provide the revenue to keep up with the increase in projected revenue needs shown earlier in Figure 7, both the Sewer Service Base Charge and the Sewer Use Charge per sewer unit will be increased annually each year for FY 2014/15 through FY 2017/18. Figure 12 shows the proposed rates for the next 5 years.

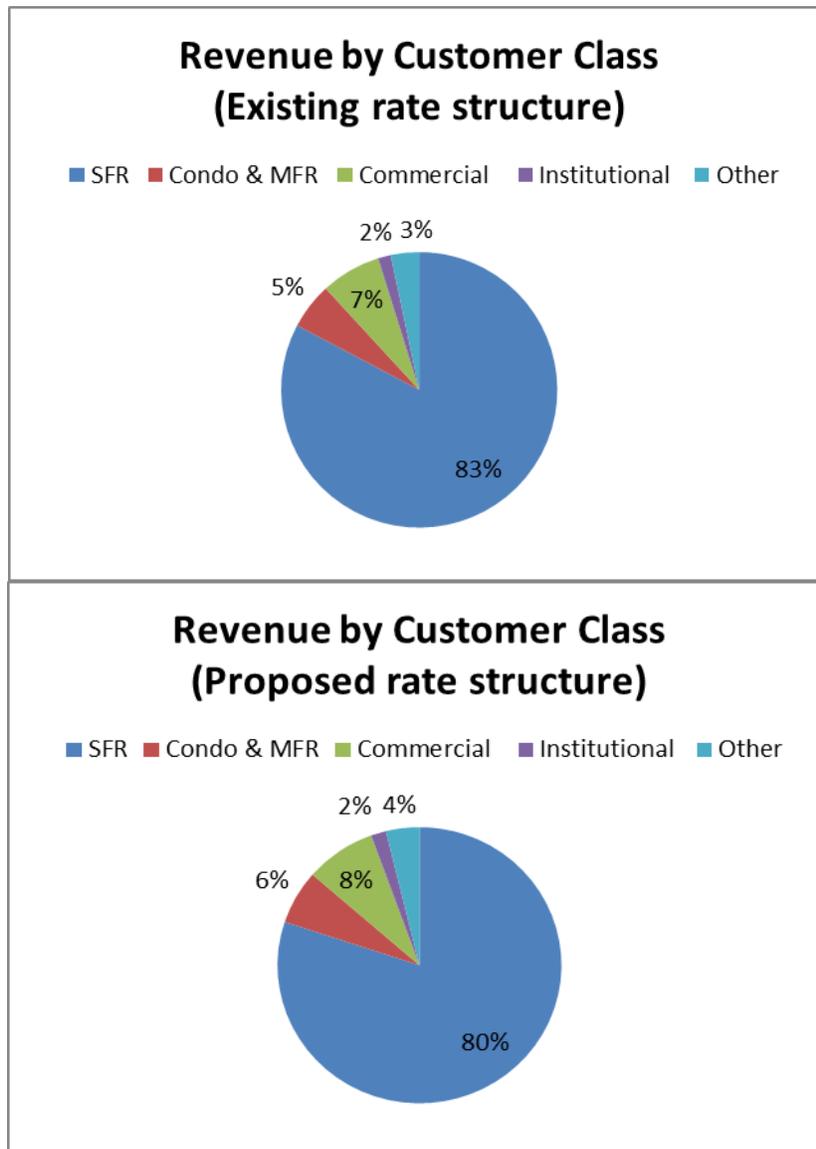
**Figure 12
 PROPOSED SEWER RATES FOR FY 2013/14 TO FY 2017/18**

	Fiscal Year				
	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18
Number of Equiv. Residential Units	12,330	12,361	12,392	12,423	12,454
Actual Annual Sewer Units	1,843,192				
Estimated 3 Yr Avg Sewer Flow	1,556,310	1,556,310	1,556,310	1,556,310	1,556,310
Sewer Base Charge per unit	\$ 209.00	\$ 219.45	\$ 230.42	\$ 244.25	\$ 261.35
% Increase from prior year	N/A	5.0%	5.0%	6.0%	7.0%
Sewer Use Charge per ccf	\$ 1.66	\$ 1.74	\$ 1.83	\$ 1.94	\$ 2.07
% Increase from prior year	N/A	5.0%	5.0%	6.0%	7.0%
Total Revenue from Proposed Rates	\$ 5,633,183	\$ 5,422,141	\$ 5,700,369	\$ 6,049,958	\$ 6,481,571

As shown, following the adoption of the recommended Sewer Base Charge of \$209.00 per residential unit or equivalent unit, and the Sewer Use charge of \$1.66 per ccf; rates would increase five percent (5%) in FY 2014/15 and FY 2015/16, six percent (6%) in FY 2016/17 and seven percent (7%) in FY 2017/18.

Based upon the adoption of the recommended rates, Figure 13 on the following page shows the revenue generated by customer class under the recommended rate structure as well as the revenue generated by customer class under the existing commodity base rate structure. As seen, there is a slight reduction in the total revenue generated by single family homes (83% under the existing commodity based rate structure versus 80% under the proposed sewer base charge plus sewer use charge rate structure). This is offset by small increases in the revenue generated by the other rate classes (commercial increases from 7% to 8% of total revenue for example).

Figure 13
REVENUE BY CUSTOMER CLASS



Cash Flow Analysis

Figure 14 shows the projected cash flow for the City’s Sewer Fund based upon the adoption of the recommended Sewer Base Charge of \$209.00 per residential unit or equivalent residential unit for non-residential accounts and a Sewer Use Charge of \$1.66 per unit effective beginning FY 2013/14 for parcels connected to the City sewer system. The proposed rates will smooth the costs over time, in recognition of increased treatment plant capital costs which are projected to begin in FY 2015/16. As shown, annual revenues will be greater than the estimated costs for the first 2 years and then will be less than the estimated cost for the last 3 years of the study period. The primary reason for this is due to the projected increase in debt service for the City’s portion of the planned improvements to the

**Figure 14
 CITY SEWER FUND CASH FLOW ANALYSIS**

LINE ITEM DESCRIPTION	PROJECTED CASH FLOW				
	ESTIMATED FY 13-14	ESTIMATED FY 14-15	ESTIMATED FY 15-16	ESTIMATED FY 16-17	ESTIMATED FY 17-18
Beginning Fund Balance	\$ 2,200,000	\$ 2,414,548	\$ 2,466,415	\$ 2,246,371	\$ 1,825,390
Projected Revenue from Rates	5,633,183	5,422,141	5,700,369	6,049,958	6,481,571
Less Annual Operating Expenditures	(3,622,306)	(3,722,323)	(4,346,572)	(4,547,661)	(4,769,685)
Operating Income	\$ 2,010,878	\$ 1,699,818	\$ 1,353,797	\$ 1,502,297	\$ 1,711,886
Estimated Interest Earnings	22,000	36,218	49,328	44,927	36,508
Less Capital Projects	(1,818,330)	(1,684,169)	(1,623,170)	(1,968,205)	(1,900,333)
Ending Fund Balance	\$ 2,414,548	\$ 2,466,415	\$ 2,246,371	\$ 1,825,390	\$ 1,673,451
Operating Reserve Requirement (25%)	\$ 1,289,076	\$ 1,337,091	\$ 1,517,544	\$ 1,593,670	\$ 1,676,581

Notes:

1. Projected revenue from rates for FY 2013/14 is based upon actual sewer units (2012 water data), and for FY2014/15-2017/18 is based upon 3 year average sewer units (winter water usage for calendar years 2010-2012) and rates shown in Figure 12 for future years. Actual revenue will vary based upon actual winter water usage for the prior calendar year.
2. Capital project cost shown in Sewer Master Plan were reduced by \$200k per year for fiscal years 14/15-17/18
3. Beginning Fund Balance for FY 13-14 was reduced by \$4,000k for Capital Projects which have been approved but funds have not yet been encumbered

Palo Alto treatment plant. Debt service costs are projected to increase more than \$500k annually beginning in FY 2015/16; however that increase may be delayed depending on the financing mechanism ultimately selected by the City of Palo Alto to fund the plant improvements. At the end of the five year study period, the Sewer Fund's operating reserve will be 25% of projected annual expenditures which is the desired level.

Typical Sewer Rates

Figure 15 on the following page shows the charge per parcel for the typical sewer customers in the City based upon the estimated expenditures shown in Figure 7 – Annual Sewer Expenses and the recommended sewer rates for FY 2013/14. Because the new sewer rate structure involves a change in how the annual sewer charge is calculated, the new rate structure will result in changes to customer bills even if they were applied in a revenue neutral situation.

The specific change to an individual property will depend upon the customer class and actual sewer units used based upon 2012 water use. However, the typical single family residential customer using 124 sewer units will see a 3% increase in their sewer charge for FY 2013/14. Residential customers who are low water users will see a higher percentage increase in their annual sewer charge as a result of the fixed sewer base charge that is charged to all parcels to cover their share of the fixed costs that are not directly impacted by sewer flows. Large residential water users will see a decrease in their annual sewer charge since a portion of the total annual costs is being spread to all sewer users regardless of the sewer units used.

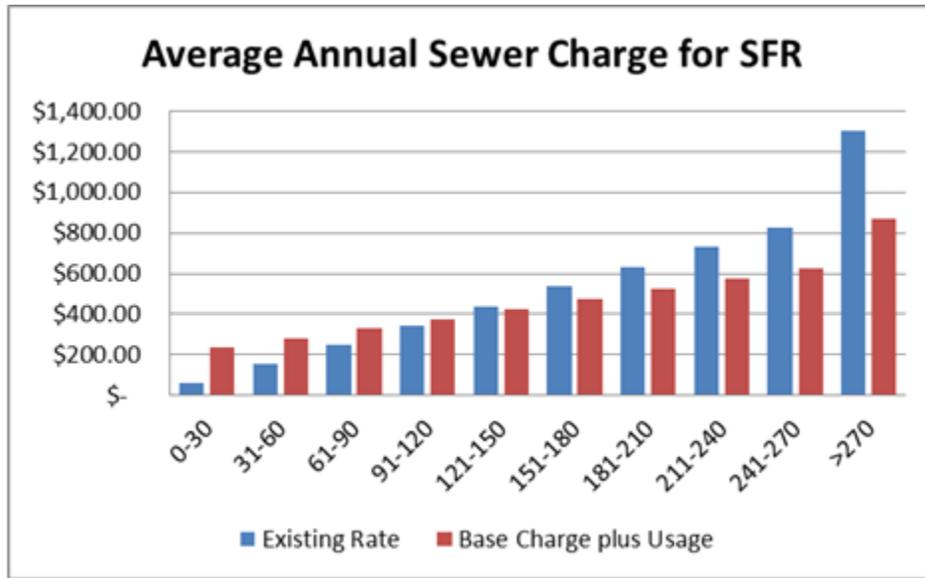
The typical non-residential customer (132 sewer units) will not see an increase in their annual sewer charge. Those non-residential sewer customers who are large water users, and discharge larger quantities of wastewater will see an average increase of 10% in their sewer charge based upon the actual sewer units discharged. Low water users would see a higher percentage increase in their annual sewer charge since they are being charged the same sewer base charge as non-residential parcels to cover their share of the fixed costs.

Figure 16
ANNUAL SEWER SERVICE CHARGE FOR VARIOUS LAND USES

Land Use Description	Annual Sewer Use	Existing 2012/13 Rates		Proposed 2013/14 Rates				% Change
		Annual Sewer Charge (\$3.25)	Monthly Sewer Charge	Base Charge (\$209)	Usage Charge (\$1.66 Unit)	Annual Sewer Charge	Monthly Sewer Charge	
Single Family Home (10th percentile)	48	\$ 156.00	\$ 13.00	\$ 209.00	\$ 79.68	\$ 288.68	\$ 24.06	85%
Single Family Home (20th percentile)	68	\$ 221.00	\$ 18.42	\$ 209.00	\$ 112.88	\$ 321.88	\$ 26.82	46%
Single Family Home (30th percentile)	88	\$ 286.00	\$ 23.83	\$ 209.00	\$ 146.08	\$ 355.08	\$ 29.59	24%
Single Family Home (40th percentile)	104	\$ 338.00	\$ 28.17	\$ 209.00	\$ 172.64	\$ 381.64	\$ 31.80	17%
Single Family Home (50th percentile)	124	\$ 403.00	\$ 33.58	\$ 209.00	\$ 205.84	\$ 414.84	\$ 34.57	3%
Single Family Home (60th percentile)	144	\$ 468.00	\$ 39.00	\$ 209.00	\$ 239.04	\$ 448.04	\$ 37.34	-4%
Single Family Home (70th percentile)	172	\$ 559.00	\$ 46.58	\$ 209.00	\$ 285.52	\$ 494.52	\$ 41.21	-12%
Single Family Home (80th percentile)	208	\$ 676.00	\$ 56.33	\$ 209.00	\$ 345.28	\$ 554.28	\$ 46.19	-18%
Single Family Home (90th percentile)	272	\$ 884.00	\$ 73.67	\$ 209.00	\$ 451.52	\$ 660.52	\$ 55.04	-25%
Single Family Home (highest)	1,312	\$ 4,264.00	\$ 355.33	\$ 209.00	\$ 2,177.92	\$ 2,386.92	\$ 198.91	-44%
Condominium	57	\$ 185.25	\$ 15.44	\$ 209.00	\$ 94.62	\$ 303.62	\$ 25.30	64%
Multi-Family Residence (2 units)	116	\$ 377.00	\$ 31.42	\$ 418.00	\$ 192.56	\$ 610.56	\$ 50.88	62%
Multi-Family Residence (4 units)	172	\$ 559.00	\$ 46.58	\$ 836.00	\$ 285.52	\$ 1,121.52	\$ 93.46	101%
Multi-Family Residence (25 units)	832	\$ 2,705.24	\$ 225.44	\$ 5,225.00	\$ 1,381.75	\$ 6,606.75	\$ 550.56	144%
Church	339	\$ 1,101.90	\$ 91.83	\$ 644.19	\$ 562.82	\$ 1,207.01	\$ 100.58	10%
Commercial / Industrial	43	\$ 139.75	\$ 11.65	\$ 209.00	\$ 71.38	\$ 280.38	\$ 23.37	101%
Commercial / Industrial	132	\$ 429.00	\$ 35.75	\$ 209.00	\$ 219.12	\$ 428.12	\$ 35.68	0%
Commercial / Industrial	320	\$ 1,040.00	\$ 86.67	\$ 608.00	\$ 531.20	\$ 1,139.20	\$ 94.93	10%
Institutional	9,425	\$ 30,632.33	\$ 2,552.69	\$ 17,908.13	\$ 15,646.05	\$ 33,554.19	\$ 2,796.18	10%
Park	602	\$ 1,955.20	\$ 162.93	\$ 1,143.04	\$ 998.66	\$ 2,141.70	\$ 178.47	10%
School	1,224	\$ 3,978.00	\$ 331.50	\$ 2,325.60	\$ 2,031.84	\$ 4,357.44	\$ 363.12	10%
Government	192	\$ 624.00	\$ 52.00	\$ 364.80	\$ 318.72	\$ 683.52	\$ 56.96	10%

Figure 16 shows the impacts of the change in the sewer rate structure on the single family residential sewer customer.

Figure 15
TYPICAL SINGLE FAMILY RESIDENTIAL SEWER CHARGE FY 2013/14
BASED UPON ANNUAL SEWER UNITS



Comparison of Sewer Charges

Figure 17 shows a comparison of the proposed sewer charges to those for surrounding jurisdictions. The non-residential rates for all of the agencies surveyed have sewer charges based upon the strength characteristics of the sewer discharge. The standard or lowest rate was used for calculating the rates shown, since the majority of the City’s non-residential sewer customers do not have sewer discharges with high COD (Chemical Oxygen Demand) or TSS (Total Suspended Solids) loadings. It should also be noted that many of the agencies surveyed still have a uniform rate for residential customers. However, State Water Resource Control Board (SWRCB) guidelines encourage that residential sewer charges have a usage component associated with them when winter water use exceeds a base usage level to incentivize conservation and to be more equitable by charging residential users their “fair share” of the fixed costs associated with operation and maintenance of the City’s sewer system.

Figure 17
COMPARISON OF TYPICAL SEWER CHARGES

Land Use Description	Sewer Use	Los Altos Current Rate	Los Altos Proposed Rates	Palo Alto Current Rate	Milpitas Current Rate	Sunnyvale (proposed rate July 1st)	Santa Clara (proposed rate July 1st)	Los Altos Hills Current Rate	West Valley Sanitary District (proposed rate July 1st)	West Bay Sanitary District (effective July 1st)	City of Belmont Current Rate (\$238.16 base + \$3.12/hcf)	Bayshore Sanitary District Current Rate(\$125 base +\$5.25/hcf)
Single Family Home	48	\$ 32.50	\$ 288.68	\$ 351.72	\$ 455.52	\$ 404.76	\$ 402.96	\$ 732.96	\$ 363.72	\$ 820.00	\$ 387.92	\$ 377.00
Single Family Home	88	\$ 286.00	\$ 355.08	\$ 351.72	\$ 455.52	\$ 404.76	\$ 402.96	\$ 732.96	\$ 363.72	\$ 820.00	\$ 512.72	\$ 587.00
Single Family Home	124	\$ 403.00	\$ 414.84	\$ 351.72	\$ 455.52	\$ 404.76	\$ 402.96	\$ 732.96	\$ 363.72	\$ 820.00	\$ 625.04	\$ 776.00
Single Family Home	144	\$ 468.00	\$ 448.04	\$ 351.72	\$ 455.52	\$ 404.76	\$ 402.96	\$ 732.96	\$ 363.72	\$ 820.00	\$ 687.44	\$ 881.00
Single Family Home	208	\$ 676.00	\$ 554.28	\$ 351.72	\$ 455.52	\$ 404.76	\$ 402.96	\$ 732.96	\$ 363.72	\$ 820.00	\$ 887.12	\$ 1,217.00
Condominiums	57	\$ 185.25	\$ 328.12	\$ 351.72	\$ 455.52	\$ 404.76	\$ 402.96	\$ 732.96	\$ 363.72	\$ 820.00	\$ 416.72	\$ 425.47
Multi-Family Residence (2 units)	116	\$ 473.40	\$ 610.56	\$ 710.64	\$ 612.72	\$ 522.48	\$ 805.92	N/A	\$ 507.60	\$ 1,640.00	\$ 838.24	\$ 859.00
Multi-Family Residence (4 units)	172	\$ 559.00	\$ 1,121.52	\$ 1,421.28	\$ 1,225.44	\$ 1,044.96	\$ 1,611.84	N/A	\$ 1,015.20	\$ 3,280.00	\$ 1,489.28	\$ 1,403.00
Multi-Family Residence (25 units)	832	\$ 2,705.24	\$ 6,606.75	\$ 8,883.00	\$ 7,659.00	\$ 6,531.00	\$ 10,074.00	N/A	\$ 6,345.00	\$ 20,500.00	\$ 8,551.03	\$ 7,495.00
Church	339	\$ 1,101.90	\$ 1,207.01	\$ 1,902.06	\$ 1,177.44	\$ 1,129.03	\$ 1,118.86	N/A	\$ 1,091.73	\$ 2,559.81	\$ 1,295.99	\$ 1,905.00
Commercial/ Industrial (lowest rate)	132	\$ 826.98	\$ 428.12	\$ 740.52	\$ 508.68	\$ 439.56	\$ 501.60	N/A	\$ 425.04	\$ 996.60	\$ 650.00	\$ 818.00
Institutional	9,425	\$ 30,632.33	\$ 33,554.19	\$ 52,876.12	\$ 30,526.15	\$ 31,386.36	\$ 38,832.37	N/A	\$ 30,349.57	\$ 70,124.48	\$ 29,645.20	\$ 49,608.00
Park	602	\$ 1,955.20	\$ 2,141.70	\$ 3,374.98	\$ 2,025.49	\$ 2,003.33	\$ 2,286.08	N/A	\$ 1,937.15	\$ 4,475.90	\$ 2,115.15	\$ 3,283.40
School	1,224	\$ 3,978.00	\$ 4,357.44	\$ 6,866.64	\$ 4,035.84	\$ 4,075.92	\$ 5,422.32	N/A	\$ 4,430.88	\$ 9,106.56	\$ 4,057.04	\$ 6,551.00
Government	192	\$ 624.00	\$ 683.52	\$ 1,077.12	\$ 702.48	\$ 639.36	\$ 729.60	N/A	\$ 618.24	\$ 1,428.48	\$ 837.20	\$ 1,133.00

Notes:

1. City of Sunnyvale has proposed a 6.5% rate increase effective July 1st, they are also considering the adoption of an alternative rate structure to be effective July 1, 2014 for residential customers which would be based upon a fixed charge of \$285 per year plus \$1.05/hcf (rate for single family home using 124 hcf would be \$415.20 if the alternative rate structure is adopted)
2. West Valley Sanitary District serves the cities of Campbell, Monte Sereno, Los Gatos, two thirds of Saratoga, and the intervening unincorporated areas of Santa Clara County, District has proposed a 10% rate increase effective July 1, 2013 and 10% increases for FY 14/15 and 15/16, increase of 9.5% for FY 16/17 and 9% increase for FY 17/18.
3. West Bay Sanitary District serves City of Menlo Park, Atherton, and Portola Valley, and areas of East Palo Alto, Woodside and unincorporated San Mateo and Santa Clara counties.
4. Bayshore Sanitary District serves portions of Daly City and City of Brisbane
5. In those agencies that impose a “strength based” charge on non-residential sewer customers, the lowest rate was used for comparison purposes. However, depending upon the type of commercial use the actual sewer charge may be significantly higher. For example, the sewer charge for restaurants is typically 50-100% higher than for office use.

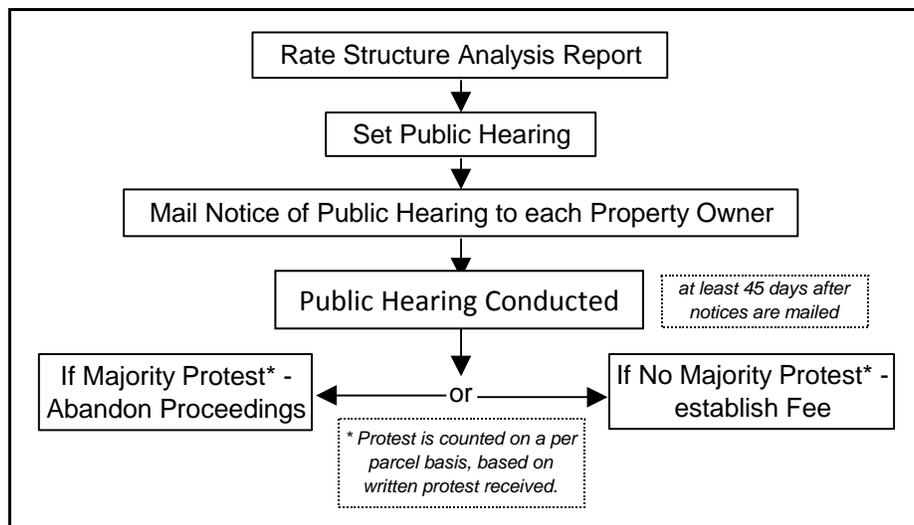
Steps for Adoption of Recommended Sewer Fees

Because the rates will be increasing, the City will need to comply with the requirements of Article XIIIID of the California Constitution (Proposition 218) for adoption of the recommended sewer fees. Under Proposition 218, all new or increased fees and charges now require a public hearing process with mailed notices to all affected property owners a minimum of 45 days prior to the date of the public hearing. If a majority of the affected properties submit written protests prior to the close of the public hearing, then the fee or charge may not be imposed.

The following outlines that steps required for the adoption of the recommend sewer user fee by the City.

1. Develop Sewer User Rate Structure which will generate the required revenue for the maintenance and operation of the sewer system and sewer capital improvement program.
2. Prepare a draft Rate Analysis Report, for review by City staff.
3. Finalize the Rate Analysis Report for presentation to the City Council.
4. After approval of the Rate Analysis Report by the City Council, mail notices to all affected property owners a minimum of 45-days prior to the public hearing.
5. If less than a majority of the properties affected by the proposed sewer fee submit written protests to the fee, then the City may establish the fee.

The flowchart, shown below, outlines the legal steps required to establish a Sewer User Fee after finalization of the Rate Analysis Report.



Proposed Schedule of Events

The following provides a preliminary schedule for establishing the Annual Sewer Service Charge to be collected for FY 2013-14.

1. Prepare rate analysis report.....April-May, 2013
2. Approve Rate Report and set public hearing date May 14, 2013
3. Mail notice of public hearing to property owners by May 25, 2013
4. First reading of Rate Adoption Ordinance June 11, 2013
5. Conduct public hearing and 218 Protest..... July 9, 2013
6. Submit FY2013/14 rates on property tax roll August, 2013