



Harris & Associates<sup>SM</sup>

SHAPING THE FUTURE ONE PROJECT AT A TIME<sup>SM</sup>

# Annual Report

---

for

## Abalone Cove Sewer Maintenance Fee

FY 2014-15

prepared for the

**City of Rancho Palos Verdes**  
Los Angeles County, California

June 2, 2014

## TABLE OF CONTENTS

<b>Certificates .....</b>	<b>Pg. 1</b>
<b>Introduction.....</b>	<b>Pg. 2</b>
<b>Cost Estimates .....</b>	<b>Pg. 3</b>
<b>Annual Fee Rate Calculations.....</b>	<b>Pg. 4</b>
<b>Sample Calculations .....</b>	<b>Pg. 7</b>

## APPENDIX

### Preliminary Sewer Fee Roll

**FY 2014-15 Annual Report  
City of Rancho Palos Verdes  
Abalone Cove Sewer Maintenance Fee**

The undersigned respectfully submits the enclosed report.

DATED: June 2, 2014

  
BY: K. Dennis Klingelhofer  
R.C.E. No. 50255



## INTRODUCTION

To insure a flow of funds for the on-going operation and maintenance of the sewer facilities in the Abalone Cove area, the City Council formed the Abalone Cove Sewer Maintenance Fee. This Sewer Maintenance Fee ensures a fair and equitable levying of the necessary costs of operating and maintaining of the facilities and was established in compliance with the provisions of Proposition 218, Article XIID of the California Constitution, Section 6(b). Mailed notices were sent to all affected property owners and the Public Hearing was held on July 17, 2001. Since there was not a majority of written protests, the Fee was established with a maximum annual escalator of seven percent (7%).

This report, as signed and presented to the Council for approval, has been prepared according to the methodology and rates approved by the City Council in 2001.

The City Council annually reviews the current and projected year's costs for the operation and maintenance of the sewer facilities and sets the rates for the ensuing fiscal year, which runs between July 1 and June 30. In setting the annual rates, the City Council will consider any new or updated maintenance costs, and any fund balances or shortages, and adjust the rates accordingly.

The Abalone Cove Sewer Maintenance Fee is levied under the authority of the California Health and Safety Code, Sections 5471 et seq. (the "Code"). Payment of the fees for each parcel will be made in the same manner and at the same time as payments are made for property taxes for each property.

This report contains the necessary data required to establish the annual fee rates and is submitted to the City Clerk for filing in the office of the City Clerk where it shall remain open for public inspection.

## COST ESTIMATE

The estimated annual cost of the Abalone Cove Sewer System is provided below in Table 1.

**Table 1 – Estimated Annual Costs**

<b>GRAVITY SUBSYSTEM</b>	
Annual Maintenance	\$25,500
PVD Pump Station Pump Maintenance	\$3,000
PVD Pump Station Annual Maintenance	\$3,180
Gravity System Repairs	\$7,500
	<hr/>
	\$39,180
<b>FORCE MAIN SUBSYSTEM</b>	
Annual Maintenance	\$20,750
Pump Replacement	\$8,000
Emergency Repairs	\$3,500
	<hr/>
	\$32,250
<b>LOW PRESSURE SUBSYSTEM</b>	
Annual Maintenance	\$1,950
Pump Maintenance	\$14,700
Emergency Repairs	\$5,400
	<hr/>
	\$22,050
	<b>Subtotal = \$93,480</b>
<b>ADMINISTRATIVE COSTS</b>	
City Administration and Overhead	\$20,100
Fund Balance	(\$9,500)
Operating Reserve	
County Charge for Fee Collection	\$500
	<hr/>
	<b>Subtotal = \$11,100</b>
	<b>Total Maintenance &amp; Operation Costs = \$104,580</b>
	Zone A City Contribution = (\$6,431)
	Zone B City Contribution = (\$8,374)
	Zone C City Contribution = (\$19,014)
	Zone D City Contribution = (\$13,868)
	<hr/>
	Total City Contribution = (\$47,686)
	<b>Total Annual Fee = \$56,894</b>

## ANNUAL FEE RATE CALCULATIONS

The rate structure for the Sewer Maintenance Fee is based on the amount of sewage flow generated by each parcel of land within the sewer system service area.

### Equivalent Residential Units

The sewer flow rates used to calculate this User Fee are based on the Los Angeles County Sanitation District (LACSD) standards, as outlined in their Master Service Charge Ordinance of South Bay Cities Sanitation District of Los Angeles County, as adopted on March 18, 1998. This ordinance describes the user categories and mean loading of sewer usage for flow in the South Bay Cities Sanitation District of Los Angeles County.

Using these standards, residential parcels with single family homes are assigned a flow rate of 260 Gallons Per Day (GPD). Therefore, 260 GPD is defined as 1 Equivalent Residential Unit (ERU) and all other parcels are charged based on the number of ERUs calculated on their property for their particular use. (The total flow rate for each parcel is divided by 260 to calculate the number of ERUs assigned to the parcel.) Vacant parcels have no sewer flow associated with them and therefore would be assigned 0 ERUs.

The Abalone Cove Beach property flow rate has been calculated based on the future improvements to the beach. These future improvements consist of 7 toilet facilities and 2 showers. The flow rates for these facilities are based on information provided by the City of Los Angeles Bureau of Sanitation, and are shown below in Table 2.

Table 2 provides a summary of the user categories in the Abalone Cove sewer service area, the assigned flow rates, and the ERU calculation for each.

**Table 2 – ERU Calculation Summary Table**

Land Use Description	Flow (GPD)	ERU Calc.
Single Family Home	260 / home	1.00 / home
Church	50 / 1000 bldg sf	0.19 / 1000 bldg sf
School/Nursery	200 / 1000 bldg sf	0.77 / 1000 bldg sf
Beach Toilet	120 / toilet	0.46 / toilet
Beach Shower	85 / shower	0.33 / shower
Vacant	0	0

### Sewer System Components

The Abalone Cove sewer system is comprised of three types of components or subsystems:

- ◆ a gravity subsystem,
- ◆ a force main subsystem, and
- ◆ a low-pressure subsystem.

These different and integrated subsystems collect flows from the sewer service area and ultimately convey it to the LACSD outfall. Flows generated by each parcel are conveyed through one or more of these subsystems.

Each of these subsystems requires different levels of operation and maintenance and, therefore, have different costs associated with them. Parcels that contribute flow to a subsystem will be charged for the operation and maintenance of that subsystem. Because the entire Abalone Cove sewer system flows into the Palos Verdes Drive Pump Station and the 6-inch force main and gravity system between the pump station and the LACSD outfall, all users of the system will be charged for the operation and maintenance of these facilities.

- ◆ **Gravity Subsystem.** Gravity systems are the most basic of sewer systems and require minimal routine maintenance. Parcels connected to the Gravity Subsystem would be responsible for sharing the costs associated with maintenance of the gravity system. All parcels within the service area contribute to this subsystem, as sewage flows contributed by each parcel are eventually discharged into the gravity subsystem.
- ◆ **Force Main Subsystem.** Force main subsystems include pump station and pressurized pipes in addition to gravity lines. Parcels connected to the Force Main Subsystem would be responsible for sharing the additional costs associated with the operation and maintenance of those components. The pump stations for these lines are located at Thyme Place, Sweetby East and Sweetby at Altimira Canyon.
- ◆ **Low Pressure Subsystem.** Low pressure subsystems include grinder pumps at each user connection to the system as well as low pressure pipes. Parcels connected to the Low Pressure Subsystem would be responsible for sharing the associated operation and maintenance costs of those components.

A few parcels that are connected to the gravity subsystem or the force main subsystem require the use of a grinder pump to get their flow into the system. These parcels share in the cost of grinder pump maintenance and are considered to be a part of the low pressure subsystem.

### Rate Zones

A system of zones was developed to identify the specific combination of subsystems used by each contributing parcel. These zones are as follows:

- Zone A - Gravity subsystem only
- Zone B - Gravity & Force Main subsystems
- Zone C - Gravity & Low Pressure subsystems
- Zone D - Gravity & Force Main & Low Pressure subsystems

### Inventory of Parcels

Table 3 and Table 4, on the following page, were compiled from information obtained from the Los Angeles County Assessor's Roll, Assessor's Parcel Maps, and the City of Rancho Palos Verdes.

**Table 3 – Land Use Inventory**

Land use Description	Parcels	Bldg sf	ERUs
Single Family Home	110		123.00
Church	1	6,144.00	1.17
School/Nursery	1	2,301.00	1.77
Beach with 2 showers & 7 toilets	1		3.88
Vacant	67		0.00
<b>Total:</b>	<b>180</b>	<b>8,445.00</b>	<b>129.82</b>

**Table 4 – ERU Distribution by Rate Zone and Subsystem**

Zone	ERU's	Subsystem	ERU's
A	29.00	Gravity	129.82
B	36.00	Force Main	63.00
C	37.82	Low Pressure	64.82
D	27.00		
<b>Total:</b>	<b>129.82</b>		

Table 5 provides a summary of the annual Sewer User Fee rates for each of the Rate Zones.

**Table 5 – Summary of Annual Fee Rates per ERU**

Subsystem & Budget	Zone A	Zone B	Zone C	Zone D	Fee Rate \$/ERU
Gravity + Admin. \$50,280	X	X	X	X	\$387.31
Force Main \$32,250		X		X	\$511.90
Low Pressure \$22,050			X	X	\$340.17
Total 2014-15 User Fee without contribution (\$ / ERU)	\$387.31	\$899.21	\$727.48	\$1,239.38	
Contribution (\$ / ERU)	(\$221.75)	(\$232.61)	(\$502.74)	(\$513.62)	
<b>Total 2014-15 User Fee (\$ / ERU)</b>	<b>\$165.56</b>	<b>\$666.60</b>	<b>\$224.74</b>	<b>\$725.76</b>	
Total 2013-14 User Fee (\$ / ERU)	\$163.92	\$660.00	\$222.51	\$718.57	
Total 2012-13 User Fee (\$ / ERU)	\$161.82	\$491.76	\$219.65	\$709.35	
Total 2011-12 User Fee (\$ / ERU)	\$158.65	\$638.75	\$215.34	\$695.44	
Total 2010-11 User Fee (\$ / ERU)	\$154.03	\$561.01	\$209.07	\$675.18	

Table 6 provides the annual fee rates for FY 2014-15 and shows the calculated maximum rates. The maximum rates, which may be levied for each ERU, shall be increased automatically by the annual increase in Consumer Price Index for all Urban Consumers (CPI) for the Los Angeles, Riverside, Orange County Areas, not to exceed seven percent (7%).



**Table 6 – Summary of Abalone Cove Sewer Maintenance Fee Rates**

<b>Zone</b>	<b>FY 2013-14 Max. Rates</b>	<b>FY 2014-15 Max. Rates</b>	<b>FY 2014-15 Actual Rates</b>
A	\$163.92 / ERU	\$165.56 / ERU	<b>\$165.56 / ERU</b>
B	\$660.00 / ERU	\$666.60 / ERU	<b>\$666.60 / ERU</b>
C	\$222.51 / ERU	\$224.74 / ERU	<b>\$224.74 / ERU</b>
D	\$718.57 / ERU	\$725.76 / ERU	<b>\$725.76 / ERU</b>

CPI Increase = 1.00%

**Table 7 – Sample Calculations**

<b>Land Use</b>	<b>Rate Zone A</b>	<b>Rate Zone B</b>	<b>Rate Zone C</b>	<b>Rate Zone D</b>
<b>FY 2014-15 Rate:</b>	\$165.56 / ERU	\$666.60 / ERU	\$224.74 / ERU	\$725.76 / ERU
Residential	\$165.56 / Dwelling	\$666.60 / Dwelling	\$224.74 / Dwelling	\$725.76 / Dwelling
Church	\$31.46 / 1000 bldg sf	\$126.65 / 1000 bldg sf	\$42.70 / 1000 bldg sf	\$137.89 / 1000 bldg sf
School/Nursery	\$127.48 / 1000 bldg sf	\$513.28 / 1000 bldg sf	\$173.05 / 1000 bldg sf	\$558.84 / 1000 bldg sf
Beach with 2 showers & 7 toilets	n/a	n/a	\$871.99 / parcel	n/a
Vacant	\$0.00 / Lot	\$0.00 / Lot	\$0.00 / Lot	\$0.00 / Lot

The Preliminary Sewer Fee Roll, which is a listing of each parcel within this sewer fee area and its proposed sewer fee for FY 2014-15, is provided in the Appendix.

# Appendix

## Preliminary Sewer Fee Roll

Preliminary Sewer Fee Roll

Parcel Number	Map Ref	Rate Zone	Land Use	Bldg Sq Ft	ERU	FY 2014-15 Prop. Fee	Parcel Number	Map Ref	Rate Zone	Land Use	Bldg Sq Ft	ERU	FY 2014-15 Prop. Fee
7572009023	1	A	SFR		1	\$165.56	7572011023	50	D	VAC		0	\$0.00
7572009022	2	A	VAC		0	\$0.00	7572011022	51	D	SFR		1	\$725.76
7572009021	3	A	SFR		1	\$165.56	7572011019	52	D	SFR		1	\$725.76
7572009020	4	A	SFR		1	\$165.56	7572011018	53	D	VAC		0	\$0.00
7572009019	5	A	SFR		1	\$165.56	7572011015	54	D	VAC		0	\$0.00
7572009018	6	A	VAC		0	\$0.00	7572011014	55	D	SFR		1	\$725.76
7572009017	7	A	SFR		1	\$165.56	7572011011	56	D	SFR		1	\$725.76
7572009016	8	A	SFR		1	\$165.56	7572011010	57	D	SFR		1	\$725.76
7572009015	9	A	VAC		0	\$0.00	7572011007	58	D	VAC		0	\$0.00
7572009014	10	A	VAC		0	\$0.00	7572011006	59	D	SFR		1	\$725.76
7572009013	11	A	SFR		1	\$165.56	7572002018	60	B	SFR		1	\$666.60
7572009012	12	A	SFR		1	\$165.56	7572002019	61	B	SFR		1	\$666.60
7572009011	13	A	VAC		0	\$0.00	7572002017	62	B	SFR		1	\$666.60
7572009010	14	A	SFR		1	\$165.56	7572017034	63	C	SFR		1	\$224.74
7572009009	15	A	SFR		1	\$165.56	7572011005	64	B	SFR		1	\$666.60
7572009024	16	A	SFR		1	\$165.56	7572011008	65	B	VAC		0	\$0.00
7572009007	17	A	VAC		0	\$0.00	7572011009	66	B	VAC		0	\$0.00
7572009006	18	A	VAC		0	\$0.00	7572011012	67	B	SFR		1	\$666.60
7572009005	19	A	VAC		0	\$0.00	7572011013	68	B	VAC		0	\$0.00
7572010027	20	A	SFR		1	\$165.56	7572011016	69	B	SFR		1	\$666.60
7572010014	21	A	VAC		0	\$0.00	7572011017	70	B	VAC		0	\$0.00
7572010013	22	A	VAC		0	\$0.00	7572011020	71	B	SFR		1	\$666.60
7572010012	23	A	VAC		0	\$0.00	7572011021	72	B	SFR		1	\$666.60
7572010011	24	A	SFR		1	\$165.56	7572011024	73	B	SFR		1	\$666.60
7572010010	25	A	VAC		0	\$0.00	7572011025	74	B	SFR		1	\$666.60
7572010015	26	A	SFR		1	\$165.56	7572011028	75	B	VAC		0	\$0.00
7572010016	27	C	SFR		1	\$224.74	7572011029	76	B	SFR		1	\$666.60
7572010017	28	C	SFR		1	\$224.74	7572011030	77	B	SFR		1	\$666.60
7572010018	29	C	SFR		1	\$224.74	7572011031	78	B	SFR		1	\$666.60
7572010019	30	A	VAC		0	\$0.00	7572013001	79	B	SFR		1	\$666.60
7572010026	31	A	VAC		0	\$0.00	7572013004	80	B	SFR		1	\$666.60
7572010025	32	A	VAC		0	\$0.00	7572013005	81	B	SFR		1	\$666.60
7572010024	33	A	VAC		0	\$0.00	7572013006	82	B	VAC		0	\$0.00
7572010023	34	A	VAC		0	\$0.00	7572013011	83	B	SFR		1	\$666.60
7572010022	35	A	VAC		0	\$0.00	7572013016	84	B	SFR		1	\$666.60
7572010021	36	A	VAC		0	\$0.00	7572013015	85	B	SFR		1	\$666.60
7572010020	37	A	VAC		0	\$0.00	7572013017	86	B	VAC		0	\$0.00
7572010009	38	B	SFR		1	\$666.60	7572013018	87	B	SFR		1	\$666.60
7572002021	39	D	SFR		14	\$10,160.64	7572013019	88	B	SFR		1	\$666.60
7572002030	40	B	SFR		1	\$666.60	7572013014	89	B	SFR		1	\$666.60
7572002027	41	B	SFR		1	\$666.60	7572013013	90	B	SFR		1	\$666.60
7572002029	43	B	VAC		0	\$0.00	7572013012	91	A	SFR		1	\$165.56
7572002024	44	B	SFR		1	\$666.60	7572013010	92	A	SFR		1	\$165.56
7572002025	45	B	SFR		1	\$666.60	7572013009	93	A	VAC		0	\$0.00
7572002026	46	B	SFR		1	\$666.60	7572013008	94	A	VAC		0	\$0.00
7572002020	47	B	VAC		0	\$0.00	7572013007	95	A	VAC		0	\$0.00
7572011027	48	B	SFR		1	\$666.60	7572013003	96	A	VAC		0	\$0.00
7572011026	49	B	SFR		1	\$666.60	7572013002	97	A	SFR		1	\$165.56

LANDUSE LEGEND

SFR = Residential  
 VAC = Vacant  
 SCH = School  
 BCH = Beach  
 CCH = Church  
 EXE = Exempt (property not connected to sewer)

RATE ZONE LEGEND

A - Gravity only  
 B - Gravity + Force Main  
 C - Gravity + Low Pressure (grinder pumps)  
 D - Gravity + Force Main + Low Pressure (grinder pumps)



Parcel Number	Map Ref	Rate Zone	Land Use	Bldg Sq Ft	ERU	FY 2014-15 Prop. Fee	Parcel Number	Map Ref	Rate Zone	Land Use	Bldg Sq Ft	ERU	FY 2014-15 Prop. Fee
7572014012	98	A	SFR		1	\$165.56	7572017009	148	C	SFR		1	\$224.74
7572014013	99	A	SFR		1	\$165.56	7572017010	149	C	SFR		1	\$224.74
7572014014	100	A	SFR		1	\$165.56	7572017011	150	C	SFR		1	\$224.74
7572014015	101	A	SFR		1	\$165.56	7572017014	151	C	VAC		0	\$0.00
7572014016	102	A	VAC		0	\$0.00	7572017015	152	C	SFR		1	\$224.74
7572014017	103	C	VAC		0	\$0.00	7572017016	153	A	SFR		1	\$165.56
7572014018	104	C	SFR		1	\$224.74	7572017013	154	C	SFR		1	\$224.74
7572014019	105	C	VAC		0	\$0.00	7572017028	155	C	SFR		1	\$224.74
7572014020	106	C	SFR		1	\$224.74	7572017029	156	C	SFR		1	\$224.74
7572014021	107	C	SFR		1	\$224.74	7572015010	157	C	VAC		0	\$0.00
7572014022	108	B	SFR		1	\$666.60	7572015011	158	C	SFR		1	\$224.74
7572014023	109	B	SFR		1	\$666.60	7572015016	159	C	VAC		0	\$0.00
7572014024	110	B	SFR		1	\$666.60	7572015017	160	C	VAC		0	\$0.00
7572014025	111	C	VAC		0	\$0.00	7572015018	161	C	VAC		0	\$0.00
7572014026	112	C	SFR		1	\$224.74	7572015013	162	C	SFR		1	\$224.74
7572014027	113	C	SFR		1	\$224.74	7572015015	163	C	VAC		0	\$0.00
7572014028	114	C	SFR		1	\$224.74	7572015012	164	C	SFR		1	\$224.74
7572014029	115	A	SFR		1	\$165.56	7572015014	165	C	VAC		0	\$0.00
7572014030	116	A	SFR		1	\$165.56	7572019005	166	C	SFR		1	\$224.74
7572014031	117	A	SFR		1	\$165.56	7572018900	167	C	SCH	2,301	1.77	\$397.79
7572014032	118	A	SFR		1	\$165.56	7572018900	167	C	BCH		3.88	\$871.99
7572014033	119	A	SFR		1	\$165.56	7572012026	168	C	CCH	6,144	1.17	\$262.95
7572016011	120	B	VAC		0	\$0.00	7572012028	169	A	VAC		0	\$0.00
7572016013	121	B	SFR		1	\$666.60	7572012023	171	C	SFR		1	\$224.74
7572016012	122	B	SFR		1	\$666.60	7572012022	172	C	SFR		1	\$224.74
7572016010	123	B	VAC		0	\$0.00	7572012021	173	C	VAC		0	\$0.00
7572016022	124	D	VAC		0	\$0.00	7572012020	174	C	SFR		1	\$224.74
7572016014	125	B	VAC		0	\$0.00	7572012019	175	C	VAC		0	\$0.00
7572016021	126	D	SFR		1	\$725.76	7572012018	176	C	SFR		1	\$224.74
7572016015	127	D	SFR		1	\$725.76	7572012017	177	A	SFR		1	\$165.56
7572016016	128	D	SFR		1	\$725.76	7572012016	178	A	SFR		1	\$165.56
7572016017	129	D	SFR		1	\$725.76	7572016023	179	D	SFR		1	\$725.76
7572016018	130	D	SFR		1	\$725.76	7572016024	180	D	VAC		0	\$0.00
7572016001	131	C	VAC		0	\$0.00	7572001004	181	A	VAC		0	\$0.00
7572016002	132	C	VAC		0	\$0.00	7572017018	182	D	SFR		1	\$725.76
7572016003	133	C	SFR		1	\$224.74						129.82	\$56,894.03
7572016004	134	C	SFR		1	\$224.74							
7572016005	135	C	SFR		1	\$224.74							
7572016006	136	C	VAC		0	\$0.00							
7572016007	137	C	VAC		0	\$0.00							
7572016008	138	C	VAC		0	\$0.00							
7572016009	139	C	SFR		1	\$224.74							
7572016020	140	D	VAC		0	\$0.00							
7572017001	141	C	VAC		0	\$0.00							
7572017002	142	C	EXE		0	\$0.00							
7572017003	143	C	VAC		0	\$0.00							
7572017004	144	C	VAC		0	\$0.00							
7572017005	145	C	VAC		0	\$0.00							
7572017006	146	C	SFR		1	\$224.74							
7572017007	147	C	SFR		1	\$224.74							

**LANDUSE LEGEND**

SFR = Residential  
 VAC = Vacant  
 SCH = School  
 BCH = Beach  
 CCH = Church  
 EXE = Exempt (property not connected to sewer)

**RATE ZONE LEGEND**

A - Gravity only  
 B - Gravity + Force Main  
 C - Gravity + Low Pressure (grinder pumps)  
 D - Gravity + Force Main + Low Pressure (grinder pumps)

