WATER RESOURCES - EXECUTIVE SUMMARY

Executive Summary

The Department of Water Resources constructs large scale drainage improvement projects intended to mitigate or prevent flood damage in developed areas of the County. The typical annual Capital Improvement Plan (CIP) budget for the drainage program is approximately \$2.7 million to \$5.7 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. Projects proposed to be completed in the 2005-06 Fiscal Year Capital Budget include an "Operating Budget Impact" statement.

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. 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 systems as close as possible to meeting current standards and to minimize potential flood damage in a 100-year event.

Several 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 can 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 system to prevent pump intake and outfalls pipe from becoming plugged during larger storms.

The Five-Year CIP capital cost is approximately \$20.1 million for projects identified.

There are 21 projects identified in the Fiscal Year 2005-06 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.

- Ardenridge Drive/Shadowglen Road Storm Drain Improvement—This project alleviate structure, garage, yard and street flooding. The existing storm drain system is undersized compared to current storm runoff design standards. Estimated Total Cost: \$2,518,861.
- Wilhaggin Storm Drainage Pump Station (D43) Trashrake, 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: \$3,051,000.

WATER RESOURCES

SUMMARY

PROJ.			FISCAL YEAR					
#	PROJECT	PRIOR YEARS	2005-06	2006-07	2007-08	2008-09	2009-10	TOTAL
1	6th Avenue/K Street Storm Drain Improvement	\$4,190	\$0	\$0	\$25,400	\$187,800	\$10,000	\$227,390
2	Ardenridge Drive/Shadowglen Road Storm Drain Improvement	2,377,861	141,000	0	0	0	0	2,518,861
3	Ashton Drive/Dorking Court Storm Drain Improvement	594,375	48,000	0	0	0	0	642,375
4	Barnett Circle/Gorman Drive-Fair Oaks Boulevard/Menlo Avenue Storm Drain Improvement	21,500	323,000	19,500	0	0	0	364,000
5	Black Duck Way/Harlequin Way Storm Drain Improvement	272,000	0	7,500	2,746,500	180,000	0	3,206,000
6	Clairidge Way Storm Drain Improvement	34,000	387,500	22,000	0	0	0	443,500
7	Donnie Lyn Way/Robertson Avenue Storm Drain Improvement	0	46,000	601,000	34,000	0	0	681,000
8	El Nido/El Tejon Storm Drain Improvement	2,300	0	0	49,000	421,300	45,400	518,000
9	Glenbrook Lane Storm Drain Improvement	521,989	65,000	0	0	0	0	586,989
10	Glenwood Road/Clelsea Road Storm Drain Improvement	6,150	0	0	60,000	470,350	30,000	566,500
11	Janell Way/Bowman Oaks Way Storm Drain Improvement	95,000	529,000	32,000	0	0	0	656,000
12	Kubel Circle Storm Drain Improvement	0	0	0	0	80,000	931,000	1,011,000
13	Lassen Way Storm Drain Improvement	0	30,000	400,500	23,000	0	0	453,500
14	Q Street/Front Street to Dry Creek Road Storm Drain Improvement	6,600	84,700	749,300	44,400	0	0	885,000
15	Ravenwood Avenue Storm Drain Improvement	4,700	0	0	80,000	590,000	36,300	711,000
16	Shangrila Drive/Monte Park Avenue Storm Drain Improvement	5,500	361,000	24,500	0	0	0	391,000
17	Somersby/Wixford Storm Drain Improvement	7,800	425,200	25,000	0	0	0	458,000

PROJ.			FISCAL YEAR					
#	PROJECT	PRIOR YEARS	2005-06	2006-07	2007-08	2008-09	2009-10	TOTAL
18	Tami Way Storm Drain Improvement	\$3,000	\$65,000	\$481,700	\$28,300	\$0	\$0	\$578,000
19	Valmonte Drive/Stewart Road Storm	1,167,000	315,000	60,000	0	0	0	1,542,000
	Drain Improvement							
20	Wedge Circle/Madison Avenue	6,000	0	0	70,000	541,000	35,000	652,000
	Storm Drain Improvement							
21	Wilhaggin Storm Drainage Pump	0	0	0	0	375,000	2,676,000	3,051,000
	Station (D43) Trash Rake, Discharge							
	Lines and Pump Improvement							
	TOTAL	\$5,129,965	\$2,820,400	\$2,423,000	\$3,160,600	\$2,845,450	\$3,763,700	\$20,143,115

PRIOR-YEAR COMPLETED/CANCELLED PROJECTS SUMMARY

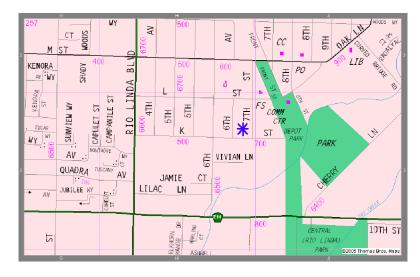
PROJ.			FISCAL YEAR		REASON				
#	PROJECT	PRIOR YEARS	2004-05	2005-06	2006-07	2007-08	2008-09	TOTAL	DROPPED
3	Backup Generators (D05)	\$0	\$2,100,000	\$0	\$0	\$0	\$0	\$2,100,000	Project Completed
6	Cameron Ranch Levee Improvement	689,000	1,877,000	0	0	0	0	2,566,000	Project Completed
10	Flagstone Street/Agate Way Storm	0	0	70,000	167,000	0	0	237,000	Project Cancelled
	Drain Improvement								
12	Hagginbottom Pump Station (D01)	0	0	50,000	150,000	1,248,000	0	1,448,000	Project Cancelled
	Emergency Generator								
14	Kadema Pump Station (D02)	0	0	0	42,000	225,000	866,600	1,133,600	Project Cancelled
	Emergency Generator								
15	Larkspur Lane/Evelyn Lane Storm	0	0	131,000	267,000	0	0	398,000	Project Cancelled
	Drain Improvement								
	TOTAL	\$689,000	\$3,977,000	\$251,000	\$626,000	\$1,473,000	\$866,600	\$7,882,600	

6th Avenue/K Street Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$227,390

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 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	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Construction Costs	0	0	0	0	173,000	0	173,000
Project Management/ Design Construction	4,190	0	0	25,400	12,700	0	42,290
Inspection TOTAL	4,190	0	0	25,400	2,100 187,800	10,000 10,000	12,100 227,390

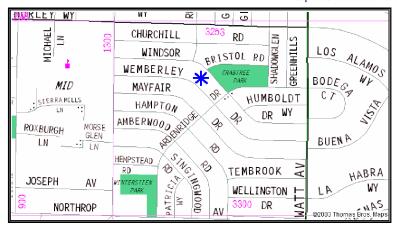
	Prior	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	4,190	0	0	25,400	187,800	10,000	227,390

Ardenridge Drive/Shadowglen Road Storm Drain Improvement

Department: Water Resources Estimated Project Cost: \$2,518,861

Expected Completion Date: 2005 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate structure, garage, yard and street flooding along Churchill Road, Shadowglen Road, Humboldt Way, Windsor Drive, Wemberly Drive, Mayfair Drive, Hampton Road, Singingwood Road, Morse Avenue, Joseph 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 Hurley Way, Shadowglen Road, Churchill Road, Ardenridge Drive, Windsor Drive, Humboldt Way, Singingwood Road, Morse Avenue, and Joseph Avenue. In addition, a culvert will be replaced and a new outfall installed along Joseph Avenue.

Operating Budget Impact:

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

Ardenridge Drive/Shadowglen Road Storm Drain Improvement

	Prior	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Construction Costs Project Management/	1,949,989	0	0	0	0	0	1,949,989
Design Construction	414,599	15,000	0	0	0	0	429,599
Inspection	12,000	126,000	0	0	0	0	138,000
Misc. Project Costs TOTAL	1,273 2,377,861	0 141,000	0 0	0 0	0 0	0	1,273 2,518,861

	Prior	Fiscal Year					
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	2,377,861	141,000	0	0	0	0	2,518,861

Ashton Drive/Dorking Court Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$642,375

Expected Completion Date: 2005 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate garage, yard and street flooding along Ashton Drive, Dorking Court, and the intersection of Ashton Drive and Penshurst Court. 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 along Ashton Drive, Dorking Court, and the intersection of American River Drive and Ashton Drive. This project was designed in conjunction with the Somersby-Wixford Storm Drain Improvement Project, since modifications to either project will affect storm drain runoff analysis in each area.

Operating Budget Impact:

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

Ashton Drive/Dorking Court Storm Drain Improvement

	Prior	Fiscal Year	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Construction Costs Project Management/	487,000	0	0	0	0	0	487,000
Design Construction	97,375	0	0	0	0	0	97,375
Inspection TOTAL	10,000 594,375	48,000 48,000	0	0	0	0	58,000 642,375

	Prior	Fiscal Year	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	594,375	48,000	0	0	0	0	642,375

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

Department: Water Resources **Estimated Project Cost:** \$364,000

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.

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

	Prior	Fiscal Year					
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Construction Costs Project Management/	0	282,000	0	0	0	0	282,000
Design Construction	21,500	38,000	2,500	0	0	0	62,000
Inspection	0	2,750	17,000	0	0	0	19,750
Misc. Project Costs	0	250	0	0	0	0	250
TOTAL	21,500	323,000	19,500	0	0	0	364,000

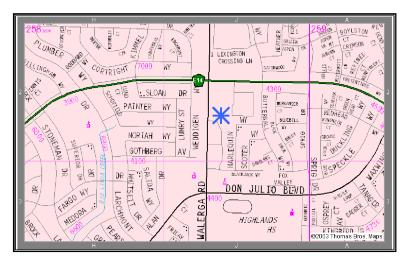
	Prior	Fiscal Year	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	21,500	323,000	19,500	0	0	0	364,000

Black Duck Way/Harlequin Way Storm Drain Improvement

Estimated Project Cost: \$3,206,000 **Department:** Water Resources

Expected Completion Date: 2007 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 l	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Construction Costs	0	0	0	2,700,000	0	0	2,700,000
Project Management/							
Design	272,000	0	7,500	22,500	15,000	0	317,000
Construction							
Inspection	0	0	0	24,000	165,000	0	189,000
TOTAL	272,000	0	7,500	2,746,500	180,000	0	3,206,000

	Prior	Fiscal Year					
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	272,000	0	7,500	2,746,500	180,000	0	3,206,000

Clairidge Way Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$443,500

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 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					
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
		•					
Construction Costs	0	341,000	0	0	0	0	341,000
Project Management/							
Design	34,000	39,000	2,000	0	0	0	75,000
Construction							
Inspection	0	4,000	20,000	0	0	0	24,000
Misc. Project Costs	0	3,500	0	0	0	0	3,500
TOTAL	34,000	387,500	22,000	0	0	0	443,500

	Prior	Fiscal Year	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	34,000	387,500	22,000	0	0	0	443,500

Donnie Lyn Way/Robertson Avenue Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$681,000

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	2005-06	2006-07	2007-08	2008-09	2009-10	Total		
Construction Costs	0	0	524,000	0	0	0	524,000		
Project Management/									
Design	0	45,000	70,000	4,000	0	0	119,000		
Construction									
Inspection	0	0	7,000	30,000	0	0	37,000		
Misc. Project Costs	0	1,000	0	0	0	0	1,000		
TOTAL	0	46,000	601,000	34,000	0	0	681,000		

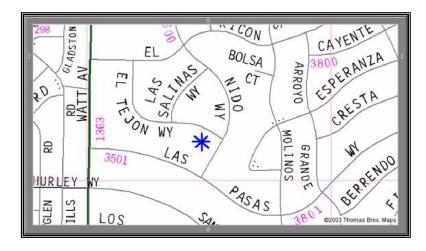
	Prior	Fiscal Year					
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	0	46,000	601,000	34,000	0	0	681,000

El Nido/El Tejon Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$518,000

Expected Completion Date: 2010 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/El Tejon Storm Drain Improvement

	Prior	Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year							
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total		
Construction Costs	0	0	0	0	380,000	0	380,000		
Project Management/									
Design	2,300	0	0	45,000	36,300	2,400	86,000		
Construction									
Inspection	0	0	0	0	5,000	43,000	48,000		
Misc. Project Costs	0	0	0	4,000	0	0	4,000		
TOTAL	2,300	0	0	49,000	421,300	45,400	518,000		

	Prior	Fiscal Year					
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	2,300	0	0	49,000	421,300	45,400	518,000

Glenbrook Lane Storm Drain Improvement

Department: Water Resources Estimated Project Cost: \$586,989

Expected Completion Date: 2005 Funding Sources: Storm Water Utility (SWU)

Capital Construction Fund



Project Description:

This project will alleviate structure, garage, yard and street flooding along Glenbrook Lane, Homesweet Way, and Panama 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 along Glenbrook Lane, Homesweet Way, and Panama Avenue. Some of these improvements will involve the use of existing drainage easements.

Operating Budget Impact:

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

Glenbrook Lane Storm Drain Improvement

	Prior	Fiscal Year					
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Construction Costs	351,124	0	0	0	0	0	351,124
Project Management/							
Design	165,865	20,000	0	0	0	0	185,865
Construction							
Inspection	5,000	45,000	0	0	0	0	50,000
TOTAL	521,989	65,000	0	0	0	0	586,989

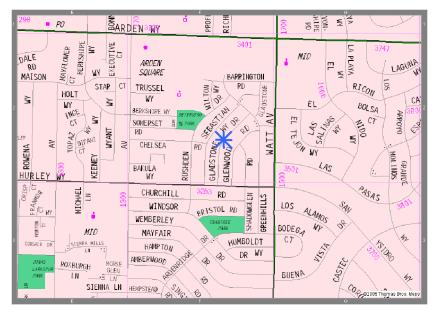
	Prior	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	521,989	65,000	0	0	0	0	586,989

Glenwood Road/Chelsea Road Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$566,500

Expected Completion Date: 2010 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

	Fiscal Year	cal Year Fiscal Year					
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Construction Costs	0	0	0	0	434,000	0	434,000
Project Management/ Design	6,150	0	0	60,000	33,000	3,000	102,150
Construction Inspection	0	0	0	0	3,350	27,000	30,350
TOTAL	6,150	0	0	60,000	470,350	30,000	566,500

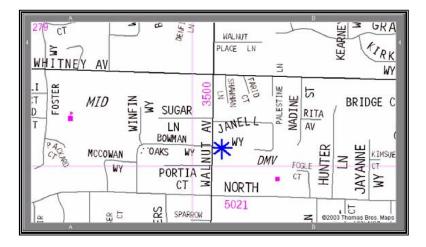
	Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year							
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total	
SWU Capital Construction Fund	6,150	0	0	60,000	470,350	30,000	566,500	

Janell Way/Bowman Oaks Way Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$656,000

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.

Janell Way/Bowman Oaks Way Storm Drain Improvement

	Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year Fiscal Year							
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total	
Construction Costs	0	496,000		0	0	0	496,000	
Project Management/								
Design	95,000	25,000	4,000	0	0	0	124,000	
Construction								
Inspection	0	7,000	28,000	0	0	0	35,000	
Misc. Project Costs	0	1,000	0	0	0	0	1,000	
TOTAL	95,000	529,000	32,000	0	0	0	656,000	

	Prior	Fiscal Year	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	95,000	529,000	32,000	0	0	0	656,000

Kubel Circle Levee Improvement

Department: Water Resources
Expected Completion Date: 2009

Estimated Project Cost: \$1,011,000

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 Storm Drain Improvement

	Prior	Fiscal Year					
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Construction Costs	0	0	0	0	0	817,000	817,000
Project Management/							
Design	0	0	0	0	80,000	100,000	180,000
Construction							
Inspection	0	0	0	0	0	13,000	13,000
Misc. Project Costs	0	0	0	0	0	1,000	1,000
TOTAL	0	0	0	0	80,000	931,000	1,011,000

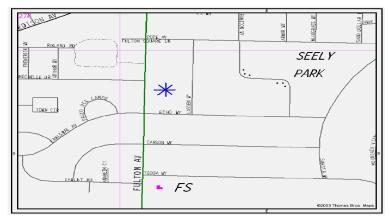
	Prior	Fiscal Year					
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	0	0	0	0	80,000	931,000	1,011,000

Lassen Way Storm Drain Improvement

Estimated Project Cost: \$453,500 **Department:** Water Resources

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

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	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Construction Costs	0	0	351,000	0	0	0	351,000
Project Management/							
Design Construction	0	30,000	45,000	2,000	0	0	77,000
Inspection	0	0	3,500	21,000	0	0	24,500
Misc. Project Costs	0	0	1,000	0	0	0	1,000
TOTAL	0	30,000	400,500	23,000	0	0	453,500

	Prior	Fiscal Year					
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	0	30,000	400,500	23,000	0	0	453,500

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

Department: Water Resources **Estimated Project Cost:** \$885,000

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.

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

	Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year								
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total		
Construction Costs	0	0	685,000	0	0	0	685,000		
Project Management/									
Design	6,600	84,700	55,000	4,400	0	0	150,700		
Construction									
Inspection	0	0	8,000	40,000	0	0	48,000		
Misc. Project Costs	0	0	1,300	0	0	0	1,300		
TOTAL	6,600	84,700	749,300	44,400	0	0	885,000		

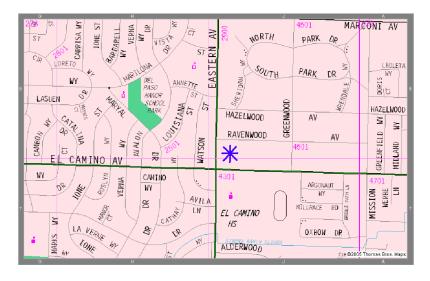
	Prior	Fiscal Year l	Fiscal Year l	Fiscal Year	Fiscal Year l	Fiscal Year	
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	6,600	84,700	749,300	44,400	0	0	885,000

Ravenwood Avenue Storm Drain Improvement

Department: Water Resources Estimated Project Cost: \$711,000

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 Ravenwood 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 Hazelwood Avenue, Ravenwood Avenue and Eastern Avenue. Drainage inlets improved with the Hazelwood-Mission Storm Drain Project (1999) will be incorporated into the design solution for this project.

Ravenwood Avenue Storm Drain Improvement

	Prior	Fiscal Year l	Fiscal Year	Fiscal Year 1	Fiscal Year	Fiscal Year	
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Construction Costs	0	0	0	0	550,000	0	550,000
Project Management/							
Design	4,700	0	0	80,000	30,000	6,300	121,000
Construction							
Inspection	0	0	0	0	8,500	30,000	38,500
Misc. Project Costs	0	0	0	0	1,500	0	1,500
TOTAL	4,700	0	0	80,000	590,000	36,300	711,000

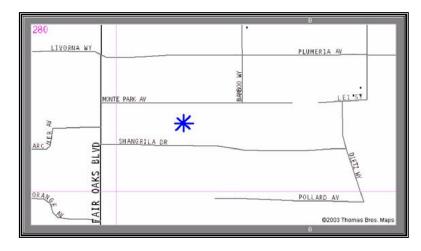
	Prior	Fiscal Year					
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	4,700	0	0	80,000	590,000	36,300	711,000

Shangrila Drive/Monte Park Avenue Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$391,000

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 Plumeria Avenue, Monte Park Avenue, Shangrila Drive and Pollard 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 Plumeria Avenue, Monte Park Avenue, Shangrila Drive and Pollard Avenue. Some of these improvements will involve the use of existing easements.

Shangrila Drive/Monte Park Avenue Storm Drain Improvement

	Prior	Fiscal Year					
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Construction Costs	0	302,000	0	0	0	0	302,000
Project Management/							
Design	5,500	56,000	5,000	0	0	0	66,500
Construction							
Inspection	0	3,000	19,500	0	0	0	22,500
TOTAL	5,500	361,000	24,500	0	0	0	391,000

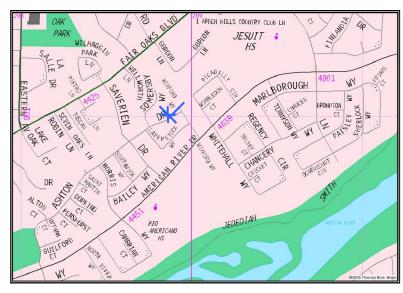
	Prior	Fiscal Year	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	5,500	361,000	24,500	0	0	0	391,000

Somersby/Wixford Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$458,000

Expected Completion Date: 2006 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/Wixford Storm Drain Improvement

	Prior	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year l	Fiscal Year	
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Construction Costs	0	354,000	0	0	0	0	354,000
Project Management/	· ·	221,000	Ü	Ü			55 1,000
Design	7,800	65,000	5,000	0	0	0	77,800
Construction							
Inspection	0	4,800	20,000	0	0	0	24,800
Misc. Project Costs	0	1,400	0	0	0	0	1,400
TOTAL	7,800	425,200	25,000	0	0	0	458,000

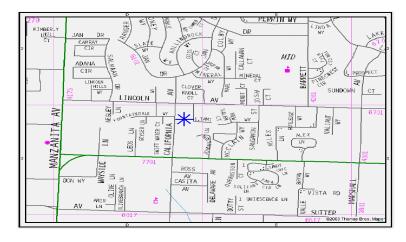
	Prior	Fiscal Year					
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	7,800	425,200	25,000	0	0	0	458,000

Tami Way Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$578,000

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 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 Tami Way, New Salem Court, and through numerous back lots from Tami Way to California Avenue. Some of these improvements will involve the use of existing drainage easements.

Tami Way Storm Drain Improvement

	Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year							
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total	
Construction Costs	0	0	447,000	0	0	0	447,000	
Project Management/								
Design	3,000	65,000	25,000	5,300	0	0	98,300	
Construction								
Inspection	0	0	8,300	23,000	0	0	31,300	
Misc. Project Costs	0	0	1,400	0	0	0	1,400	
TOTAL	3,000	65,000	481,700	28,300	0	0	578,000	

	Prior	Fiscal Year l	Fiscal Year l	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	3,000	65,000	481,700	28,300	0	0	578,000

Valmonte Drive/Stewart Road Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$1,542,000

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.

Valmonte Drive/Stewart Road Storm Drain Improvement

	Prior	Fiscal Year					
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Construction Costs	1,012,500	275,000	0	0	0	0	1,287,500
Project Management/							
Design	154,500	15,000	10,000	0	0	0	179,500
Construction							
Inspection	0	24,000	50,000	0	0	0	74,000
Misc. Project Costs	0	1,000	0	0	0	0	1,000
TOTAL	1,167,000	315,000	60,000	0	0	0	1,542,000

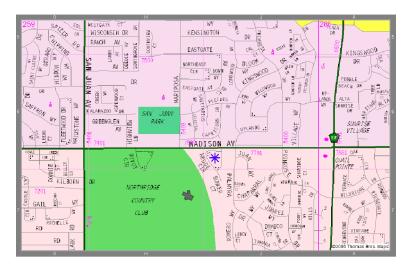
	Prior	Fiscal Year					
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	1,167,000	315,000	60,000	0	0	0	1,542,000

Wedge Circle/Madison Avenue Storm Drain Improvement

Department: Water Resources **Estimated Project Cost:** \$652,000

Expected Completion Date: 2010 **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 Fiscal Year Fiscal Year Fiscal Year Fiscal Year								
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total	
Construction Costs	0	0	0	0	500,000	0	500,000	
Project Management/ Design Construction	6,000	0	0	70,000	33,000	7,000	116,000	
Inspection	0	0	0	0	7,000	28,000	35,000	
Misc. Project Costs	0	0	0	0	1,000	0	1,000	
TOTAL	6,000	0	0	70,000	541,000	35,000	652,000	

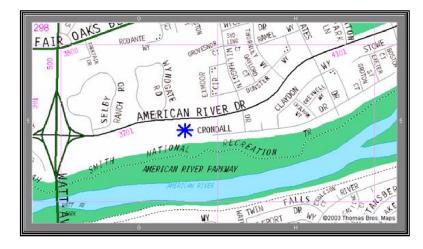
	Prior	Fiscal Year					
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	6,000	0	0	70,000	541,000	35,000	652,000

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

Department: Water Resources **Estimated Project Cost:** \$3,051,000

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					
Project Costs	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Construction Costs	0	0	0	0	0	2,500,000	2,500,000
Project Management/							
Design	0	0	0	0	75,000	35,000	110,000
Consultant Services	0	0	0	0	300,000	100,000	400,000
Construction							
Inspection	0	0	0	0	0	40,000	40,000
Misc. Project Costs	0	0	0	0	0	1,000	1,000
TOTAL	0	0	0	0	375,000	2,676,000	3,051,000

	Prior	Fiscal Year					
Funding Sources	Years	2005-06	2006-07	2007-08	2008-09	2009-10	Total
SWU Capital Construction Fund	0	0	0	0	375,000	2,676,000	3,051,000