



Appendix L - Funding Plan Supporting Information

Table 1.
Proposed Drainage Facilities and Costs
Dry Creek Watershed Flood Control Plan
Placer County Flood Control District

2010 Dollars

	Total Cost	(Less) Current Dry Creek Trust Fund Balance ⁽¹⁾	Net Cost
<u>Option 1</u>			
Implementation of Antelope Creek flood flow reduction project plus ALERT system upgrades	\$3,601,000	(\$1,400,000)	\$2,201,000
<u>Option 2</u>			
Implementation of Antelope Creek and Secret Ravine flood flow reduction projects plus ALERT system upgrades	\$6,835,000	(\$1,400,000)	\$5,435,000
<u>Option 3</u>			
Implementation of all five flood flow reduction projects plus ALERT system upgrades	\$9,794,000	(\$1,400,000)	\$8,394,000

⁽¹⁾ The proposed projects in Options 1-3 will both mitigate impacts generated by new development as well as correct the existing deficiencies from 1992 to 2010, the period during which fees comprising the Dry Creek Trust Fund were collected.



Table 2A-1.
 Maximum Drainage Impact Fees Applicable to New Development: **Option 1**
 Dry Creek Watershed Flood Control Plan
 Placer County Flood Control District

Land Use	Projected Acres of New Development at Build-out ⁽²⁾	Average % Impervious	Impervious Acres	Cost Allocation		Assumed DU/Acre (avg) ⁽³⁾	Total Units	Maximum Fee
				Total Cost	Per Impervious Acre			
Residential								
Single Family (4 du/acre and less) ⁽¹⁾	10,708.0	17%	1,827.2	\$1,399,125	\$766	0.75	8,031	\$174 /unit
High Density (greater than 4 du/acre)	75.5	66%	49.6	\$38,015	\$766	7.00	528	\$71 /unit
Commercial/Industrial	2,120.1	47%	997.6	\$763,860	\$766			\$360 /gross acre
Total	12,903.6		2,874.5	\$2,201,000	\$766		8,559	

⁽¹⁾ Single Family Residential comprised of Rural Residential, Rural Estates, Low Density Residential, and Medium Density Residential land use designations.

⁽²⁾ New development based on the difference between the estimated acreage at General Plan buildout and 2007 conditions, excluding the downstream areas in Sacramento County where the impacts from new development will not be mitigated by the proposed drainage facilities.

⁽³⁾ Dwelling units per acre based on assumptions in 1992 Dry Creek plan. For single family residential, based on weighted average.



Table 2A-2.

Maximum Drainage Impact Fees Applicable to New Development: **Option 1A** Based on \$500,000 for Antelope Creek Project from Proposition 84 Grant
 Dry Creek Watershed Flood Control Plan
 Placer County Flood Control District

Land Use	Projected Acres of New Development at Build-out ⁽²⁾	Average % Impervious	Impervious Acres	Cost Allocation		Assumed DU/Acre (avg) ⁽³⁾	Total Units	Maximum Fee
				Total Cost	Per Impervious Acre			
<u>Residential</u>								
Single Family (4 du/acre and less) ⁽¹⁾	10,708.0	17%	1,827.2	\$1,081,287	\$592	0.75	8,031	\$134 /unit
High Density (greater than 4 du/acre)	75.5	66%	49.6	\$29,379	\$592	7.00	528	\$55 /unit
<u>Commercial/Industrial</u>	2,120.1	47%	997.6	\$590,334	\$592			\$278 /gross acre
Total	12,903.6		2,874.5	\$1,701,000	\$592		8,559	

⁽¹⁾ Single Family Residential comprised of Rural Residential, Rural Estates, Low Density Residential, and Medium Density Residential land use designations.

⁽²⁾ New development based on the difference between the estimated acreage at General Plan buildout and 2007 conditions, excluding the downstream areas in Sacramento County where the impacts from new development will not be mitigated by the proposed drainage facilities.

⁽³⁾ Dwelling units per acre based on assumptions in 1992 Dry Creek plan. For single family residential, based on weighted average.



Table 2B.
 Maximum Drainage Impact Fees Applicable to New Development: **Option 2**
 Dry Creek Watershed Flood Control Plan
 Placer County Flood Control District

Land Use	Projected Acres of New Development at Build-out ⁽²⁾	Average % Impervious	Impervious Acres	Cost Allocation		Assumed DU/Acre (avg) ⁽³⁾	Total Units	Maximum Fee
				Total Cost	Per Impervious Acre			
Residential								
Single Family (4 du/acre and less) ⁽¹⁾	10,708.0	17%	1,827.2	\$3,454,905	\$1,891	0.75	8,031	\$430 /unit
High Density (greater than 4 du/acre)	75.5	66%	49.6	\$93,871	\$1,891	7.00	528	\$177 /unit
Commercial/Industrial	2,120.1	47%	997.6	\$1,886,224	\$1,891			\$890 /gross acre
Total	12,903.6		2,874.5	\$5,435,000	\$1,891		8,559	

⁽¹⁾ Single Family Residential comprised of Rural Residential, Rural Estates, Low Density Residential, and Medium Density Residential land use designations.

⁽²⁾ New development based on the difference between the estimated acreage at General Plan buildout and 2007 conditions, excluding the downstream areas in Sacramento County where the impacts from new development will not be mitigated by the proposed drainage facilities.

⁽³⁾ Dwelling units per acre based on assumptions in 1992 Dry Creek plan. For single family residential, based on weighted average.



Table 2C.
 Maximum Drainage Impact Fees Applicable to New Development: **Option 3**
 Dry Creek Watershed Flood Control Plan
 Placer County Flood Control District

Land Use	Projected Acres of New Development at Build-out ⁽²⁾	Average % Impervious	Impervious Acres	Cost Allocation		Assumed DU/Acre (avg) ⁽³⁾	Total Units	Maximum Fee
				Total Cost	Per Impervious Acre			
Residential								
Single Family (4 du/acre and less) ⁽¹⁾	10,708.0	17%	1,827.2	\$5,335,874	\$2,920	0.75	8,031	\$664 /unit
High Density (greater than 4 du/acre)	75.5	66%	49.6	\$144,977	\$2,920	7.00	528	\$274 /unit
Commercial/Industrial	2,120.1	47%	997.6	\$2,913,149	\$2,920			\$1,374 /gross acre
Total	12,903.6		2,874.5	\$8,394,000	\$2,920		8,559	

⁽¹⁾ Single Family Residential comprised of Rural Residential, Rural Estates, Low Density Residential, and Medium Density Residential land use designations.

⁽²⁾ New development based on the difference between the estimated acreage at General Plan buildout and 2007 conditions, excluding the downstream areas in Sacramento County where the impacts from new development will not be mitigated by the proposed drainage facilities.

⁽³⁾ Dwelling units per acre based on assumptions in 1992 Dry Creek plan. For single family residential, based on weighted average.



Table 3A. Impervious Area by Jurisdiction

		Impervious Area (square-miles)					
		Placer County	Roseville	Rocklin	Loomis	Sacramento County	Total
2007	Single Family Residential	4.93	2.31	1.30	0.68	0.64	9.86
	High Density Residential	0.14	0.24	0.15	0.00		0.53
	Commercial/Industrial	0.49	2.89	0.99	0.46	0.01	4.85
	Other	0.41	0.83	1.08	0.04	0.02	2.39
	Total	5.97	6.28	3.52	1.19	0.67	17.63
Build-out	Single Family Residential	6.56	2.48	2.05	0.90	0.73	12.72
	High Density Residential	0.17	0.27	0.16	0.00		0.61
	Commercial/Industrial	0.82	3.30	1.74	0.53	0.01	6.40
	Other	0.18	0.88	1.13	0.03	0.00	2.22
	Total	7.73	6.94	5.08	1.46	0.74	21.95
Increase from 2007 to Build-out	Single Family Residential	1.63	0.16	0.75	0.22	0.10	2.86
	High Density Residential	0.03	0.03	0.02	0.00	0.00	0.08
	Commercial/Industrial	0.33	0.41	0.75	0.07	0.00	1.56
	Other	-0.23	0.05	0.05	-0.02	-0.02	-0.17
	Total	1.76	0.66	1.56	0.27	0.07	4.32

Source: RBF 7/21/11

Note: Commercial/Industrial category includes schools and other public structures



Table 3B. Total Area by Jurisdiction

		Total Area (square-miles)					
		Placer County	Roseville	Rocklin	Loomis	Sacramento County	Total
2007	Single Family Residential	34.59	5.80	2.81	4.54	4.54	52.28
	High Density Residential	0.20	0.38	0.25	0.00		0.83
	Commercial/Industrial	0.62	4.03	1.70	0.61	0.01	6.97
	Other	15.66	4.03	5.29	2.18	1.22	28.39
	Total	51.08	14.23	10.05	7.33	5.78	88.46
Build-out	Single Family Residential	46.32	6.19	4.61	6.58	5.30	69.01
	High Density Residential	0.25	0.42	0.27	0.00		0.94
	Commercial/Industrial	1.03	4.63	3.92	0.70	0.01	10.28
	Other	3.47	2.97	1.27	0.04	0.45	8.21
	Total	51.07	14.21	10.07	7.33	5.76	88.45
Increase from 2007 to Build- out	Single Family Residential	11.73	0.40	1.80	2.04	0.76	16.73
	High Density Residential	0.05	0.04	0.03	0.00	0.00	0.12
	Commercial/Industrial	0.41	0.60	2.22	0.09	0.00	3.31
	Other	-12.19	-1.06	-4.02	-2.13	-0.77	-20.18
	Total	0.00	-0.02	0.02	0.00	-0.01	-0.01



Table 4. Operations and Maintenance, and Capital Replacement Cost Estimate

Capital Replacement Costs				
		$i = 0.06$		$n = 50$
Project	50-year basis	Maintenance	Future Replacement	Annualized Replacement
Miners Ravine Off-channel Detention Basin	\$500,000	\$15,000	\$ 9,210,077	\$ 31,722
Antelope Creek at Atlantic Street	\$684,000	\$20,520	\$ 12,599,386	\$ 43,396
Secret Ravine at Sierra College Boulevard	\$437,000	\$13,110	\$ 8,049,607	\$ 27,725
Linda Creek at Old Auburn Road	\$130,250	\$3,908	\$ 2,399,225	\$ 8,264
Linda Creek at Wedgewood Drive	\$171,975	\$5,159	\$ 3,167,806	\$ 10,911
Linda Creek near Auburn-Folsom Road	\$128,750	\$3,863	\$ 2,371,595	\$ 8,168
Total		\$61,559		\$ 130,186

Current O&M & Capital Replacement Costs	
Miners Ravine Off-channel Detention Basin	
Annual basin maintenance (CCC)	\$ 8,000
Annual landscaping maintenance (Cagwin)	\$ 4,000
Special Liability Insurance Policy	\$ 17,000
Annual Incidental	\$ 3,000
ALERT System	\$ 14,000
Total O&M	\$ 46,000
Miners Ravine Annualized Replacement Cost	\$ 32,000
Total Current O&M + Capital Replacement Costs	\$ 78,000

Future O&M & Capital Replacement Costs	
Current O&M + Capital Replacement Cost	\$ 78,000
Antelope Creek O&M	\$ 21,000
Antelope Creek Annualized Replacement Cost	\$ 43,000
Annual Software Maintenance & Technical Support	\$ 6,000
Annual Gage Maintenance (7 new sites – 2 visits per year)	\$ 26,000
Total Future O&M & Capital Replacement Costs	\$ 174,000





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