WATER RESOURCES - EXECUTIVE SUMMARY

Executive Summary

The Department of Water Resources constructs large-scale countywide drainage improvement projects intended to mitigate or prevent flood damage in developed areas. The typical annual Capital Improvement Plan (CIP) budget for the drainage program is approximately \$2.3 million to \$5.8 million. Projects are intended to minimize flooding during large storm events through upgrading existing portions of the drainage system, adding new facilities to the existing system and by ensuring the reliability of existing drainage facilities through back-up facilities.

Most of the constructed projects consist of upgrades (either by upsizing in place or by construction of parallel systems) to underground piped drainage systems in existing residential neighborhoods which have experienced flooding in the past. The existing systems that are upgraded are typically up to 30-years old or more and do not meet the current design standards for drainage capacity and flood protection. The goal of such projects is to bring the existing system as close as possible to meeting current standards and to minimize potential flood damage in a 100-year event.

Some of the planned projects entail providing upgrades to existing drainage pump stations. Many of the existing pump stations in the County require additional pumping capacity to increase the level of protection of low lying residences. Additionally, many of the pump stations lack a back-up power source in the event that power is lost during a storm event. Further, the performance of pump stations may also be hindered blockages caused by the build up of debris carried in the storm runoff. As a result, several projects are planned which will provide for additional pumping capacity where possible, the installation of back-up generators and also the installation of automated debris removal systems to prevent pump intake and outfall pipes from becoming plugged during major storms.

The estimated capital costs for projects identified in the Five-Year CIP is \$22.5 million. Projects proposed to be completed in the 2006-07 Fiscal Year Capital Budget include an "Operating Budget Impact" statement.

There are 24 projects identified in the Fiscal Year 2006-07 CIP that are planned or underway by Water Resources. The following brief descriptions highlight several projects that demonstrate the magnitude and range of construction undertaken by the County.

• <u>Mayhew Channel Low-Flow Drainage Diversion</u> -- This project provides urban runoff water quality protection to the lower American River by decreasing bacterial loading and creating an additional safeguard for aquatic wildlife, while also advancing the recreational uses of the resource. The flows are diverted through a pipe to a sewer interceptor manhole. **Estimated Total Cost**: \$742,500.

- <u>Valmonte Drive/Stewart Road Storm Drain Improvement</u> --This project alleviates structure, garage, yard and street flooding. The existing storm drain system is undersized compared to current storm runoff design standards. **Estimated Total Cost**: \$1,350,736.
- Wilhaggin Storm Drainage Pump Station (D43) Trash Rake, Discharge Lines and Pump Improvement -- The existing pumping capacity will not protect all structures during a 100-year rainfall concurrent with high flows in the American River. The improvement increases flow capacity from the pumps and through gravity and automates the removal of debris. Estimated Total Cost: \$3,241,950.

WATER RESOURCES

SUMMARY

PROJ.			FISCAL YEAR					
#	PROJECT	PRIOR YEARS	2006-07	2007-08	2008-09	2009-10	2010-11	TOTAL
1	6th Avenue/K Street Storm Drain	\$6,348	\$0	\$27,680	\$190,300	\$0	\$0	\$224,328
	Improvement							
2	Arden Way/Fair Oaks Boulevard	4,700	0	0	51,620	339,200	0	395,520
	Storm Drain Improvement							
3	Barnett Circle/Gorman Drive-Fair	87,519	703,422	0	0	0	0	790,941
	Oaks Boulevard/Menlo Avenue							
	Storm Drain Improvement							
4	Black Duck Way/Harlequin Way	403,738	16,000	19,500	1,645,000	1,325,000	0	3,409,238
	Storm Drain Improvement							
5	Clairidge Way Storm Drain	83,806	0	55,500	541,200	0	0	680,506
	Improvement							
6	Crestview Drive Storm Drain	0	0	28,000	102,000	517,000	495,000	1,142,000
	Improvement							
7	Donnie Lyn Way/Robertson Avenue	5,047	84,835	576,400	0	0	0	666,282
	Storm Drain Improvement							
8	Eastern Avenue/Arden Way Storm	4,700	0	0	159,500	1,074,000	0	1,238,200
	Drain Improvement							
9	El Nido Way/El Tejon Way Storm	4,078	56,722	420,500	0	0	0	481,300
	Drain Improvement							
10	Glenwood Road/Chelsea Road Storm	6,501	0	66,439	477,400	0	0	550,340
	Drain Improvement							
11	Janell Way/Bowman Oaks Way	119,646	606,630	0	0	0	0	726,276
	Storm Drain Improvement	·	·					
12	Kinross Road/Root Avenue Storm	0	15,000	23,500	43,500	277,000	0	359,000
	Drain Improvement				·			
13	Kubel Circle Levee Improvement	0	0	135,220	898,700	0	0	1,033,920
14	Lakehaven Storm Drain	0	180,000	0	0	0	0	180,000
	Improvement							
15	Lassen Way Storm Drain	6,472	71,248	513,700	0	0	0	591,420
	Improvement	ŕ	ŕ	,				•
16	Lincoln Avenue Storm Drain	47,530	307,260	0	0	0	0	354,790
	Improvement							,
17	Mayhew Channel Low-Flow	10,000	160,000	572,500	0	0	0	742,500
	Drainage Diversion	, , ,	,	,				,,,,,

PROJ.			FISCAL YEAR					
#	PROJECT	PRIOR YEARS	2006-07	2007-08	2008-09	2009-10	2010-11	TOTAL
18	Q Street/Front Street to Dry Creek	\$6,993	\$103,907	\$753,500	\$0	\$0	\$0	\$864,400
	Road Storm Drain Improvement							
19	Rancho Cordova Channel Lining	44,280	399,800	1,231,700	0	0	0	1,675,780
	East of Dawes Street							
20	Rancho Cordova Channel Low-Flow	10,000	160,000	572,500	0	0	0	742,500
	Drainage Diversion							
21	Somersby Way/Wixford Way Storm	37,748	20,462	389,400	0	0	0	447,610
	Drain Improvement							
22	Valmonte Drive/Stewart Road Storm	182,446	1,168,290	0	0	0	0	1,350,736
	Drain Improvement							
23	Wedge Circle/Madison Avenue	6,000	0	79,000	550,000	0	0	635,000
	Storm Drain Improvement							
24	Wilhaggin Storm Drainage Pump	257,950	0	0	0	183,000	2,801,000	3,241,950
	Station (D43) Trash Rake, Discharge							
	Lines and Pump Improvement							
	TOTAL	\$1,335,502	\$4,053,576	\$5,465,039	\$4,659,220	\$3,715,200	\$3,296,000	\$22,524,537

PRIOR-YEAR COMPLETED/CANCELLED PROJECTS SUMMARY

PROJ.			FISCAL YEAR		REASON				
#	PROJECT	PRIOR YEARS	2005-06	2006-07	2007-08	2008-09	2009-10	TOTAL	DROPPED
2	Ardenridge Drive/Shadowglen Road	\$2,478,018	\$0	\$0	\$0	\$0	\$0	\$2,478,018	Project Completed
3	Ashton Drive/Dorking Court Storm	705,654	0	0	0	0	0	705,654	Project Completed
9	Glenbrook Lane Storm Drain	585,962	0	0	0	0	0	585,962	Project Completed
	Improvement								
12	Kubel Circle Storm Drain	0	0	0	0	80,000	931,000	1,011,000	Scope Changed
	Improvement								
15	Ravenwood Avenue Storm Drain	4,700	0	80,000	590,000	36,300		711,000	Project Delayed
	Improvement						0		
16	Shangrila Drive/Monte Park Avenue	67,058	24,500	0	0	0	0	91,558	Project Cancelled
	Storm Drain Improvement								
18	Tami Way Storm Drain Improvement	47,530	307,260	0	0	0	0	354,790	Project Renamed
	TOTAL	\$3,888,922	\$331,760	\$80,000	\$590,000	\$116,300	\$931,000	\$5,937,982	

6th Avenue/K Street Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$224,328

Expected Completion Date: 2008 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate yard and street flooding along 6th Avenue, 7th Street, L Street and K Street in Rio Linda. In addition, the project will alleviate storm drain contamination caused by an oil/sand separator that becomes inundated when the drainage system surcharges near the intersection of 6th Avenue and K Street. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, storm drain system improvements (mainline, laterals and drainage inlets) will need to be made along 6th Avenue, L Street and K Street.

6th Avenue/K Street Storm Drain Improvement

	Prior	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs	0	0	0	173,000	0	0	173,000
Project Management/ Design Construction	6,348	0	27,680	5,190	0	0	39,218
Inspection TOTAL	6,348	0	27,680	12,110 190,300	0	0	12,110 224,328

	Prior	Fiscal Year	Fiscal Year l	Fiscal Year I	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	6,348	0	27,680	190,300	0	0	224,328

Arden Way/Fair Oaks Boulevard Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$395,520

Expected Completion Date: 2009 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate structure, yard and street flooding along Marione Drive, Elsdon Circle and in the Five Points Shopping Center (southeast corner of Arden Way/Fair Oaks Boulevard). The existing storm drain system is undersized compared to current storm runoff design standards and it appears the overland release path is obstructed. Therefore, to alleviate the flooding, storm drain system improvements (mainline, laterals, drainage inlets and possibly overland release paths) will need to be made along Marione Drive, Elsdon Circle and in the Five Points Shopping Center.

Arden Way/Fair Oaks Boulevard Storm Drain Improvement

	Prior	Fiscal Year					
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs	0	0	0	0	307,000	0	307,000
Project Management/	U	U	U	U	307,000	U	307,000
Design	4,700	0	0	49.120	9,210	0	63,030
Construction	4,700	V	V	47,120	7,210	U	05,050
Inspection	0	0	0	0	21,490	0	21,490
Misc. Project Costs	0	0	0	2,500	1,500	0	4,000
TOTAL	4,700	0	0	51,620	339,200	0	395,520

	Prior	Fiscal Year					
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	4,700	0	0	51,620	339,200	0	395,520

Barnett Circle/Gorman Drive – Fair Oaks Boulevard/Menlo Avenue Storm Drain Improvement

Department: Water Resources Estimated Project Cost: \$790,941

Expected Completion Date: 2006 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate structure, garage, yard and street flooding along Barnett Circle, Gorman Drive and Menlo Avenue. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, storm drain system improvements (mainline, laterals and drainage inlets) will need to be made along Barnett Circle, Gorman Drive, Menlo Avenue and through numerous backlots. Some of these improvements will involve the use of existing drainage easements while other improvements may require the acquisition of new drainage easements.

Operating Budget Impact:

The completion of this project has no measurable impact on the operating budget.

Barnett Circle/Gorman Drive - Fair Oaks Boulevard/Menlo Avenue Storm Drain Improvement

	Prior	Fiscal Year 1	Fiscal Year	Fiscal Year 1	Fiscal Year	Fiscal Year	
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs	0	639,474	0	0	0	0	639,474
Project Management/ Design Construction	73,255	19,185	0	0	0	0	92,440
Inspection	12,277	44,763	0	0	0	0	57,040
Misc. Project Costs	1,987	0	0	0	0	0	1,987
TOTAL	87,519	703,422	0	0	0	0	790,941

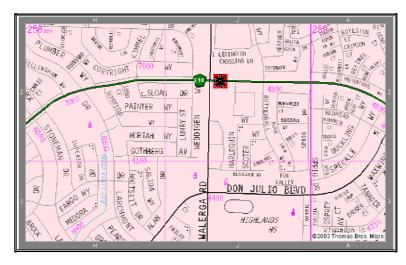
	Prior	Fiscal Year l	Fiscal Year I	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	87,519	703,422	0	0	0	0	790,941

Black Duck Way/Harlequin Way Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$3,409,238

Expected Completion Date: 2009 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate house, garage, yard and street flooding along Black Duck Way, Harlequin Way, Lumry Street, Sea Duck Court, Weddigen Way and other surrounding streets. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, a new storm drain trunk line will be installed in Elkhorn Boulevard from McDermott Drive to Schofield Way. The channel culvert on Larchmont Drive will be improved and storm drain system improvements (mainline, laterals and drainage inlets) will be made along Black Duck Way, Butterball Way, Harlequin Way and Weddigen Way. The storm drain project will be coordinated with the Sacramento County Department of Transportation project – Elkhorn Boulevard Widening Project (Watt Avenue to Don Julio Boulevard).

Black Duck Way/Harlequin Way Storm Drain Improvement

	Prior	Fiscal Year					
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs Project Management/	0	0	0	1,500,000	1,200,000	0	2,700,000
Design Construction	400,652	16,000	16,000	45,000	36,000	0	513,652
Inspection	0	0	0	100,000	89,000	0	189,000
Misc. Project Costs	3,086	0	3,500	0	0	0	6,586
TOTAL	403,738	16,000	19,500	1,645,000	1,325,000	0	3,409,238

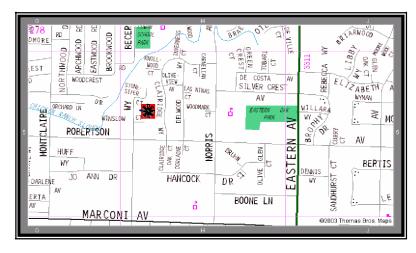
	Prior	Fiscal Year					
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	403,738	16,000	19,500	1,645,000	1,325,000	0	3,409,238

Clairidge Way Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$680,506

Expected Completion Date: 2008 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate structure, garage, yard and street flooding along Clairidge Way. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, storm drain system improvements will need to be made along Clairidge Way and Becerra Way. Some of these improvements will involve the use of existing drainage easements.

Clairidge Way Storm Drain Improvement

	Prior	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year l	Fiscal Year	
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs Project Management/	0	0	0	492,000	0	0	492,000
Design Construction	83,806	0	52,000	14,760	0	0	150,566
Inspection	0	0	0	34,440	0	0	34,440
Misc. Project Costs	0	0	3,500	0	0	0	3,500
TOTAL	83,806	0	55,500	541,200	0	0	680,506

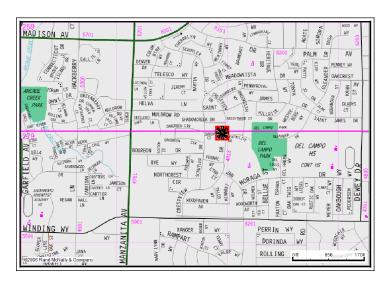
Funding Sources	Prior Years	Fiscal Year 2006-07	Fiscal Year 2007-08	Fiscal Year 1 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Total
SWU Capital Construction Fund	83,806	0	55,500	541,200	0	0	680,506

Crestview Drive Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$1,142,000

Expected Completion Date: 2010 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate structure, yard and street flooding along Crestview Drive. The existing channel system is undersized compared to current storm runoff design standards. The culvert capacities are less than the channel capacities. Therefore, to alleviate the flooding, culvert improvements are necessary on Crestview Drive and Schuyler Drive at Verde Cruz Creek.

Crestview Drive Storm Drain Improvement

	Prior 1	Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year							
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total		
Construction Costs	0	0	0	0	450,000	450,000	900,000		
Project Management/									
Design	0	0	24,000	100,000	33,500	13,500	171,000		
Construction									
Inspection	0	0	0	0	31,500	31,500	63,000		
Misc. Project Costs	0	0	4,000	2,000	2,000	0	8,000		
TOTAL	0	0	28,000	102,000	517,000	495,000	1,142,000		

	Prior	Fiscal Year	Fiscal Year l	Fiscal Year l	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	0	0	28,000	102,000	517,000	495,000	1,142,000

Donnie Lyn Way/Robertson Avenue Storm Drain Improvement

Department: Water Resources Estimated Project Cost: \$666,282

Expected Completion Date: 2007 Funding Sources: Storm Water Utility (SWU) Capital Construction Fund



Project Description:

This project will alleviate structure and street flooding along Mission Avenue, Marconi Avenue, Robertson Avenue, and Donnie Lyn Way. This project is the second phase of the Bertis Drive Storm Drain Project which was completed January 2003. The existing storm drain system was built in the 1950's and is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, storm drain system improvements (mainlines, laterals and drainage inlets) will need to be made along Donnie Lyn Way, Marconi Avenue, and Mission Avenue. Some of these improvements will involve the use of existing drainage easements.

Donnie Lyn Way/Robertson Avenue Storm Drain Improvement

	Prior	Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year							
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total		
Construction Costs	0	0	524,000	0	0	0	524,000		
Project Management/									
Design	5,047	83,835	15,720	0	0	0	104,602		
Construction									
Inspection	0	0	36,680	0	0	0	36,680		
Misc. Project Costs	0	1,000	0	0	0	0	1,000		
TOTAL	5,047	84,835	576,400	0	0	0	666,282		

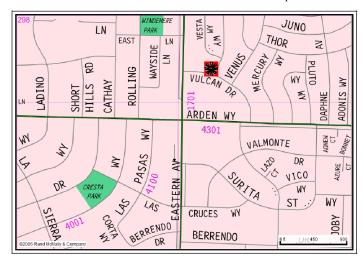
	Prior	Fiscal Year l	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	5,047	84,835	576,400	0	0	0	666,282

Eastern Avenue/Arden Way Storm Drain Improvement

Department: Water Resources Estimated Project Cost: \$1,238,200

Expected Completion Date: 2009 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate structure, yard and street flooding along Arden Way, Eastern Avenue, Mercury Way and Vulcan Drive. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, storm drain system improvements (mainline, laterals, drainage inlets and possibly channel) will need to be made along Arden Way, Daphne Avenue, Eastern Avenue frontage road, Mercury Way, Thor Way, Venus Drive and Vulcan Drive. This project is the third phase of a drainage solution conceptualized in 2001 for the 200 acre watershed that outfalls to the Strong Ranch Slough tributary channel near the East Lane/Eastern Avenue intersection. Drainage improvements constructed with Phase 1 - Park Place Drive/Olympus Drive Storm Drain Improvement Project (2002) and Phase 2 - Valmonte Drive/Stewart Road Storm Drain Improvement Project (2006) will be incorporated into the design solution for this project.

Eastern Avenue/Arden Way Storm Drain Improvement

	Prior	Fiscal Year					
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs	0	0	0	0	975,000	0	975,000
Project Management/ Design Construction	4,700	0	0	156,000	29,250	0	189,950
Inspection	0	0	0	0	68,250	0	68,250
Misc. Project Costs	0	0	0	3,500	1,500	0	5,000
TOTAL	4,700	0	0	159,500	1,074,000	0	1,238,200

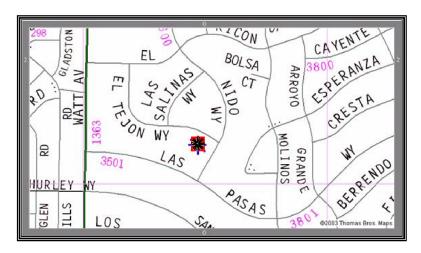
	Prior	Fiscal Year I	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	4,700	0	0	159,500	1,074,000	0	1,238,200

El Nido Way/El Tejon Way Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$481,300

Expected Completion Date: 2007 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate structure, garage, yard and street flooding along El Nido Way and El Tejon Way. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, storm drain system improvements (mainline, laterals and drainage inlets) will need to be made along Las Pasas Way, El Tejon Way, Las Salinas Way, El Nido Way and Los Molinos Way. Some of these improvements will involve the use of existing drainage easements.

El Nido Way/El Tejon Way Storm Drain Improvement

	Prior	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year l	Fiscal Year	
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs	0	0	380,000	0	0	0	380,000
Project Management/							
Design Construction	4,078	56,722	11,400	0	0	0	72,200
Inspection	0	0	26,600	0	0	0	26,600
Misc. Project Costs	0	0	2,500	0	0	0	2,500
TOTAL	4,078	56,722	420,500	0	0	0	481,300

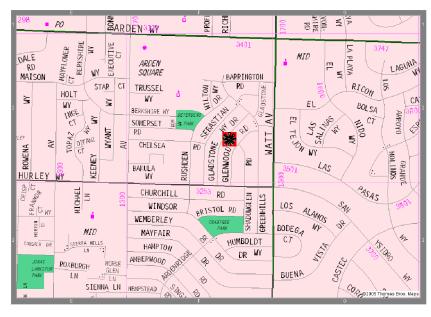
	Prior	Fiscal Year	Fiscal Year I	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	4,078	56,722	420,500	0	0	0	481,300

Glenwood Road/Chelsea Road Storm Drain Improvement

Department: Water Resources Estimated Project Cost: \$550,340

Expected Completion Date: 2008 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate garage, yard and street flooding along Glenwood Road, Rushden Drive and other surrounding streets. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, storm drain system improvements (mainline, laterals and drainage inlets) will need to be made along Glenwood Road, Hurley Way, Gladstone Drive, Sebastian Way, Rushden Drive and Chelsea Road. Some of these improvements will involve the use of existing drainage easements.

Glenwood Road/Chelsea Road Storm Drain Improvement

	Prior	Fiscal Year					
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs	0	0	0	434,000	0	0	434,000
Project Management/							
Design	6,501	0	62,939	13,020	0	0	82,460
Construction							
Inspection	0	0	0	30,380	0	0	30,380
Misc. Project Costs	0	0	3,500	0	0	0	3,500
TOTAL	6,501	0	66,439	477,400	0	0	550,340

	Prior	Fiscal Year l	Fiscal Year I	Fiscal Year l	Fiscal Year I	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	6,501	0	66,439	477,400	0	0	550,340

Janell Way/Bowman Oaks Way Storm Drain Improvement

Department: Water Resources Estimated Project Cost: \$726,276

Expected Completion Date: 2006 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate structure and street flooding along Janell and Bowman Oaks Way near Walnut Avenue. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, storm drain system improvements (mainlines, laterals and drainage inlets) will need to be made from Janell Way to the outfall at Chicken Ranch Slough. These improvements will involve the use of existing drainage easements, and the construction of a new headwall.

Operating Budget Impact:

The completion of this project has no measurable impact on the operating budget.

Janell Way/Bowman Oaks Way Storm Drain Improvement

	Prior	Fiscal Year l	Fiscal Year	Fiscal Year l	Fiscal Year	Fiscal Year	
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs	0	551,480		0	0	0	551,480
Project Management/ Design Construction	106,912	16,550	0	0	0	0	123,462
Inspection	8,084	38,600	0	0	0	0	46,684
Misc. Project Costs	4,650	0	0	0	0	0	4,650
TOTAL	119,646	606,630	0	0	0	0	726,276

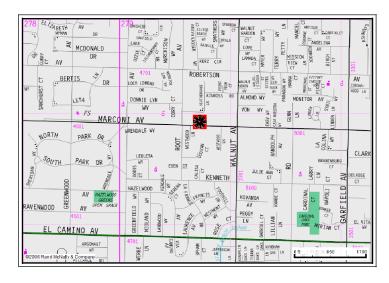
	Prior	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	119,646	606,630	0	0	0	0	726,276

Kinross Road/Root Avenue Storm Drain Improvement

Department: Water Resources Estimated Project Cost: \$359,000

Expected Completion Date: 2009 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate structure, yard and street flooding along Kinross Road to Root Avenue. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, storm drain system improvements (mainline, ditches, laterals and drainage inlets) will need to be made along Kinross Road, Heatherdale Lane and along side yards to Root Avenue.

Kinross Road/Root AvenueStorm Drain Improvement

	Prior	Fiscal Year 1	Fiscal Year	Fiscal Year	Fiscal Year l	Fiscal Year	
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs	0	0	0	0	250,000	0	250,000
Project Management/							
Design Construction	0	15,000	20,000	40,000	7,500	0	82,500
Inspection	0	0	0	0	17,500	0	17,500
Misc. Project Costs	0	0	3,500	3,500	2,000	0	9,000
TOTAL	0	15,000	23,500	43,500	277,000	0	359,000

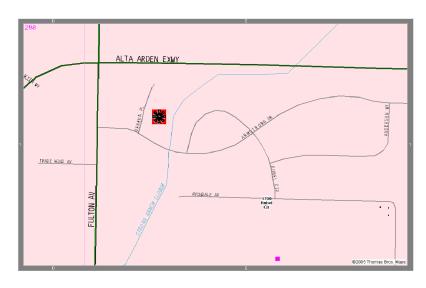
	Prior	Fiscal Year					
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	0	15,000	23,500	43,500	277,000	0	359,000

Kubel Circle Levee Improvement

Department: Water Resources **Estimated Project Cost:** \$1,033,920

Expected Completion Date: 2008 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate structure and street flooding along Kubel Circle. The existing levee is overwhelmed with water during large storm events and begins to overtop causing the low-lying areas along Kubel Circle to flood. Therefore, the levee along the south side of Strong Ranch Slough from Armstrong Drive to Alta Arden Expressway will be improved. These improvements will involve the use of existing drainage easements.

Kubel Circle Levee Improvement

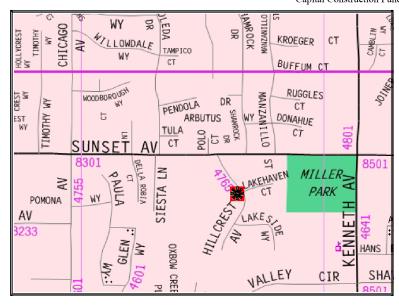
	Prior	Fiscal Year					
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs	0	0	0	817,000	0	0	817,000
Project Management/							
Design Construction	0	0	130,720	24,510	0	0	155,230
Inspection	0	0	0	57,190	0	0	57,190
Misc. Project Costs	0	0	4,500	0	0	0	4,500
TOTAL	0	0	135,220	898,700	0	0	1,033,920

	Prior	Fiscal Year					
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	0	0	135,220	898,700	0	0	1,033,920

Lakehaven Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$180,000

Expected Completion Date: 2007 **Funding Sources:** Storm Water Utility (SWU) Capital Construction Fund



Project Description:

This project will improve drainage at Lakehaven Court. Some of the existing storm drain system is located out of the right of way, in the back yards of some of the properties. The system is in need of repair to fix several offset joints. It is beneficial to move the pipe system out of the back yards and place the system within the right of way; therefore, to improve the maintenance capability the storm drain system improvements (mainline, laterals and drainage inlets) will need to be made along Sunset, Hillcrest, and Lakehaven.

Operating Budget Impact:

The completion of this project has no measurable impact on the operating budget.

Lakehaven Storm Drain Improvement

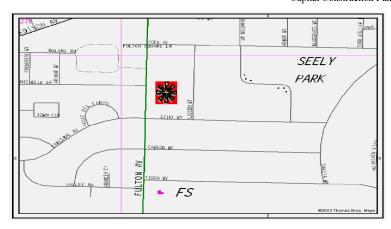
	Prior 1	Fiscal Year l	Fiscal Year	Fiscal Year l	Fiscal Year	Fiscal Year	
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	20010-11	Total
Construction Costs	0	150,000	0	0	0	0	150,000
Project Management/							
Design	0	15,000	0	0	0	0	15,000
Construction							
Inspection	0	15,000	0	0	0	0	15,000
TOTAL	0	180,000	0	0	0	0	180,000

	Prior	Fiscal Year					
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	20010-11	Total
SWU Capital Construction Fund	0	180,000	0	0	0	0	180,000

Lassen Way Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$591,420

Expected Completion Date: 2007 Funding Sources: Storm Water Utility (SWU) Capital Construction Fund



Project Description:

This project will alleviate structure, garage, yard and street flooding along Lassen Way, Pope Avenue, and Fulton Avenue. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, storm drain system improvements (mainline, laterals and drainage inlets) will need to be made along Lassen Way, Pope Avenue, Fulton Avenue, and through numerous backlots. Some of these improvements will involve the use of existing drainage easements.

Lassen Way Storm Drain Improvement

	Prior	Fiscal Year					
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs	0	0	467,000	0	0	0	467,000
Project Management/	U	U	407,000	U	v	· ·	407,000
Design	6,472	68,248	14,010	0	0	0	88,730
Construction							
Inspection	0	0	32,690	0	0	0	32,690
Misc. Project Costs	0	3,000	0	0	0	0	3,000
TOTAL	6,472	71,248	513,700	0	0	0	591,420

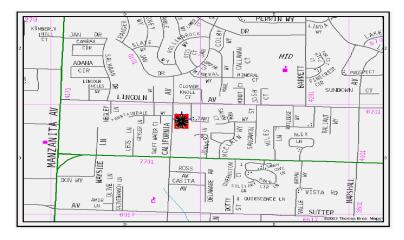
	Prior	Fiscal Year	Fiscal Year I	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	6,472	71,248	513,700	0	0	0	591,420

Lincoln Avenue Storm Drain Improvement

Department: Water Resources Estimated Project Cost: \$354,790

Expected Completion Date: 2006 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate structure, garage, yard and street flooding along Tami Way, Lincoln Avenue and other surrounding streets. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, storm drain system improvements (mainline, laterals and drainage inlets) will need to be made along Lincoln Avenue from Mint Court to California Avenue. All these improvements are within existing right-of-way.

Operating Budget Impact:

The completion of this project has no measurable impact on the operating budget.

Lincoln Avenue Storm Drain Improvement

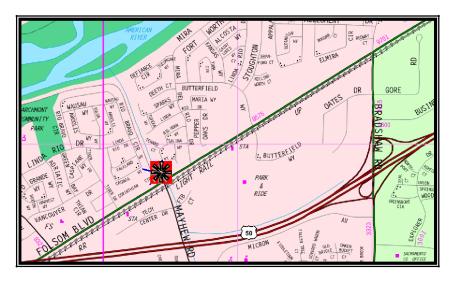
	Prior	Fiscal Year	Fiscal Year	Fiscal Year l	Fiscal Year	Fiscal Year	
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs	0	278,600	0	0	0	0	279 600
Project Management/	U	278,600	U	0	0	U	278,600
Design	40,533	8,358	0	0	0	0	48,891
Construction	40,555	0,550	V	V	V	U	40,071
Inspection	6,682	19,502	0	0	0	0	26,184
Misc. Project Costs	315	800	0	0	0	0	1,115
TOTAL	47,530	307,260	0	0	0	0	354,790

	Prior	Fiscal Year	Fiscal Year I	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	47,530	307,260	0	0	0	0	354,790

Mayhew Channel Low-Flow Drainage Diversion

Department: Water Resources Estimated Project Cost: \$742,500

Expected Completion Date: 2008 Funding Sources: State Funding-Proposition 50



Project Description:

The Mayhew Channel, on the north side of Folsom Boulevard, is a concrete lined rectangular channel with a flow line approximately two feet higher than the soffit of a perpendicular 27-inch sewer interceptor. Removal of the channel bottom and installation of a collection screen and collection gallery will intercept dry weather flows. The flows are diverted through a pipe to a sewer interceptor manhole. The runoff then receives treatment before being discharged into the Lower American River, hence removing potential contaminants. This project provides urban runoff water quality protection to the lower American River by decreasing bacterial loading and creating an additional safeguard for aquatic wildlife, while also advancing the recreational uses of the resource.

Mayhew Channel Low-Flow Drainage Diversion

	Prior	Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year							
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total		
Construction Costs	0	0	450,000	0	0	0	450,000		
Project Management/									
Design Construction	10,000	145,000	25,000	0	0	0	180,000		
Inspection	0	0	67,500	0	0	0	67,500		
Misc. Project Costs	0	15,000	30,000	0	0	0	45,000		
TOTAL	10,000	160,000	572,500	0	0	0	742,500		

	Prior	Fiscal Year l	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
State Funding- Proposition 50	10,000	160,000	572,500	0	0	0	742,500

Q Street/Front Street to Dry Creek Road Storm Drain Improvement

Department: Water Resources Estimated Project Cost: \$864,400

Expected Completion Date: 2007 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project is necessary to alleviate potential hazards created by a Transportation road-widening project. The system also appears to be undersized, although there have been no reported flooding complaints in the area. The existing storm drain system consists primarily of roadside ditches and culverts. The road-widening project caused the ditches to become very deep and narrow, causing a potential public hazard. Therefore, to alleviate the potential hazard, and to upgrade the storm drain system, improvements will need to be made along Q Street, Front Street, and other surrounding streets in Rio Linda.

Q Street/Front Street to Dry Creek Road Storm Drain Improvement

	Prior 1	Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year									
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total				
Construction Costs	0	0	685,000	0	0	0	685,000				
Project Management/ Design Construction	6,993	102,607	20,550	0	0	0	130,150				
Inspection	0	0	47,950	0	0	0	47,950				
Misc. Project Costs	0	1,300	0	0	0	0	1,300				
TOTAL	6,993	103,907	753,500	0	0	0	864,400				

	Prior	Fiscal Year	Fiscal Year I	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	6,993	103,907	753,500	0	0	0	864,400

Rancho Cordova Channel Lining East of Dawes Street

Department: Water Resources Estimated Project Cost: \$1,675,780

Expected Completion Date: 2007 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will improve drainage in the Rancho Cordova Channel between Dawes Street and Coloma Road in the City of Rancho Cordova. The existing concrete lining is cracked, broken or altogether non-existent. The condition of the lining makes channel maintenance extremely difficult and exacerbates the buildup of debris which hinders the flow of storm water. The channel is located within a drainage easement on two adjacent County of Sacramento properties. Residential properties along Dolecetto Drive, Fiske Court and Newton Way back up to the channel properties. Therefore, to improve the efficiency of maintenance and storm water conveyance, the channel lining improvements will need to be made between Dawes Street and Coloma Road.

Rancho Cordova Channel Lining East of Dawes Street

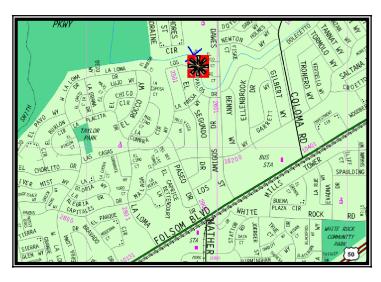
	Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year								
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total		
Construction Costs	0	360,000	1,120,000	0	0	0	1,480,000		
Project Management/									
Design	44,280	11,100	33,300	0	0	0	88,680		
Construction									
Inspection	0	25,200	78,400	0	0	0	103,600		
Misc. Project Costs	0	3,500	0	0	0	0	3,500		
TOTAL	44,280	399,800	1,231,700	0	0	0	1,675,780		

	Prior	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	44,280	399,800	1,231,700	0	0	0	1,675,780

Rancho Cordova Channel Low-Flow Drainage Diversion

Department: Water Resources Estimated Project Cost: \$742,500

Expected Completion Date: 2008 Funding Sources: Proposition 50



Project Description:

The Rancho Cordova Channel, west of Dawes Street, is a concrete lined, trapezoidal channel with a flow line elevation approximately 3.5 feet higher than the soffit of the parallel 18-inch sewer interceptor. Removal of the channel bottom and installation of a collection screen and collection gallery will intercept dry weather flows. The flows are diverted through a pipe to a sewer interceptor manhole. The runoff then receives treatment before being discharged into the Lower American River, hence removing potential contaminants. This project provides urban runoff water quality protection to the Lower American River by decreasing bacterial loading and creating an additional safeguard for aquatic wildlife, while also advancing the recreational uses of the resource.

Rancho Cordova Channel Low-Flow Drainage Diversion

	Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year							
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total	
Construction Costs	0	0	450,000	0	0	0	450,000	
Project Management/								
Design	10,000	145,000	25,000	0	0	0	180,000	
Construction								
Inspection	0	0	67,500	0	0	0	67,500	
Misc. Project Costs	0	15,000	30,000	0	0	0	45,000	
TOTAL	10,000	160,000	572,500	0	0	0	742,500	

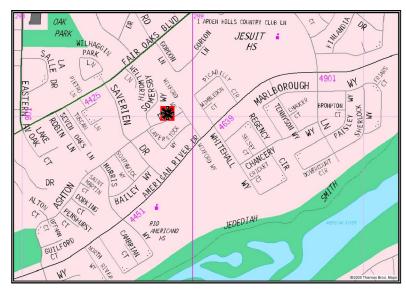
	Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year							
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total	
Proposition 50	10,000	160,000	572,500	0	0	0	742,500	

Somersby Way/Wixford Way Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$447,610

Expected Completion Date: 2007 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate garage, yard and street flooding along Somersby Way, Ashton Drive, Morris Way and Wixford Way. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, storm drain system improvements (mainline, laterals and drainage inlets) will need to be made along Somersby Way, Ashton Drive, Wixford Way, and Morris Way. This project will be designed in conjunction with the Ashton-Dorking Storm Drain Improvement Project, since modifications to either project will affect storm drain runoff analysis in each area.

Somersby Way/Wixford Way Storm Drain Improvement

	Prior	Fiscal Year					
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs	0	0	354,000	0	0	0	354,000
Project Management/							
Design Construction	37,578	19,062	10,620	0	0	0	67,260
Inspection	0	0	24,780	0	0	0	24,780
Misc. Project Costs	170	1,400	0	0	0	0	1,570
TOTAL	37,748	20,462	389,400	0	0	0	447,610

	Prior	Fiscal Year I	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	37,748	20,462	389,400	0	0	0	447,610

Valmonte Drive/Stewart Road Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$1,350,736

Expected Completion Date: 2006 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate structure, garage, yard and street flooding along Valmonte Drive, Surita Street, Lazo Court, Vico Way, and Azure Court. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, storm drain system improvements (mainline, laterals, and drain inlets) will need to be made along Stewart Road, Valmonte Drive, Surita Street, Lazo Court, Vico Way, and Azure Court.

Operating Budget Impact:

The completion of this project has no measurable impact on the operating budget.

Valmonte Drive/Stewart Road Storm Drain Improvement

•	Prior	Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year								
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total			
Construction Costs	0	1,007,536	0	0	0	0	1,007,536			
Project Management/										
Design	160,986	40,226	0	0	0	0	201,212			
Construction										
Inspection	18,922	120,528	0	0	0	0	139,450			
Misc. Project Costs	2,538	0	0	0	0	0	2,538			
TOTAL	182,446	1,168,290	0	0	0	0	1,350,736			

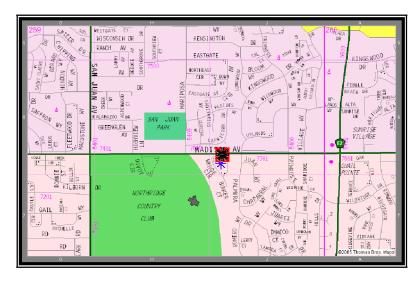
	Prior	Fiscal Year	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	182,446	1,168,290	0	0	0	0	1,350,736

Wedge Circle/Madison Avenue Storm Drain Improvement

Department: Water Resources Estimated Project Cost: \$635,000

Expected Completion Date: 2008 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate garage, yard and street flooding along Capricorn Drive, Taurus Court, Madison Avenue, Wedge Circle and Palmyra Drive. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, storm drain system improvements (mainline, laterals and drainage inlets) will need to be made along Capricorn Drive, Madison Avenue, Wedge Circle and Palmyra Drive. Some of these improvements will involve the use of existing easements. This project will need to be coordinated with the City of Citrus Heights due to the work along Capricorn Drive and Taurus Court.

Wedge Circle/Madison Avenue Storm Drain Improvement

	Prior 1	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year l	Fiscal Year	
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs	0	0	0	500,000	0	0	500,000
Project Management/							
Design	6,000	0	74,000	15,000	0	0	95,000
Construction							
Inspection	0	0	0	35,000	0	0	35,000
Misc. Project Costs	0	0	5,000	0	0	0	5,000
TOTAL	6,000	0	79,000	550,000	0	0	635,000

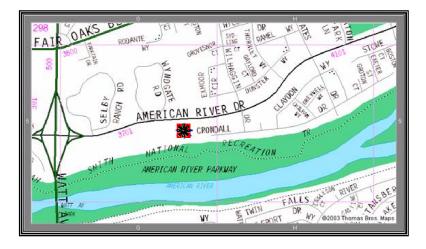
Funding Sources	Prior Years	Fiscal Year	Fiscal Year 2007-08	Fiscal Year 1 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Total
SWU Capital Construction Fund	6,000	0	79,000	550,000	0	0	635,000

Wilhaggin Storm Drainage Pump Station (D43) Trash Rake, Discharge Lines and Pump Improvement

Department: Water Resources Estimated Project Cost: \$3,241,950

Expected Completion Date: 2010 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate structure and street flooding along American River Drive and adjacent areas upstream of the pump station. The existing station does not have sufficient capacity to handle the current design storm. A new diesel powered pump and gravity discharge line will be installed to improve the capacity of the station. Due to the configuration of the station, a new sump structure will be needed to house the new pump and gravity line. In addition, the existing stationary trash rack will be upgraded to an automated trash rake, gate operators will be automated to maximize the use of the gravity discharge lines and the discharge basin/outfall will be upgraded with improved erosion control measures.

Wilhaggin Storm Drainage Pump Station (D43) Trash Rack, Discharge Lines and Pump Improvement

Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year							
Project Costs	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
Construction Costs	0	0	0	0	0	2,500,000	2,500,000
Project Management/							
Design	42,900	0	0	0	75,000	75,000	192,900
Consultant Services	215,050	0	0	0	100,000	50,000	365,050
Construction							
Inspection	0	0	0	0	0	175,000	175,000
Misc. Project Costs	0	0	0	0	8,000	1,000	9,000
TOTAL	257,950	0	0	0	183,000	2,801,000	3,241,950

	Prior	Fiscal Year	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2006-07	2007-08	2008-09	2009-10	2010-11	Total
SWU Capital Construction Fund	257,950	0	0	0	183,000	2,801,000	3,241,950