

DRAFT

Rate Analysis Report

for the

Stormwater Utility Fee

For the

City of Rancho Cordova



April 15, 2014

Introduction

The City of Rancho Cordova (City) is detaching from the County of Sacramento fee and is creating their own Stormwater Utility Fee, which is being levied per the California Health and Safety Code Section 5471 et seq.

The purpose of this Rate Analysis Report is to:

- Review the Stormwater Utility Fee and improvements to be funded.
- Review the requirements of Article XIID of the State Constitution (Proposition 218) relating to requirements for apportioning the costs associated with the City's stormwater runoff system.
- Analyze and recommend an appropriate rate structure and provide estimated rates based on cost data information provided by the City.

Proposition 218 Requirements

This fee must comply with the provisions of Article XIID of the California Constitution (Proposition 218). Section 6 of Proposition 218 has the following requirements for all "new, extended, imposed or increased" fees and charges:

- 1) "Revenues derived from the fee or charge shall not exceed the funds required to provide the property-related service."
- 2) "Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed."
- 3) "The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel."
- 4) "No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of service are not permitted. Standby charges, whether characterized as charges or assessments, shall be classified as assessments and shall not be imposed without compliance with [the assessment section of this code]."
- 5) "No fee or charge may be imposed for general governmental services including, but not limited to, police, fire, ambulance or library services where the service is available to the public at large in substantially the same manner as it is to property owners."

Background Information

In accordance with the Federal Clean Water Act of 1972, the United States Environmental Protection Agency (EPA) is required to establish regulations setting forth National Pollution Discharge Elimination System (NPDES) permit standards. The enactment of 1987 amendments to the Federal Clean Water Act (Act) of 1972 imposes permit requirements for discharge of storm waters. The Act allows the EPA to delegate its NPDES permitting authority to states with an approved environmental regulatory program. The State of California is one of the delegated states.

The responsibility for implementing various NPDES permits in the State of California has been delegated to the State Water Resources Control Board (SWRCB). The SWRCB administers NPDES authority through its nine Regional Boards. As an NPDES permittee, the City is required to manage stormwater pollution within its jurisdiction.

In order to provide for the safety of the residents of the City and protect property in the City from the damage associated with flooding and to meet the requirements of the NPDES permit, it is necessary to design, construct, operate, maintain, improve and replace storm drainage facilities which collect storm and surface water runoff and convey and treat such runoff in a safe manner to an acceptable point of discharge. It is also necessary to inspect, monitor, and take enforcement action related to illegal dumping, and illicit discharges. In order to properly fund such facilities and activities, the City has determined that it is necessary to impose on all developing properties in Rancho Cordova a user charge for storm drainage service.

Based on the 2030 General Plan and current specific plan areas, Rancho Cordova is expected to develop as shown in Table 1 below. The proposed boundary for the stormwater utility is shown in Appendix A.

Table 1 – Land Use

	Land Use/ Zoning Description	Total Acres	Total Units
Residential:			
LDR	SF (2.1-6.0 DU/AC)	2,635	13,156
	MD (6.1-12 DU/AC)	322	2,524
MDR	MD (6.1-18.0 DU/AC)	1,852	13,231
	MD (14.0-29.9 DU/AC)	60	885
HDR	HD (18.1-40.0 DU/AC)	192	4,372
	HD (30+ DU/AC)	30	825
	Residential Total	5,090	34,993
Non-Residential:			
VC	Village Commercial	202	
LTC	Local Town Center	134	
RTC	Regional Town Center	172	
BP	Business Park	158	
MP	Industrial Park	283	
Education:			
HS/MS	High School/Middle School	356	
MS	Middle School	20	
ES	Elementary School	102	
Open Space & Public:			
CP	Community Park	313	
P/QP	Public/Quasi Public	37	
NP	Neighborhood Park	194	
SWD	Storm Water Detention	186	
WP	Wetland Preserve	745	
DP	Drainage Parkway	270	
PR	Private Recreation	63	
OS	Open Space	168	
OS/P	Open Space/Preserve	279	
LC	Landscape Corridors	123	
GB	Green Belts	54	
ROW	Right-of-way	596	
BR/WP	Reservoir / Wetland Preserve	528	
S	Sewer Lift Station / Utility Substa	14	
	Vacant (unknown dev plan)	595	
	Total Non-residential	5,590	
	Total Residential & Non-Res	10,680	

A more detailed land use table by development area is shown in Appendix D.

This development is expected to require significant stormwater drainage and flood control facilities. Based on the development area and improvements that were required in four (4) recent developments

within the County of Sacramento, Table 2 summarizes the improvements that are expected once development is complete.

Table 2 – Expected Improvements

Infrastructure Type	Quantity	
Inlets	6,400	LF
Manholes	4,460	LF
66" Pipe	3,950	LF
60" Pipe	10,280	LF
54" Pipe	11,140	LF
48" Pipe	10,210	LF
42" Pipe	28,620	LF
36" Pipe	42,420	LF
30" Pipe	51,050	LF
27" Pipe	540	LF
24" Pipe	91,960	LF
21" Pipe	2,230	LF
18" Pipe	100,300	LF
15" Pipe	101,300	LF
12" Pipe	529,890	0
10" Pipe	4,170	0
Creeks and Channels	80	AC
Basins	320	AC

Services Funded

Expenditures from the revenue generated from the Stormwater Utility Fee are intended to comply with the requirements set forth in the NPDES permit. The activities and services funded by this fee include, but are not limited to:

1. Administration and oversight of the requirements set forth in the NPDES permit to City departments, developments, and local agencies.
2. Respond to and investigate incidents of illicit discharges and illegal connections to the storm drain system.
3. Periodically inspect facilities for proper handling of materials, chemicals, pollutants, garbage, waste, and debris and prevent any discharges to the storm drain system.
4. Regularly clean and maintain catch basins, the flowline, and storm drainage facilities.
5. Installation and maintenance of water quality devices required to keep pollutants out of the storm drain system.
6. Discourage illegal dumping or discharge of pollutants into the storm drain system by stenciling all City-owned catch basins with a "No Dumping" message.
7. Augment public education and outreach programs in regards to the proper use and function of the storm drainage system and the receiving waters.

8. Develop programs to promote, publicize, and facilitate public reporting of illicit discharges to the storm drain system.
9. Encourage the proper disposal of household hazardous waste (HHW) to prevent the improper disposal to the storm drain system or to the sewer system.
10. Discourage the improper disposal of litter, garden clippings, leaves, and pet waste into the street or the storm drain system.
11. Capital replacement of storm drainage and flood control improvements at the end of the expected useful life for such improvements.

Rate Structure Analysis

Section 6.b of Article XIID of the State Constitution (Proposition 218) states that:

“The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.”

and

“No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question.”

By definition, all properties that shed stormwater into the City’s stormwater drainage system use, or are served by, the City’s stormwater drainage system. The amount of use attributed to each parcel is measurable by the amount of storm runoff contributed by the property, which is directly proportional to the amount of impervious area on a parcel (such as buildings and concrete). The more impervious area on a property, the more storm runoff the property generates, the more demand placed on the storm drain system.

The amount each parcel uses the stormwater drainage system is computed by the following formula:

$$(\text{Parcel Area}) \times (\text{Impervious Percentage}) = \text{Drainage Units}$$

The typical percent impervious (% Impervious) for land uses in the City, have been applied for the purposes of estimating the runoff generated by each property. These are shown in Appendix B.

The more Drainage Units a parcel has, the more storm run-off it generates, and the more it uses and impacts the stormwater drainage system.

It is standard practice to relate other land uses to a developed single family residential (SFR) parcel, instead of working exclusively with drainage units. The median size of a SFR parcel will be approximately 0.16 acre. Therefore, it makes sense to relate all parcels to this median residential property. The runoff from a 0.16-acre SFR parcel is set equal to one Drainage Measurement Unit (DMU) and this base DMU is calculated as follows:

$$(0.16 \text{ acres of area}) \times 50\% = 0.0800 \text{ Impervious Area} = 1 \text{ DMU}$$

Single Family Residential Parcels

As a SFR property increases in size over the median parcel size, the typical percentage of impervious area decreases, as shown in Appendix B. Conversely, as a SFR parcel decreases in size below the median parcel size, the typical percentage of impervious area increases, and such increase is typically proportional to the decrease in size. Therefore, SFR properties are separated into five (5) groups. The median parcel area for each group was used and their DMUs are calculated as follows:

SFR Category	DMU/ Formula
SFR1 – SFR parcels 0.16 acres or less	1.00 DMU
SFR2 – SFR parcels 0.17 - 0.25 acres	1.10 DMUs
SFR3 – SFR parcels 0.26 – 0.33 acres	1.175 DMUs
SFR4 – SFR parcels 0.34 – 0.50 acres	1.25 DMUs
SFR5 – SFR parcels greater than 0.50 acres	$1.25 + \frac{[(\text{acres} - 0.50) \times 5\%]}{0.0800} = \text{DMUs}$

Multi-Family Residential Parcels

Multi-Family Residential (MFR) units (including condominiums) are split into categories by the density, or number of dwelling units per acre (DU/Ac) as follows:

MFR Category	Density	% Impervious
MFR1 - High Density	Greater than 18 DU/Ac	75%
MFR 2 - Med Density	10 – 18 DU/Ac	70%

$$\frac{\text{Acreage} \times \% \text{Impervious}}{0.0800} = \text{DMUs}$$

Condominium unit parcel areas are calculated by dividing the total area of the condominium complex (which includes the common area) by the number of condominium units, and the total imperviousness of the entire complex is attributed to each individual condo parcel in the complex. (This divides the runoff of the entire complex to each of the individual units.) Because these condominium common areas are taken into consideration in this manner, they are exempt from the charge.

Non- Residential Parcels

All non-residential parcel DMUs will be based on the impervious area (runoff coefficient) table shown in Exhibit B, using the following formula:

$$\frac{\text{Acreage} \times \% \text{Impervious}}{0.0800} = \text{DMUs}$$

All parcels draining into Rancho Cordova Stormwater Utility Fee-maintained drainage infrastructure are proposed to be charged the same user fee rate per DMU for stormwater runoff treatment. The Rancho Cordova Stormwater Utility Fee is proposed in perpetuity.

For the purposes of this report, City-maintained drainage infrastructure includes streets, pipes, inlets, outlets, and natural drainage courses. Parcels related to these types of property uses are exempt from the runoff charge, as they are part of the infrastructure being funded. Also exempt from the runoff charge is Caltrans right-of-way, because Caltrans handles its own runoff under a separate NPDES permit.

Drainage units may be adjusted based on appeal from the property owner. See the Appeals Process below.

Table 3, below, provides a preliminary summary of DMUs for the various land uses in Rancho Cordova.

Table 3 – Drainage Measurement Unit Summary Table

Landuse Description	Number of Units	Total Area (acres)	Impervious Area (acres)	DMUs
SINGLE FAMILY RESIDENTIAL (SFR1)	15,107	2,028		15,107.00
SINGLE FAMILY RESIDENTIAL (SFR2)	13,790	2,776		15,169.00
SINGLE FAMILY RESIDENTIAL (SFR3)	14	4		16.45
SINGLE FAMILY RESIDENTIAL (SFR4)				-
SINGLE FAMILY RESIDENTIAL (SFR5)				-
MULTI-FAMILY RESIDENTIAL (MFR1)	6,082	282		2,639.06
COMMERCIAL		666	632	7,904.00
INDUSTRIAL		283	226	2,830.00
SCHOOLS		478	239	2,985.00
PRIVATE RECREATION		63	16	195.31
PARKS/GREENBELTS		561	140	1,752.47
PUBLIC		51	15	190.13
TOTAL	34,993	7,190	1,269	48,788

Cost Estimate

Table 4 below shows the estimated costs to maintain infrastructure in the developing areas. Unit costs for maintenance were derived using budget information provided by the County, since the County currently maintains the storm drainage system. The budget information is shown in Appendix C.

Table 4 – Estimated Costs

	Estimated Quantity	Unit	Cost (\$/unit)	Frequency	Total Cost/Year
Maintenance Costs:					
Trunk Lines (larger than 24") - TV Lines	158210	LF	\$ 7.50	25 years	\$ 47,463.00
Drainage Lines 10"-24" Cleaning	829850	LF	\$ 3.00	10 years	\$ 248,955.00
Drainage Lines 10"-24" TV	829850	LF	\$ 7.50	25 years	\$ 248,955.00
Creek and Channel Maintenance and Repair	65070	LF	\$ 0.75	1 year	\$ 49,009.83
Pipe Repairs	998920	LF	\$ 0.45	1 year	\$ 451,380.43
Creeks and Channels Mowing	80	AC	\$6,825	1 year	\$ 546,000.00
Creeks and Channels Herbicides	80	AC	\$680	1 year	\$ 54,400.00
Basins Mowing	320	AC	\$9,510	1 year	\$ 3,043,200.00
Basin De-silt	320	AC	\$1,000	25 years	\$ 12,800.00
Basins Herbicides	320	AC	\$761	1 year	\$ 243,360.00
Replacement Costs:					
Inlets	6400	EA	\$2,000	75 years	\$170,667
Manholes	4460	EA	\$3,500	75 years	\$208,133
66" Pipe	3950	LF	\$550	100 years	\$21,725
60" Pipe	10280	LF	\$475	100 years	\$48,830
54" Pipe	11140	LF	\$400	100 years	\$44,560
48" Pipe	10210	LF	\$325	100 years	\$33,183
42" Pipe	28620	LF	\$275	100 years	\$78,705
36" Pipe	42420	LF	\$225	100 years	\$95,445
30" Pipe	51050	LF	\$175	100 years	\$89,338
27" Pipe	540	LF	\$150	100 years	\$810
24" Pipe	91960	LF	\$125	100 years	\$114,950
21" Pipe	2230	LF	\$115	100 years	\$2,565
18" Pipe	100300	LF	\$105	100 years	\$105,315
15" Pipe	101300	LF	\$95	100 years	\$96,235
12" Pipe	529890	LF	\$85	100 years	\$450,407
10" Pipe	4170	LF	\$75	100 years	\$3,128

Total: \$6,509,517

Annual Fee Administration: \$45,000

Operating (Cash Flow) Reserve (10% of Maintenance Costs): \$494,552

Estimated Total: **\$7,049,069**

Fee Calculations

The estimated annual costs for the proposed storm drain improvements are \$7,049,069 as shown in Table 4 above. Dividing that by the total number of proposed DMU's in Rancho Cordova (48,788), the maximum estimated annual Stormwater Utility Fee rate is **\$144.48 per DMU**.

This would be the proposed maximum fee rate for fiscal year 2014-15. The maximum rate will be increased each subsequent Fiscal Year by the annual change in the Consumer Price Index (CPI), during the preceding year, for All Urban Consumers, for the San Francisco-Oakland-San Jose areas, published by the United States Department of Labor, Bureau of Labor Statistics (or a reasonably

equivalent index should the stated index be discontinued, as determined by the Director of Public Works).

The actual rate to be levied each year will be as approved by the City at a public hearing, after they consider an Annual Fee Report outlining the estimated annual costs of the program for the ensuing fiscal year.

Table 5 provides sample fee calculations for various land uses and parcel sizes.

Table 5 – Sample Calculations

Land Use Description	Total Area (acres)	Runoff Coefficient	DMUs	Sample Fee
SINGLE FAMILY RESIDENTIAL (SFR1)	0.16		1.000	\$ 144.48
SINGLE FAMILY RESIDENTIAL (SFR2)	0.22		1.100	\$ 158.93
SINGLE FAMILY RESIDENTIAL (SFR3)	0.30		1.175	\$ 169.77
SINGLE FAMILY RESIDENTIAL (SFR4)	0.40		1.250	\$ 180.60
SINGLE FAMILY RESIDENTIAL (SFR5)	1.00		1.563	\$ 225.75
MULTI-FAMILY RESIDENTIAL (MFR1)	5.00	0.75	46.875	\$ 6,772.61
COMMERCIAL	1.00	0.95	11.875	\$ 1,715.73
INDUSTRIAL	1.00	0.80	10.000	\$ 1,444.82
SCHOOLS	5.00	0.50	31.250	\$ 4,515.08
PRIVATE RECREATION	1.00	0.25	3.125	\$ 451.51
PARKS/GREENBELTS	2.00	0.10	2.500	\$ 361.21
PUBLIC	2.00	0.30	7.500	\$ 1,083.62

The Preliminary Charge Roll, which is a listing of each parcel to be charged a fee and its proposed maximum fee for FY 2014-15, is on file in the office of the City Clerk.

Appeals Process

If a property owner disagrees with the calculation of his or her fee, based on the parcel area and estimated impervious percentage assigned to the property, then the property owner may appeal the calculation as follows:

1. Property owner must provide written documentation explaining the reason why the charge should be changed. This documentation must include:
 - a. The name, phone number, mailing address, and email address, if available, of the property owner.
 - b. The Assessor’s Parcel Number (APN) of the property in question.
2. If additional documentation is required or insufficient documentation was submitted, a representative of the Department of Public Works (Staff) will notify the property owner in writing.
3. Once Staff has determined that sufficient documentation has been submitted, Staff will perform the initial review. Staff will notify the property owner in writing within four (4) weeks from the time sufficient documentation was submitted as to whether or not the fee amount will be changed.

- a. If the determination is to change the fee amount, then the new fee amount will be documented within the City's fee database.
- b. If the determination is that the fee should not be changed, the property owner can appeal Staff's decision to the Director of Public Works. The appeal must be made in writing and returned no later than four (4) weeks from the date of mailing of Staff's initial review decision. The Director of Public Works will notify the property owner in writing within four (4) weeks from the date of receipt of the appeal as to whether or not the fee amount will be changed.

If the owner of any parcel shall have reason to feel that the computation of the DMU for his/her parcel is not correct, that person may file an appeal with the Director of Public Works in the manner prescribed by the Director of Public Works. The Director of Public Works will consider all data provided by the appellant and shall render a decision in writing. The decision of the Director of Public Works will be final with respect to City action on the appeal.

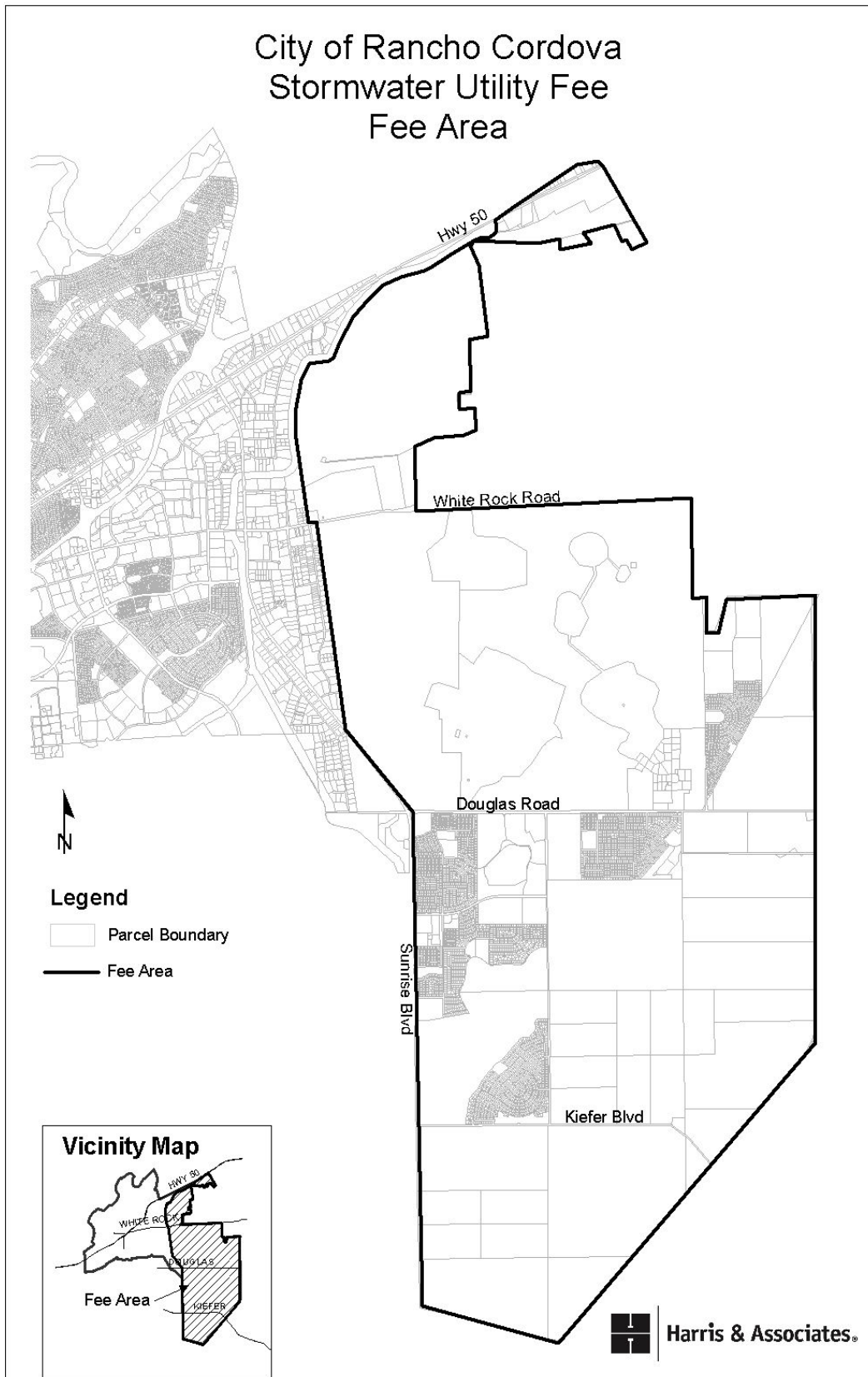
Appeals will be accepted annually up until June 30 for inclusion on the following fiscal year's property tax roll submittal. However, if an appeal is granted by Staff or the Director of Public Works that does not permit inclusion for the following fiscal year's property tax roll submittal, a reimbursement will be provided to the property owner by the City.

Respectfully submitted:

Harris & Associates

Dennis A. Anderson
Senior Project Manager

APPENDIX A



APPENDIX B

Runoff Coefficient

Land Use	Percent Impervious
Single Family Residential less than 0.166 acres	50%
Single Family Residential 0.166 acres to 0.250 acres	40%
Single Family Residential 0.251 acres to 0.330 acres	30%
Single Family Residential 0.331 acres to 0.500 acres	25%
Single Family Residential Over 0.500 acres (excluding the first 0.500 acres)	5%
High-Density Residential (including Apartments and Mobile Home Parks)	75%
Condominiums	70%
Commercial, Offices, Retail	95%
Industrial	80%
Schools	50%
Parks	25%
Greenbelts	10%

Sources:

1. Yolo County City/County Drainage Manual, February 2010.
2. Stormwater Quality Design Manual for the Sacramento and South Placer Regions, May 2007.

Appendix C

Cost Information

**County of Sacramento/City of Rancho Cordova
Current Storm Drain Maintenance Costs**

Creek and Channel Cleaning

Budget Classification		Repair Type	Actual Expenditures FY 11/12	FY 13/14 Budget
County	OCCO	Inspect Channels	\$ 149,684.06	\$ 149,684.06
	ODSO	Clean, Inspect trach Racks and Box Culverts	\$ 203,337.83	\$ 203,337.83
	OF8O	Sandbag Distribution	\$ 5,184.60	\$ 5,184.60
	OFCO	Drainage Response	\$ 82,451.66	\$ 82,451.66
	OFDO	Concrete Channel Cleaning Bobcat	\$ 552,150.54	\$ 552,150.54
	OHWO	Vegetation Removal County Forces		
	OJZO	Clean and Inspect Outfall Structures	\$ 191,840.84	\$ 191,840.84
	OLCO	Access Road Maintenance	\$ -	\$ -
	OLDO	Mowing		
	OMPO	Expose Pipe End Mechanically	\$ 2,720.90	\$ 2,720.90
	OMRO	Channel Cleaning Mechanical	\$ 49,087.50	\$ 49,087.50
	OORC	Rodent Control	\$ 32,695.06	\$ 32,695.06
	OTVD	Tree Removal	\$ 79,463.44	\$ 79,463.44
	OVDO	Dry Spoil Dumping	\$ 8,137.34	\$ 8,137.34
	OWCO	Weed Control Chemical		
	Overhead	36.39%	\$ 493,691.29	\$ 493,691.29
		Total Budget=	\$ 1,850,445	\$ 1,850,445
County	OCCO	Inspect Channels	\$ 1,797.15	\$ 1,797.15
	ODSO	Clean, Inspect trach Racks and Box Culverts	\$ -	\$ -
	OF8O	Sandbag Distribution	\$ 2,464.80	\$ 2,464.80
	OFCO	Drainage Response	\$ 1,293.11	\$ 1,293.11
	OFDO	Concrete Channel Cleaning Bobcat	\$ 144,294.58	\$ 144,294.58
	OHWO	Vegetation Removal County Forces		
	OJZO	Clean and Inspect Outfall Structures	\$ -	\$ -
	OLCO	Access Road Maintenance	\$ 57,345.54	\$ 57,345.54
	OLDO	Mowing		
	OMPO	Expose Pipe End Mechanically	\$ -	\$ -
	OMRO	Channel Cleaning Mechanical	\$ 32,935.75	\$ 32,935.75
	OORC	Rodent Control	\$ -	\$ -
	OTVD	Tree Removal	\$ 214,736.46	\$ 214,736.46
	OVDO	Dry Spoil Dumping	\$ -	\$ -

Budget Classification		Repair Type	Actual Expenditures FY 11/12	FY 13/14 Budget
	OWCO	Weed Control Chemical		
	Overhead	23.51%	\$ 106,945.71	\$ 106,945.71
		Total Budget=	\$ 561,813	\$ 561,813
Rancho Cordova	OCCO	Inspect Channels	\$ -	\$ -
	ODSO	Clean, Inspect trach Racks and Box Culverts	\$ 413.30	\$ 413.30
	OF8O	Sandbag Distribution	\$ -	\$ -
	OFCO	Drainage Response	\$ -	\$ -
	OFDO	Concrete Channel Cleaning Bobcat	\$ 65,905.39	\$ 65,905.39
	OHWO	Vegetation Removal County Forces		
	OJZO	Clean and Inspect Outfall Structures	\$ -	\$ -
	OLCO	Access Road Maintenance	\$ -	\$ -
	OLD0	Mowing		
	OMPO	Expose Pipe End Mechanically	\$ -	\$ -
	OMRO	Channel Cleaning Mechanical	\$ -	\$ -
	OORC	Rodent Control	\$ -	\$ -
	OTVD	Tree Removal	\$ -	\$ -
	OVD0	Dry Spoil Dumping	\$ -	\$ -
	OWCO	Weed Control Chemical		
	Overhead	23.51%	\$ 15,592.45	\$ 15,592.45
		Total Budget=	\$ 81,911	\$ 81,911
Total LF of Channels				
		Rancho Cordova (unlined)	74,628	74,628
		Rancho Cordova (lined)	37,562	37,562
		Total Rancho Cordova	112,189	112,189
		County (unlined)	1,677,768	1,677,768
		County (lined)	216,153	216,153
		Total County	1,893,920	1,893,920
Cost/LF of Channel for Cleaning:				
		County	\$ 1.27	\$ 1.27
		Rancho	\$ 0.73	\$ 0.75

* Costs were increased for 12/13 based on comparing actual expenditures in 11/12 with actual expenditures in 12/13.

**County of Sacramento/City of Rancho Cordova
Current Storm Drain Maintenance Costs**

Pipe Repair Costs

Budget Classification		Repair Type	Actual Expenditures for FY 11/12	FY 13/14 Budget
County North	OCUO	Drain Line Upgrade or Repair	\$ 630,912.90	\$ 630,912.90
	OFFO	Fence Repair	\$ 19,343.41	\$ 19,343.41
	OHKO	Inlet Outfall Repair	\$ 455,724.02	\$ 455,724.02
	OMSO	Erosion Control	\$ 26,189.60	\$ 26,189.60
	OY8O	Manhole Repair	\$ 63,362.44	\$ 63,362.44
	RAMP	ADA Compliant Ramp	\$ -	\$ -
	Overhead	36.39%	\$ 435,026.56	\$ 435,026.56
		Total Budget=	\$ 1,630,558.93	\$ 1,630,558.93
County South	OCUO	Drain Line Upgrade or Repair	\$ 105,317.24	\$ 105,317.24
	OFFO	Fence Repair	\$ 35,802.01	\$ 35,802.01
	OHKO	Inlet Outfall Repair	\$ 214,660.90	\$ 214,660.90
	OMSO	Erosion Control	\$ -	\$ -
	OY8O	Manhole Repair	\$ 8,585.40	\$ 8,585.40
	RAMP	ADA Compliant Ramp	\$ -	\$ -
	Overhead	23.51%	\$ 85,667.45	\$ 85,667.45
		Total Budget=	\$ 450,033.00	\$ 450,033.00
Rancho Cordova	OCUO	Drain Line Upgrade or Repair	\$ 222,809.74	\$ 229,850.53
	OFFO	Fence Repair	\$ 26,326.14	\$ 27,158.05
	OHKO	Inlet Outfall Repair	\$ 224,877.26	\$ 231,983.38
	OMSO	Erosion Control	\$ -	\$ -
	OY8O	Manhole Repair	\$ 4,498.84	\$ 4,641.00
	RAMP	ADA Compliant Ramp	\$ -	\$ -
	Overhead	23.51%	\$ 112,504.88	\$ 116,060.03
		Total Budget=	\$ 591,016.86	\$ 609,692.99
Total LF of Pipes				
		County	7,865,755	7,865,755
		Rancho Cordova	1,349,271	1,349,271
Cost/LF of pipe for Repairs				
		County	\$ 0.26	\$ 0.26
		Rancho	\$ 0.44	\$ 0.45

* Costs were increased for 12/13 based on comparing actual expenditures in 11/12 with actual expenditures in 12/13.

**County of Sacramento/City of Rancho Cordova
Current Storm Drain Maintenance Costs**

Activity	Size/Location	Cost/LF	Frequency	Notes
Pipes/Channels				
Hydro Cleaning	6"-24"	\$ 3.00	10 years	
TV Lines	all	\$ 7.50	25 years	
Creek and Channel Cleaning	Rancho	\$ 0.75	each year	Within SWU Budget
	Sac County	\$ 1.27		
Pump Maintenance	Covered within budget			Per County Staff Assume no pumps in new areas.
Repairs	2 crews year round	SWU funds support this		
Hydromod Basin		cost/ac		
Mowing		\$ 6,500.00	1.25 x's/year	Per County staff if basins cannot be maintained like they are now = \$10,000/acre
Herbicides		\$ 325.00	2 x's/year	
Additional costs				
Pesticide Control Advisor		\$ 20,000.00	annually	
Engineering admin support with regulatory agencies			10% of maint costs/year	
Supervisors and managers			5% of maint costs/year	

Appendix D

Detailed Land Use Data

Land Use/ Zoning Description	Arista Del Sol		Arboretum		Douglas 98		Douglas 103		Grantline 208		Montelena		Rio Del Oro		Suncreek		The Ranch (Sunridge)		Sunridge Lot J		Westborough		North Douglas II		Heritage Falls		Anatolia IV		Anatolia		Sunridge		Total Acres	Total Units		
	AC	Units	AC	Units	AC	Units	AC	Units	AC	Units	AC	Units	AC	Units	AC	Units	AC	Units	Est.	Units	AC	Units	AC	Units	AC	Units	AC	Units	AC	Units	GIS AC	GIS Units			GIS AC	GIS Units
Residential:																																				
LDR SF (2.1-6.0 DU/AC)	35.3	176	144.8	698			3.7	14	44.7	276	71.4	388	1,518.5	7,593	179.4	899	321.5	2,524	142.3	694	35.8	179	347.2	1,580	17.70	153.00	72.20	303.00	21.60	203.00					2,635	13,156
MD (6.1-12 DU/AC)																																			322	2,524
MDR MD (6.1-18.0 DU/AC)	83.8	556	290.0	2,334 ^a	94.2	528	28.2	287	42.8	227	54.4	402	256.0	2,048	43.7	286 ^c			105.4	685	17.5	192	146.8	1,389			92.10	525.00			450.8	2,831	146.4	941	1,852	13,231
MD (14.0-29.9 DU/AC)			60.4	885																													60	885		
HDR HD (18.1-40.0 DU/AC)													98.0	1,960	44.2	980			12.2	378 [*]			30.4	922			6.80	132.00					192	4,372		
HD (30+ DU/AC)																															30	825				
Residential Total	119.1	732	524.7	4,742	94.2	528	31.9	301	87.5	503	125.8	790	1,872.5	11,601	588.8	4,689			259.9	1,757	53.3	371	524.4	3,891	17.7	153	171	960	22	203	450.8	2,831	146.4	941	5,090	34,993
Non-Residential:																																				
VC Village Commercial			16.9				19.5				16.6		20.0		22.0								93.3												202	
LTC Local Town Center			30.4										20.0										83.5												134	
RTC Regional Town Center			0.9										113.0		58.4																				172	
BP Business Park	6.6		65.0										86.0																						158	
MP Industrial Park													283.0																						283	
Education:																																				
HS/MS High School/Middle School			72.6										78.0	110.9 ^b									94.0 ^b												356	
MS Middle School													20.0																						20	
ES Elementary School			21.2						10.6				54.0													5.50			10.8						102	
Open Space & Public:																																				
CP Community Park	11.4		60.7						7.8				107.0		44.9		29.3						52.3												313	
P/QP Public/Quasi Public			2.0								3.2		7.5		12.3								10.6								1.1				37	
NP Neighborhood Park	3.1		3.8		8.2		5.2		3.4		20.8		67.5		17.0		8.6		6.4						0.71	17.20			3.70		21.2		7.0		194	
SWD Storm Water Detention	4.0								15.0		9.6		39.0		53.5		24.3								4.00	17.40					9.5		9.6		186	
WP Wetland Preserve	55.8						43.8		81.0		54.5		510.0																						745	
DP Drainage Parkway													138.0		5.0								104.6			15.30							7.2		270	
PR Private Recreation													54.0																						63	
OS Open Space			144.5										22.0												0.60	0.80									168	
OS/P Open Space/Preserve													12.0		45.6		174.0						47.7												279	
LC Landscape Corridors	1.1				2.8								82.0		19.2											2.70		1.30			13.4		0.7		123	
GB Green Belts							2.6		5.3		22.4		51.0																						54	
ROW Right-of-way	9.5		104.3				8.5						192.0		82.6		20.5		14.5				127.1			6.90		2.20							596	
BR/WP Reservoir / Wetland Preserve			302.8												205.1										19.80										528	
S Sewer Lift Station / Utility Substation			1.0																												6.6		6.4		14	
Vacant (unknown dev plan)																															567.4		27.3		595	
Total Non-residential	91.5	826.1	11.0	79.6	123.1	127.1	1,956.0	676.5	270.2	20.9	613.1	25.1	0.0	70.0	0.0	7.2	0.0	634.3	58.2	5,590																
Total Residential & Non-Res	210.6	732.0	1,350.8	4,742.0	105.2	528.0	111.5	301.0	210.6	503.0	252.9	790.0	3,828.5	11,601.0	1,265.3	4,689.0	530.1	1,757.0	74.1	371.0	1,137.5	3,891.0	42.8	153.0	241.1	960.0	28.8	203.0	1,085.1	2,831.0	204.6	941.0	10,680			

Notes: All data is from recent plans received in Nov 2013 unless specified otherwise.

^a Arboretum has 2 MD residential classifications. The first line is for 6.1-13.9 DU/AC (instead of 6.1-18)

^b Acreage for all schools

^c Suncreek has 2 MD residential classifications. The second line is for 12.1-18 DU/AC (instead of 6.1-18)

Includes April 2012
Amendment

AC estimated