

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 \$2.6 million to \$6.2 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 by 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 \$23.6 million. Projects proposed to be completed in the Fiscal Year 2007-08 Capital Budget include an “Operating Budget Impact” statement.

There are 26 projects identified in the Fiscal Year 2007-08 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.

- **Rancho Cordova Channel Lining East of Dawes Street** -- 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. **Estimated Total Cost: \$1,184,429**

- **Valmonte Drive/Stewart Road Storm Drain Improvement** --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: \$1,340,270**
- **Wilhaggin Drive 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: \$3,262,523**

WATER RESOURCES

SUMMARY

PROJ. #	PROJECT	PRIOR YEARS	FISCAL YEAR 2007-08	FISCAL YEAR 2008-09	FISCAL YEAR 2009-10	FISCAL YEAR 2010-11	FISCAL YEAR 2011-12	TOTAL
1	6th Avenue/K Street Storm Drain Improvement	\$160,522	\$24,000	\$0	\$0	\$0	\$0	\$184,522
2	Arden Way/Fair Oaks Boulevard Storm Drain Improvement	492	17,000	278,648	19,470	0	0	315,610
3	Berrendo Drive/La Sierra Drive Storm Drain Improvement	17,479	629,171	40,700	0	0	0	687,350
4	Black Duck Way/Harlequin Way Storm Drain Improvement	416,054	19,500	10,000	380,000	2,580,000	0	3,405,554
5	Bonnie Way Storm Drain Improvement	0	205,000	0	0	0	0	205,000
6	Brome Court Storm Drain Improvement	0	203,125	0	0	0	0	203,125
7	Clairidge Way Storm Drain Improvement	100,926	547,500	49,200	0	0	0	697,626
8	Cody Way/Maryal Avenue Storm Drain Improvement	11,716	7,000	333,024	24,000	0	0	375,740
9	Crestview Drive Storm Drain Improvement	9,402	28,000	102,000	967,000	45,000	0	1,151,402
10	Donnie Lyn Way/Robertson Avenue Storm Drain Improvement	527,167	39,136	0	0	0	0	566,303
11	Eastern Avenue/Arden Way Storm Drain Improvement	4,700	80,000	988,830	83,440	0	0	1,156,970
12	El Nido Way/El Tejon Way Storm Drain Improvement	834,290	58,774	0	0	0	0	893,064
13	Engle Road Storm Drain Improvement	0	238,750	0	0	0	0	238,750
14	Glenwood Road/Chelsea Road Storm Drain Improvement	15,863	70,000	841,137	63,500	0	0	990,500
15	Kinross Road/Root Avenue Storm Drain Improvement	75,169	616,631	44,900	0	0	0	736,700
16	Kubel Circle Levee Improvement	2,369	95,000	284,411	774,690	0	0	1,156,470
17	Large Oak Court Storm Drain Improvement	0	146,563	0	0	0	0	146,563

PROJ. #	PROJECT	PRIOR YEARS	FISCAL YEAR 2007-08	FISCAL YEAR 2008-09	FISCAL YEAR 2009-10	FISCAL YEAR 2010-11	FISCAL YEAR 2011-12	TOTAL
18	Lassen Way Storm Drain Improvement	\$476,445	\$39,100	\$0	\$0	\$0	\$0	\$515,545
19	Old Ranch Road Storm Drain Improvement	1,180	131,820	228,000	1,264,000	0	0	1,625,000
20	Q Street/Front Street to Dry Creek Road Storm Drain Improvement	93,806	936,574	72,240	0	0	0	1,102,620
21	Rancho Cordova Channel Lining East of Dawes Street	1,084,224	100,205	0	0	0	0	1,184,429
22	Valmonte Drive/Stewart Road Storm Drain Improvement	1,137,770	202,500	0	0	0	0	1,340,270
23	Von Way Storm Drain Improvement	0	267,188	0	0	0	0	267,188
24	Watt Avenue and Mayfair Drive Storm Drain Improvement	0	506,563	0	0	0	0	506,563
25	Wedge Circle/Madison Avenue Storm Drain Improvement	15,500	579,000	50,000	0	0	0	644,500
26	Wilhaggin Drive Storm Drainage Pump Station (D43) Trash Rake, Discharge Lines and Pump Improvement	278,523	0	0	0	356,000	2,628,000	3,262,523
	TOTAL	\$5,263,597	\$5,788,100	\$3,323,090	\$3,576,100	\$2,981,000	\$2,628,000	\$23,559,887

PRIOR-YEAR COMPLETED/CANCELLED PROJECTS SUMMARY

PROJ. #	PROJECT	PRIOR YEARS	FISCAL YEAR 2006-07	FISCAL YEAR 2007-08	FISCAL YEAR 2008-09	FISCAL YEAR 2009-10	FISCAL YEAR 2010-11	TOTAL	REASON DROPPED
3	Barnett Circle/Gorman Drive – Fair Oaks Boulevard/Menlo Avenue Storm Drain Improvement	\$87,519	\$695,181	\$0	\$0	\$0	\$0	\$782,700	Project Completed
11	Janell Way/Bowman Oaks Way Storm Drain Improvement	119,646	637,569	0	0	0	0	757,215	Project Completed
14	Lakehaven Storm Drain Improvement	0	180,000	0	0	0	0	180,000	Project Completed
16	Lincoln Avenue Storm Drain Improvement	47,530	313,376	0	0	0	0	360,906	Project Completed
17	Mayhew Channel Low-Flow Drainage Diversion	10,000	0	0	0	0	0	0	Project Cancelled
20	Rancho Cordova Channel Low-Flow Drainage Diversion	10,000	0	0	0	0	0	0	Project Cancelled
21	Somersby Way/Wixford Way Storm Drain Improvement	37,748	5,311	0	0	0	0	43,059	Project Delayed
TOTAL		\$312,443	\$1,831,437	\$0	\$0	\$0	\$0	\$2,123,880	

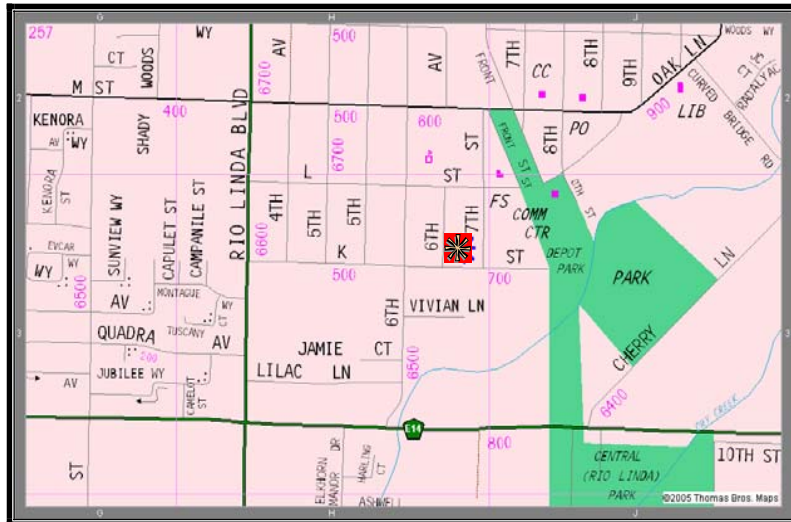
6th Avenue/K Street Storm Drain Improvement

Department: Water Resources

Estimated Project Cost: \$184,522

Expected Completion Date: 2007

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.

Operating Budget Impact:

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

6th Avenue/K Street Storm Drain Improvement

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	89,955	0	0	0	0	0	89,955
Project Management/Design	65,867	8,000	0	0	0	0	73,867
Construction Inspection	2,500	16,000	0	0	0	0	18,500
Misc. Project Costs	2,200	0	0	0	0	0	2,200
TOTAL	160,522	24,000	0	0	0	0	184,522

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	160,522	24,000	0	0	0	0	184,522

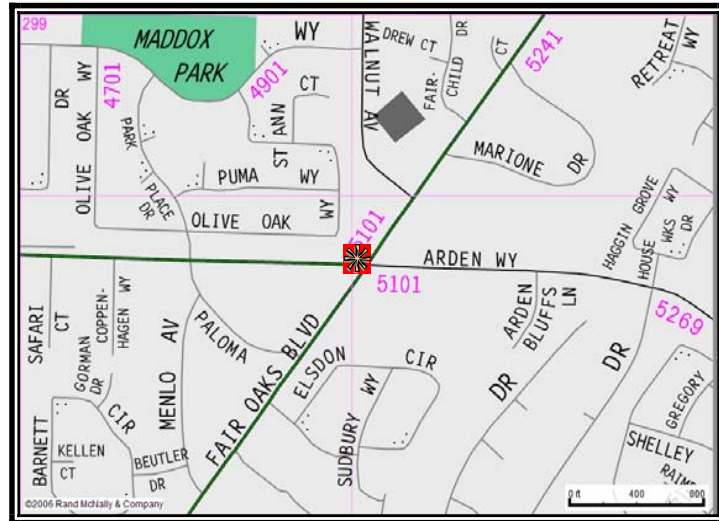
Arden Way/Fair Oaks Boulevard Storm Drain Improvement

Department: Water Resources

Estimated Project Cost: \$315,610

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

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	0	221,000	0	0	0	221,000
Project Management/Design	492	17,000	51,648	6,000	0	0	75,140
Construction Inspection	0	0	3,500	11,970	0	0	15,470
Misc. Project Costs	0	0	2,500	1,500	0	0	4,000
TOTAL	492	17,000	278,648	19,470	0	0	315,610

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	492	17,000	278,648	19,470	0	0	315,610

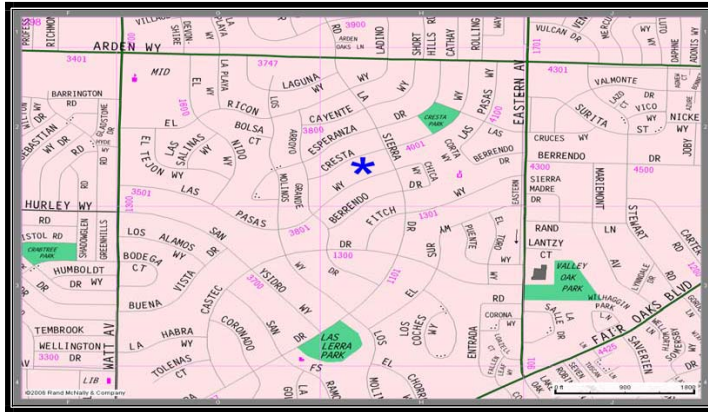
Berrendo Drive/La Sierra Drive Storm Drain Improvement

Department: Water Resources

Estimated Project Cost: \$687,350

Expected Completion Date: 2008

Funding Sources: Storm Water Utility (SWU)
Capital Construction Fund



Project Description:

This project will alleviate structure and street flooding along Fitch Way, Berrendo Drive, Las Pasas Way, Cresta Way, La Sierra Drive and Esperanza Drive. 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 on Fitch Way, Berrendo Drive, Las Pasas Way, Cresta Way, La Sierra Drive and Esperanza Drive.

Berrendo Drive/La Sierra Drive Storm Drain Improvement

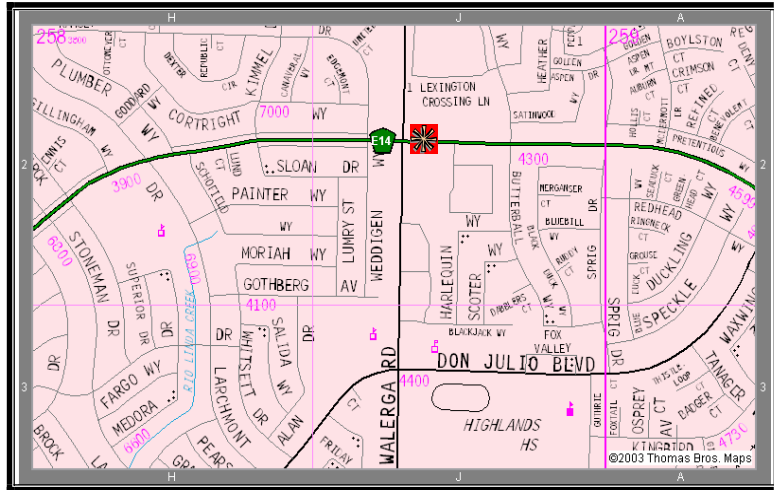
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	485,000	0	0	0	0	485,000
Project Management/Design	17,479	134,171	13,250	0	0	0	164,900
Construction Inspection	0	6,500	27,450	0	0	0	33,950
Misc. Project Costs	0	3,500	0	0	0	0	3,500
TOTAL	17,479	629,171	40,700	0	0	0	687,350

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	17,479	629,171	40,700	0	0	0	687,350

Black Duck Way/Harlequin Way Storm Drain Improvement

Department: Water Resources
Expected Completion Date: 2010

Estimated Project Cost: \$3,405,554
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

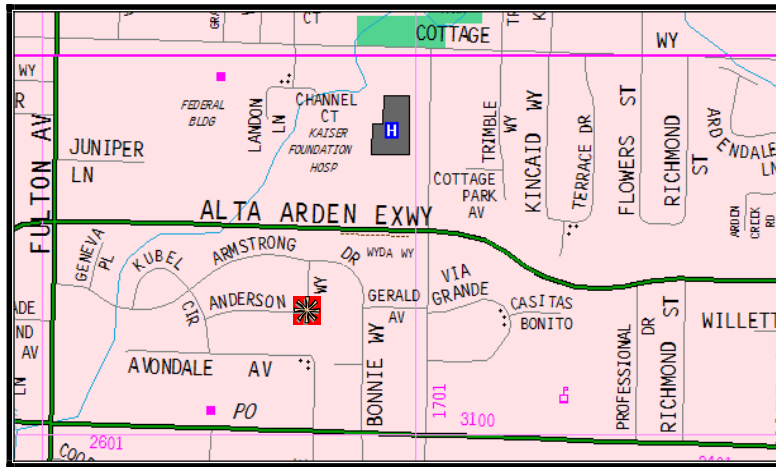
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	0	0	245,000	2,455,000	0	2,700,000
Project Management/Design	412,968	16,000	10,000	35,000	36,000	0	509,968
Construction Inspection	0	0	0	100,000	89,000	0	189,000
Misc. Project Costs	3,086	3,500	0	0	0	0	6,586
TOTAL	416,054	19,500	10,000	380,000	2,580,000	0	3,405,554

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital	416,054	19,500	10,000	380,000	2,580,000	0	3,405,554
Construction Fund							

Bonnie Way Storm Drain Improvement

Department: Water Resources
Expected Completion Date: 2007

Estimated Project Cost: \$205,000
Funding Sources: Storm Water Utility (SWU)
 Capital Construction Fund



Project Description:
 This project will improve drainage at Bonnie Way. The homeowner of 1823 Bonnie Way had severe yard flooding. Sections of the existing storm drain system are damaged. The system is in need of repair to fix several offset joints and corrosion. It is beneficial to improve the mainline, laterals, and drain inlets along Anderson Drive.

Operating Budget Impact:
 The completion of this project has no measurable impact on the operating budget.

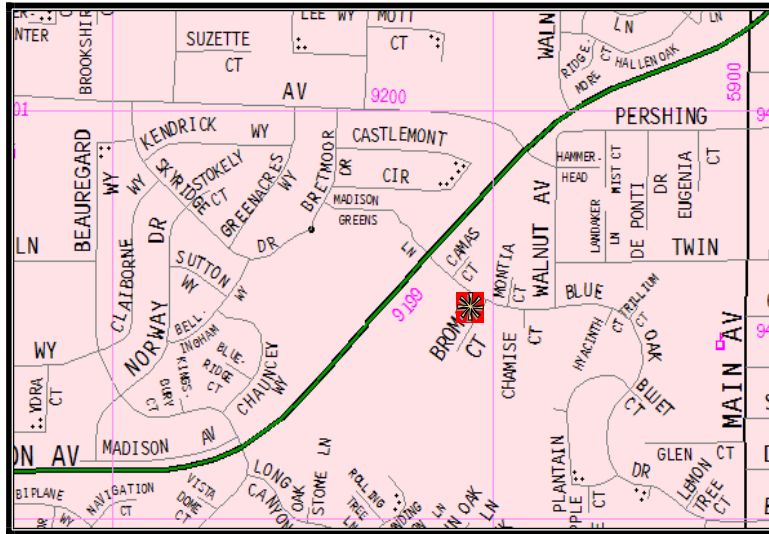
Bonnie Way Storm Drain Improvement							
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	164,000	0	0	0	0	164,000
Project Management/ Design	0	24,600	0	0	0	0	24,600
Construction Inspection	0	16,400	0	0	0	0	16,400
TOTAL	0	205,000	0	0	0	0	205,000

Bonnie Way Storm Drain Improvement							
Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital	0	205,000	0	0	0	0	205,000
Construction Fund	0	205,000	0	0	0	0	205,000

Brome Court Storm Drain Improvement

Department: Water Resources
Expected Completion Date: 2007

Estimated Project Cost: \$203,125
Funding Sources: Storm Water Utility (SWU)
 Capital Construction Fund



Project Description:

This project will improve drainage at Brome Court and Blue Oak Drive. There is a history of ponding and flooding in the area. Sections of the existing storm drain system are 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, cracks and sags in the pipes. It is beneficial to improve the mainline, laterals and drain inlets along Brome Court and Blue Oak Drive.

Operating Budget Impact:

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

Brome Court Storm Drain Improvement

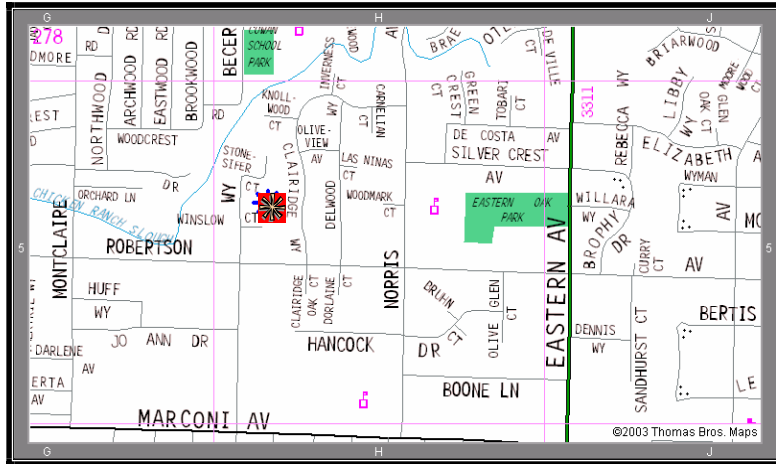
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	162,500	0	0	0	0	162,500
Project Management/ Design	0	24,375	0	0	0	0	24,375
Construction Inspection	0	16,250	0	0	0	0	16,250
TOTAL	0	203,125	0	0	0	0	203,125

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	0	203,125	0	0	0	0	203,125

Clairidge Way Storm Drain Improvement

Department: Water Resources
Expected Completion Date: 2008

Estimated Project Cost: \$697,626
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

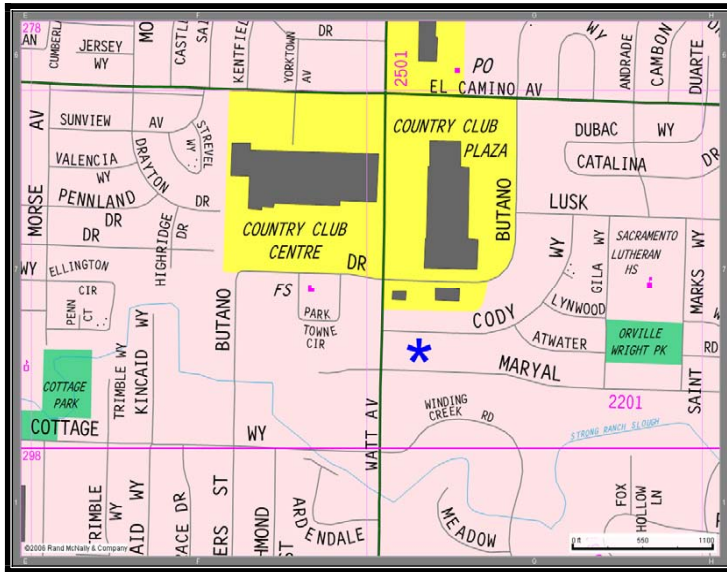
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	492,000	0	0	0	0	492,000
Project Management/Design	100,926	52,000	14,760	0	0	0	167,686
Construction Inspection	0	0	34,440	0	0	0	34,440
Misc. Project Costs	0	3,500	0	0	0	0	3,500
TOTAL	100,926	547,500	49,200	0	0	0	697,626

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital	100,926	547,500	49,200	0	0	0	697,626
Construction Fund	0	0	0	0	0	0	0

Cody Way/Maryal Drive Storm Drain Improvement

Department: Water Resources
Expected Completion Date: 2009

Estimated Project Cost: \$375,740
Funding Sources: Storm Water Utility (SWU)
 Capital Construction Fund



Project Description:

This project will alleviate street flooding along Cody Way and Maryal Drive. 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 on Cody Way, Maryal Drive, Watt Avenue and Cottage Way.

Cody Way/Maryal Drive Storm Drain Improvement

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	0	264,000	0	0	0	264,000
Project Management/ Design	11,716	7,000	63,044	8,000	0	0	89,760
Construction Inspection	0	0	2,480	16,000	0	0	18,480
Misc. Project Costs	0	0	3,500	0	0	0	3,500
TOTAL	11,716	7,000	333,024	24,000	0	0	375,740

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	11,716	7,000	333,024	24,000	0	0	375,740

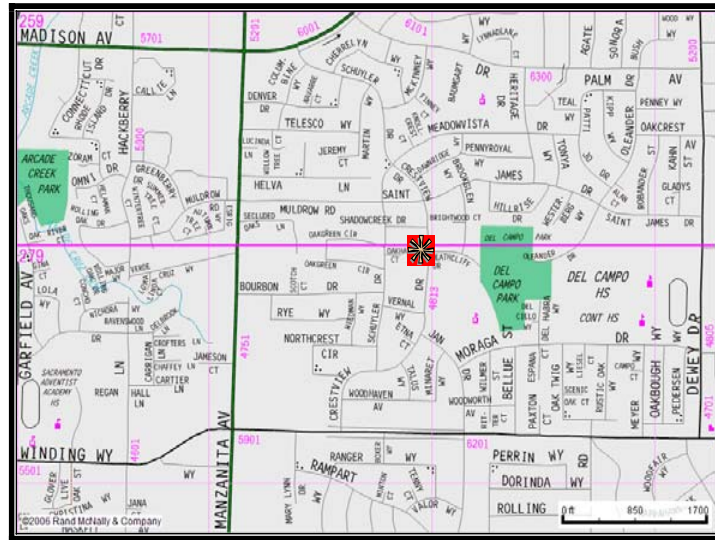
Crestview Drive Storm Drain Improvement

Department: Water Resources

Estimated Project Cost: \$1,151,402

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

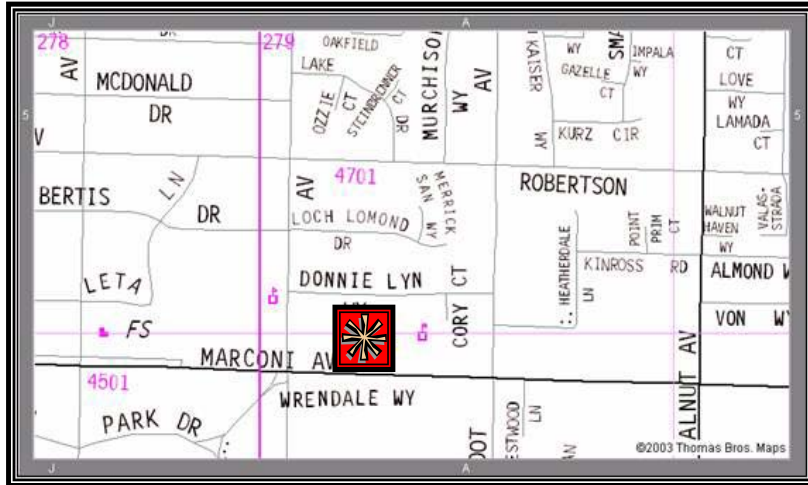
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	0	0	900,000	0	0	900,000
Project Management/ Design	9,402	24,000	100,000	33,500	13,500	0	180,402
Construction Inspection	0	0	0	31,500	31,500	0	63,000
Misc. Project Costs	0	4,000	2,000	2,000	0	0	8,000
TOTAL	9,402	28,000	102,000	967,000	45,000	0	1,151,402

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	9,402	28,000	102,000	967,000	45,000	0	1,151,402

Donnie Lyn Way/Robertson Avenue Storm Drain Improvement

Department: Water Resources
Expected Completion Date: 2007

Estimated Project Cost: \$566,303
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, Robertson Avenue, and Mission 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.

Donnie Lyn Way/Robertson Avenue Storm Drain Improvement

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	427,658	0	0	0	0	0	427,658
Project Management/ Design	92,209	13,000	0	0	0	0	105,209
Construction Inspection	3,800	26,136	0	0	0	0	29,936
Misc. Project Costs	3,500	0	0	0	0	0	3,500
TOTAL	527,167	39,136	0	0	0	0	566,303

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	527,167	39,136	0	0	0	0	566,303

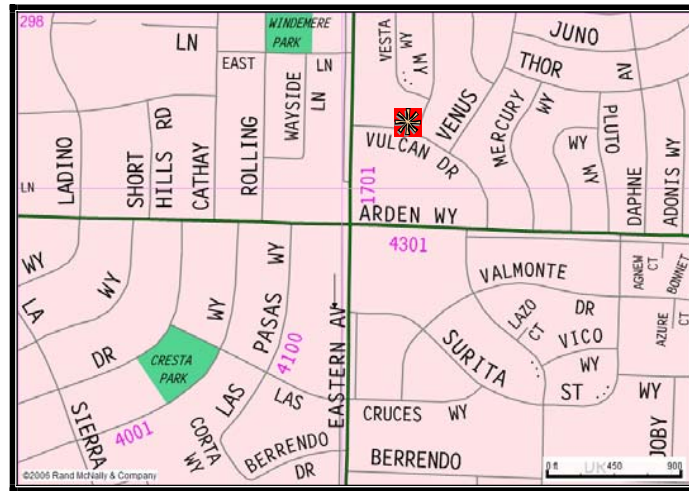
Eastern Avenue/Arden Way Storm Drain Improvement

Department: Water Resources

Estimated Project Cost: \$1,156,970

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

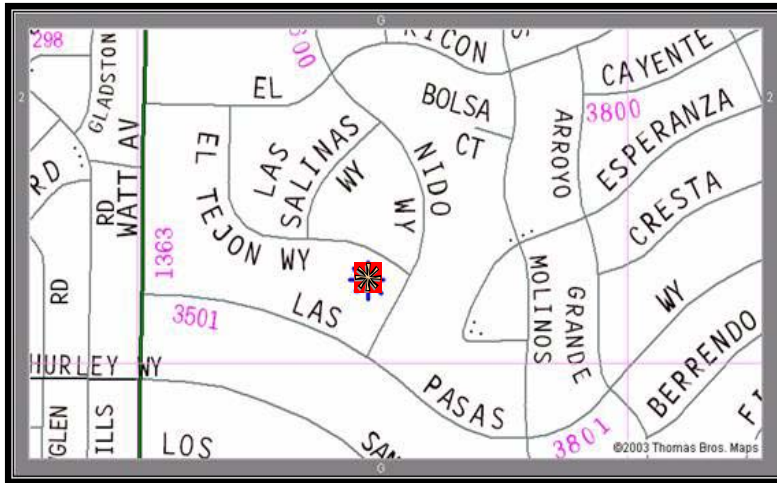
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	0	817,000	0	0	0	817,000
Project Management/ Design	4,700	80,000	163,830	29,250	0	0	277,780
Construction Inspection	0	0	4,500	52,690	0	0	57,190
Misc. Project Costs	0	0	3,500	1,500	0	0	5,000
TOTAL	4,700	80,000	988,830	83,440	0	0	1,156,970

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital							
Construction Fund	4,700	80,000	988,830	83,440	0	0	1,156,970

El Nido Way/El Tejon Way Storm Drain Improvement

Department: Water Resources
Expected Completion Date: 2007

Estimated Project Cost: \$893,064
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.

Operating Budget Impact:

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

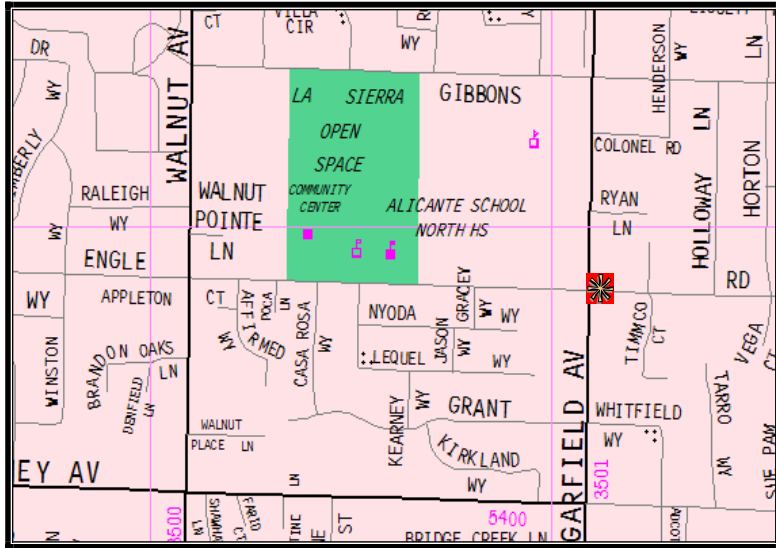
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	769,629	0	0	0	0	0	769,629
Project Management/Design	55,661	11,400	0	0	0	0	67,061
Construction Inspection	6,500	47,374	0	0	0	0	53,874
Misc. Project Costs	2,500	0	0	0	0	0	2,500
TOTAL	834,290	58,774	0	0	0	0	893,064

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	834,290	58,774	0	0	0	0	893,064

Engle Road Storm Drain Improvement

Department: Water Resources
Expected Completion Date: 2007

Estimated Project Cost: \$238,750
Funding Sources: Storm Water Utility (SWU)
 Capital Construction Fund



Project Description:

This project will improve drainage at Engle Road. There have been two occasions of street/yard flooding and two occasions of structure flooding in the area. The system is in need of repair to fix several offset joints, several cracks, and rusted bottoms. It is beneficial to improve the mainline, laterals, and drainage inlets along Engle Road.

Operating Budget Impact:

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

Engle Road Storm Drain Improvement

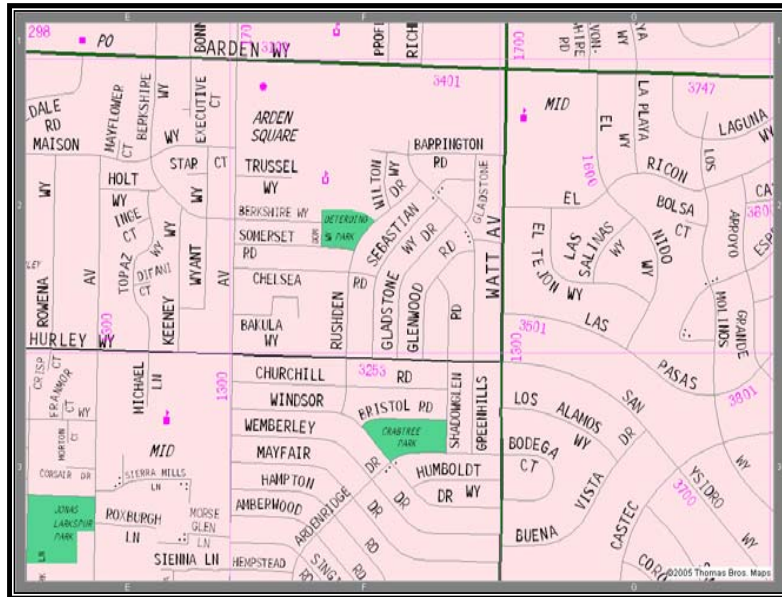
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	191,000	0	0	0	0	191,000
Project Management/Design	0	28,650	0	0	0	0	28,650
Construction Inspection	0	19,100	0	0	0	0	19,100
TOTAL	0	238,750	0	0	0	0	238,750

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	0	238,750	0	0	0	0	238,750

Glenwood Road/Chelsea Road Storm Drain Improvement

Department: Water Resources
Expected Completion Date: 2009

Estimated Project Cost: \$990,500
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

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	0	700,000	0	0	0	700,000
Project Management/ Design	15,863	70,000	131,137	21,000	0	0	238,000
Construction Inspection	0	0	6,500	42,500	0	0	49,000
Misc. Project Costs	0	0	3,500	0	0	0	3,500
TOTAL	15,863	70,000	841,137	63,500	0	0	990,500

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	15,863	70,000	841,137	63,500	0	0	990,500

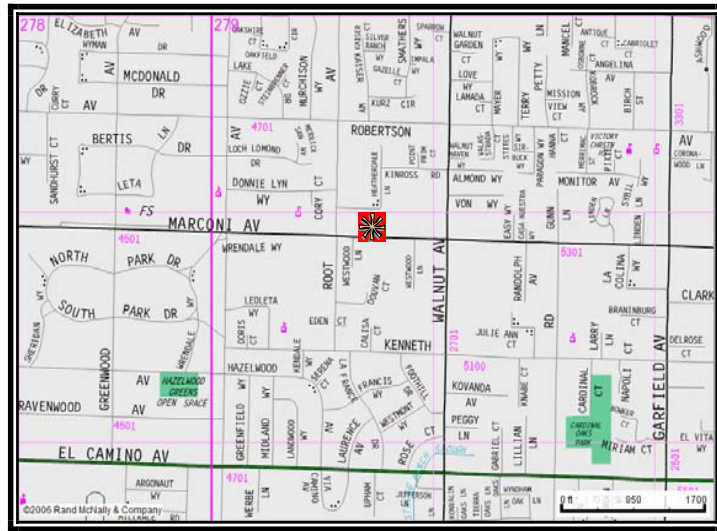
Kinross Road/Root Avenue Storm Drain Improvement

Department: Water Resources

Estimated Project Cost: \$736,700

Expected Completion Date: 2008

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 Avenue Storm Drain Improvement

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	520,000	0	0	0	0	520,000
Project Management/Design	75,169	86,631	15,000	0	0	0	176,800
Construction	0	6,500	29,900	0	0	0	36,400
Inspection	0	3,500	0	0	0	0	3,500
Misc. Project Costs	0	3,500	0	0	0	0	3,500
TOTAL	75,169	616,631	44,900	0	0	0	736,700

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital	75,169	616,631	44,900	0	0	0	736,700
Construction Fund	0	0	0	0	0	0	0

Kubel Circle Levee Improvement

Department: Water Resources

Estimated Project Cost: \$1,156,470

Expected Completion Date: 2009

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							
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	0	116,000	701,000	0	0	817,000
Project Management/Design	2,369	95,000	155,411	25,000	0	0	277,780
Construction Inspection	0	0	8,500	48,690	0	0	57,190
Misc. Project Costs	0	0	4,500	0	0	0	4,500
TOTAL	2,369	95,000	284,411	774,690	0	0	1,156,470

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	2,369	95,000	284,411	774,690	0	0	1,156,470

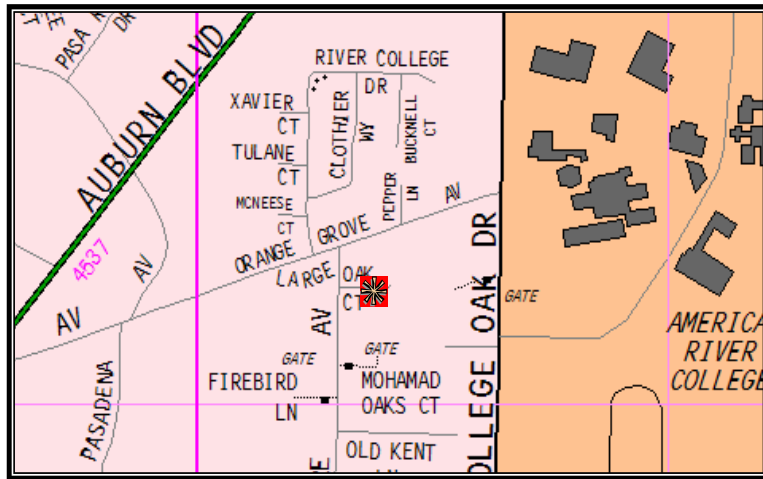
Large Oak Court Storm Drain Improvement

Department: Water Resources

Estimated Project Cost: \$146,563

Expected Completion Date: 2007

Funding Sources: Storm Water Utility (SWU)
Capital Construction Fund



Project Description:

This project will improve drainage at Large Oak Court. The system is in need of repair to fix damaged pipes (smashed) containing several separated joints and severe corrosion. It is beneficial to improve the mainline, laterals, and drain inlets along Large Oak Court. Sections of the existing storm drain system are located out of the right-of-way, in the backyards of some of the properties.

Operating Budget Impact:

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

Large Oak Court Storm Drain Improvement

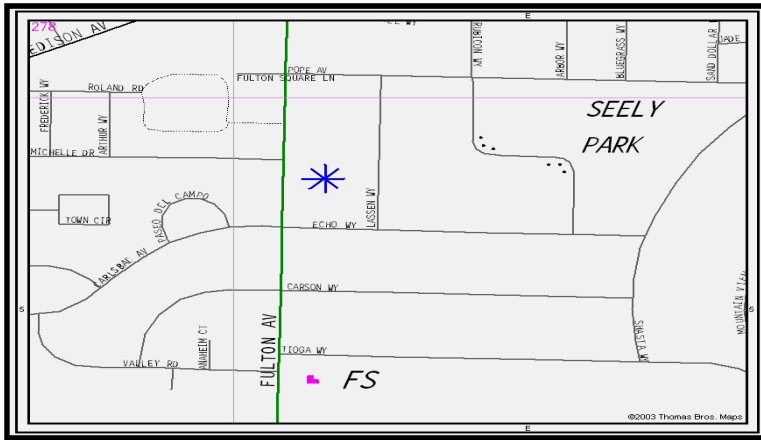
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	117,250	0	0	0	0	117,250
Project Management/Design	0	17,588	0	0	0	0	17,588
Construction Inspection	0	11,725	0	0	0	0	11,725
TOTAL	0	146,563	0	0	0	0	146,563

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	0	146,563	0	0	0	0	146,563

Lassen Way Storm Drain Improvement

Department: Water Resources
Expected Completion Date: 2007

Estimated Project Cost: \$515,545
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.

Operating Budget Impact:

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

Lassen Way Storm Drain Improvement

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	410,000	0	0	0	0	0	410,000
Project Management/ Design	61,645	13,000	0	0	0	0	74,645
Construction Inspection	2,600	26,100	0	0	0	0	28,700
Misc. Project Costs	2,200	0	0	0	0	0	2,200
TOTAL	476,445	39,100	0	0	0	0	515,545

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	476,445	39,100	0	0	0	0	515,545

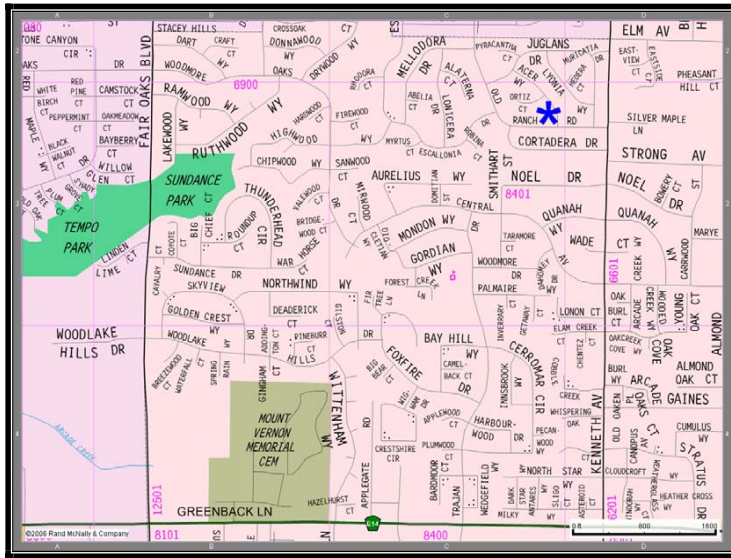
Old Ranch Road Storm Drain Improvement

Department: Water Resources

Estimated Project Cost: \$1,625,000

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 Old Ranch Road and Cortadera 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 on Cortadera Drive, Noel Drive, and between homes on Old Ranch Road and Coradera Drive and Noel Drive.

Old Ranch Road Storm Drain Improvement

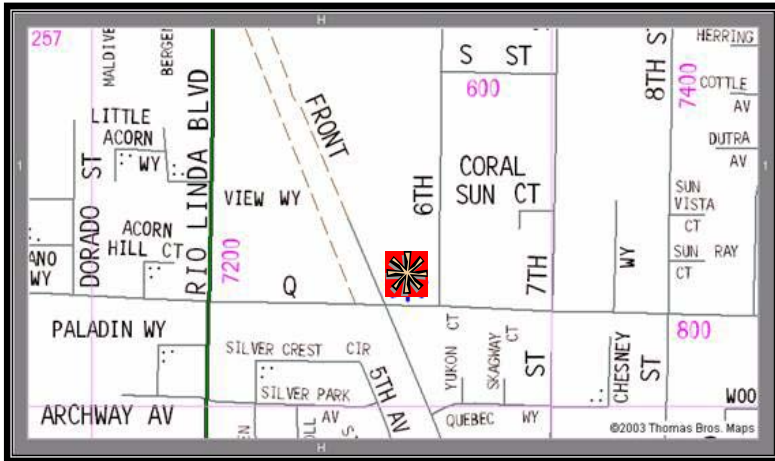
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	0	0	1,150,000	0	0	1,150,000
Project Management/Design	1,180	131,820	220,000	38,000	0	0	391,000
Construction Inspection	0	0	4,500	76,000	0	0	80,500
Misc. Project Costs	0	0	3,500	0	0	0	3,500
TOTAL	1,180	131,820	228,000	1,264,000	0	0	1,625,000

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital							
Construction Fund	1,180	131,820	228,000	1,264,000	0	0	1,625,000

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

Department: Water Resources
Expected Completion Date: 2008

Estimated Project Cost: \$1,102,620
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.

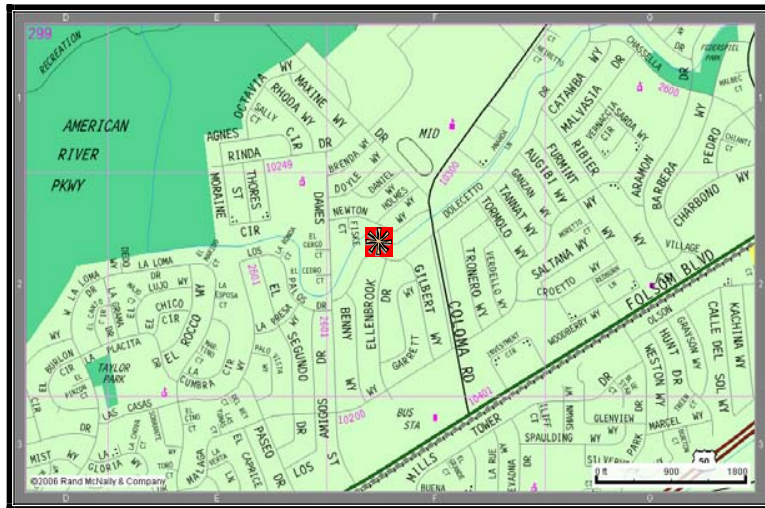
Q Street/Front Street to Dry Creek Road Storm Drain Improvement

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	782,000	0	0	0	0	782,000
Project Management/ Design	93,806	148,074	24,000	0	0	0	265,880
Construction Inspection	0	6,500	48,240	0	0	0	54,740
TOTAL	93,806	936,574	72,240	0	0	0	1,102,620

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital							
Construction Fund	93,806	936,574	72,240	0	0	0	1,102,620

Rancho Cordova Channel Lining East of Dawes Street

Department: Water Resources **Estimated Project Cost:** \$1,184,429
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.

Operating Budget Impact:

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

Rancho Cordova Channel Lining East of Dawes Street							
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	1,010,500	0	0	0	0	0	1,010,500
Project Management/ Design	60,024	33,300	0	0	0	0	93,324
Construction							
Inspection	10,200	66,905	0	0	0	0	77,105
Misc. Project Costs	3,500	0	0	0	0	0	3,500
TOTAL	1,084,224	100,205	0	0	0	0	1,184,429

Rancho Cordova Channel Lining East of Dawes Street							
Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital							
Construction Fund	1,084,224	100,205	0	0	0	0	1,184,429

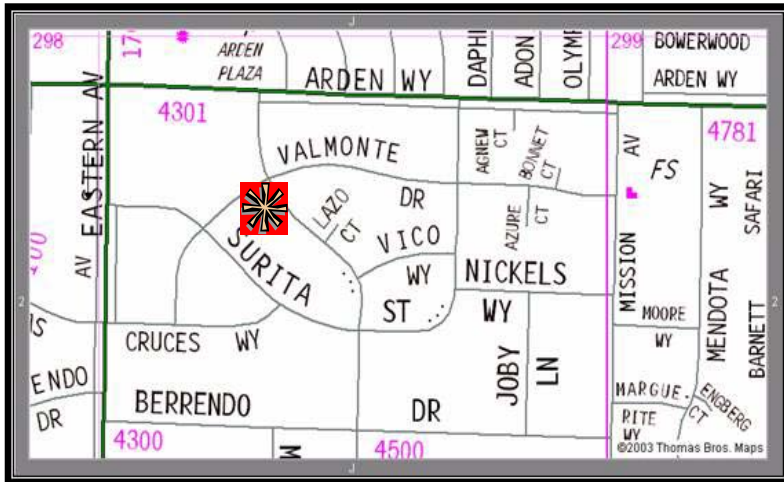
Valmonte Drive/Stewart Road Storm Drain Improvement

Department: Water Resources

Estimated Project Cost: \$1,340,270

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 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.

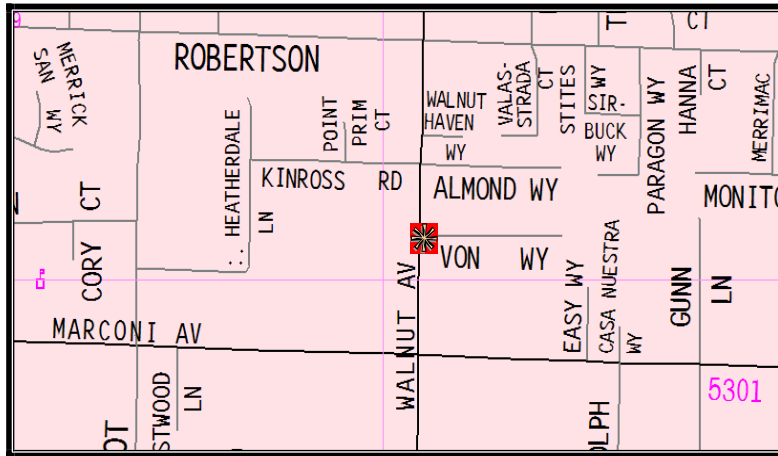
Valmonte Drive/Stewart Road Storm Drain Improvement

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	829,291	186,000	0	0	0	0	1,015,291
Project Management/ Design	197,737	4,500	0	0	0	0	202,237
Construction							
Inspection	108,204	12,000	0	0	0	0	120,204
Misc. Project Costs	2,538	0	0	0	0	0	2,538
TOTAL	1,137,770	202,500	0	0	0	0	1,340,270

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital							
Construction Fund	1,137,770	202,500	0	0	0	0	1,340,270

Von Way Storm Drain Improvement

Department: Water Resources Estimated Project Cost: \$267,188
 Expected Completion Date: 2007 Funding Sources: Storm Water Utility (SWU)
 Capital Construction Fund



Project Description:
 This project will improve drainage at Von Way. There is a history of garage flooding in the area. It is beneficial to pipe the ditch on the south side of Von Way and tie into the existing pipe system on Walnut Avenue.

Operating Budget Impact:
 The completion of this project has no measurable impact on the operating budget.

Von Way Storm Drain Improvement							
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	213,750	0	0	0	0	213,750
Project Management/Design	0	32,063	0	0	0	0	32,063
Construction Inspection	0	21,375	0	0	0	0	21,375
TOTAL	0	267,188	0	0	0	0	267,188

Von Way Storm Drain Improvement							
Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	0	267,188	0	0	0	0	267,188

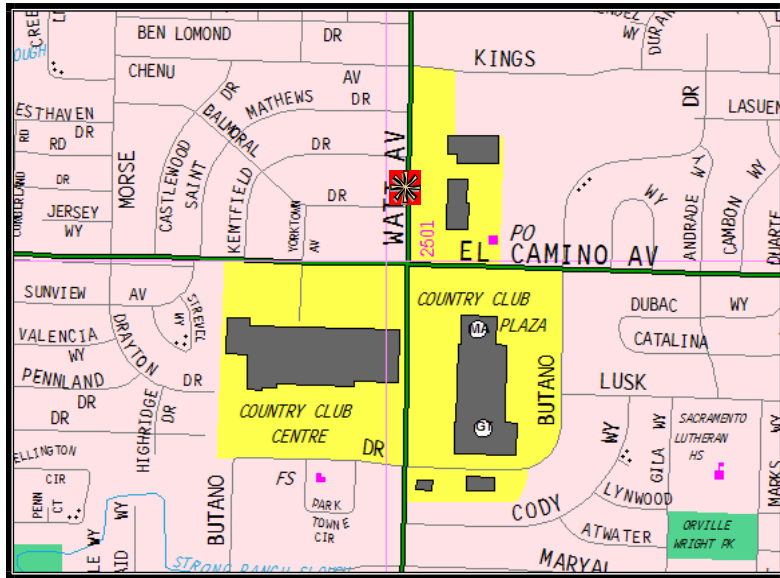
Watt Avenue and Mayfair Drive Storm Drain Improvement

Department: Water Resources

Estimated Project Cost: \$506,563

Expected Completion Date: 2007

Funding Sources: Storm Water Utility (SWU)
Capital Construction Fund



Project Description:

This project will improve drainage at Mayfair Drive. This area has a history of drain inlets that continually plug. The system is in need of repair to fix some damaged pipes containing several offset joints and holes. It is beneficial to improve the mainline, laterals, and drainage inlets along Mayfair Drive.

Operating Budget Impact:

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

Watt Avenue and Mayfair Drive Storm Drain Improvement

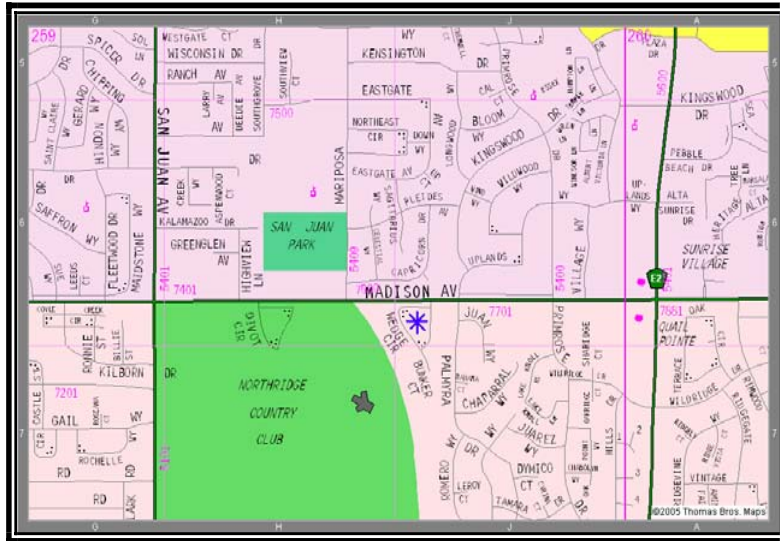
Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	405,250	0	0	0	0	405,250
Project Management/Design	0	60,788	0	0	0	0	60,788
Construction Inspection	0	40,525	0	0	0	0	40,525
TOTAL	0	506,563	0	0	0	0	506,563

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	0	506,563	0	0	0	0	506,563

Wedge Circle/Madison Avenue Storm Drain Improvement

Department: Water Resources
Expected Completion Date: 2008

Estimated Project Cost: \$644,500
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

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	500,000	0	0	0	0	500,000
Project Management/Design	15,500	74,000	15,000	0	0	0	104,500
Construction	0	0	35,000	0	0	0	35,000
Inspection	0	5,000	0	0	0	0	5,000
Misc. Project Costs	0	5,000	0	0	0	0	5,000
TOTAL	15,500	579,000	50,000	0	0	0	644,500

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital	15,500	579,000	50,000	0	0	0	644,500
Construction Fund	0	0	0	0	0	0	0

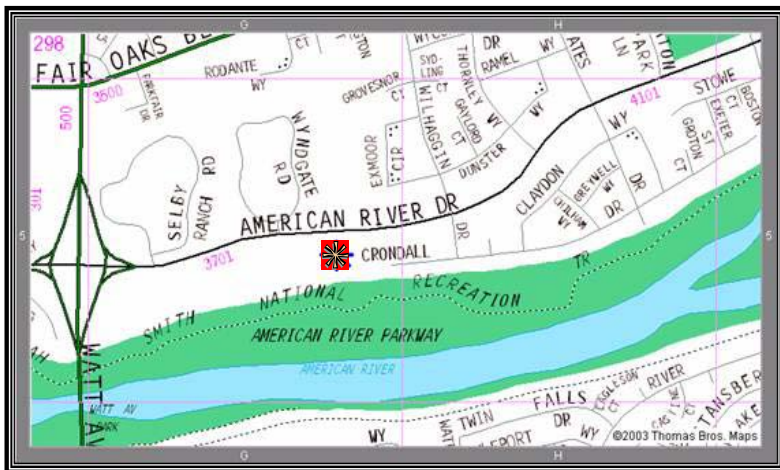
Wilhaggin Storm Drainage Pump Station (D43) Trash Rake, Discharge Lines and Pump Improvement

Department: Water Resources

Estimated Project Cost: \$3,262,523

Expected Completion Date: 2011

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 storm runoff design standards. 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

Project Costs	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
Construction Costs	0	0	0	0	163,000	2,337,000	2,500,000
Project Management/Design	63,473	0	0	0	75,000	75,000	213,473
Consultant Services	215,050	0	0	0	100,000	50,000	365,050
Construction Inspection	0	0	0	0	10,000	165,000	175,000
Misc. Project Costs	0	0	0	0	8,000	1,000	9,000
TOTAL	278,523	0	0	0	356,000	2,628,000	3,262,523

Funding Sources	Prior Years	Fiscal Year 2007-08	Fiscal Year 2008-09	Fiscal Year 2009-10	Fiscal Year 2010-11	Fiscal Year 2011-12	Total
SWU Capital Construction Fund	278,523	0	0	0	356,000	2,628,000	3,262,523