

WATER RESOURCES - DRAINAGE

EXECUTIVE SUMMARY

The Department of Water Resources constructs 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 \$2.0 million to \$4.8 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 40-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 cost for the 17 projects identified in the Five-Year CIP is \$17.2 million. Projects proposed to be completed in the Fiscal Year 2011-12 Capital Budget include an "Operating Budget Impact" statement.

There are eight projects identified in the Fiscal Year 2011-12 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.

- **New York Avenue/Oriana Court Storm Drain Improvement** — This project will alleviate structure, garage, yard and street flooding along New York Avenue and Oriana 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 be made along New York Avenue and Oriana Court. Estimated Total Cost: \$280,546
- **El Sur Way/Arden Way Storm Drain Improvement** — This project will alleviate structure and street flooding along El Nido Way, El Sur Way, Fitch Way, La Playa Way, and Las Pajas Way. 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 Arden Way, El Nido Way, El Sur Way, Fitch Way, and La Playa Way. Estimated Total Cost: \$937,213

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- **Elkhorn Boulevard/Schofield Way Storm Drain Improvement Project – Phase 1** — This project, in conjunction with the Black Duck Way/Harlequin Way Storm Drain Improvement Project, will alleviate house, garage, yard and street flooding along Black Duck Way, Butterball Way, Harlequin Way, Lumry Street, Sea Duck Court, Weddigen Way and other surrounding streets. The project will be constructed in three phases in the spring and summer of 2011, 2012, and 2013. The existing storm drain system is undersized compared to current storm runoff design standards. Therefore, to alleviate the flooding, this phase of the project will install storm drain trunk line in Schofield Way, improve the channel culvert on Larchmont Drive, and upgrade the channel lining between Larchmont Drive and Schofield Way. Estimated Total Cost: \$1,383,294

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PROJECT SUMMARY

PROJ #	PROJECT	PRIOR YEARS	FISCAL YEAR 2011-12 PY Rollover	FISCAL YEAR 2011-12 Budget	FISCAL YEAR 2012-13	FISCAL YEAR 2013-14	FISCAL YEAR 2014-15	FISCAL YEAR 2015-16	TOTAL
1	3509 El Camino Avenue Storm Drain Improvement	\$6,770	\$0	\$80,000	\$435,500	\$1,081,000	\$0	\$0	\$1,603,270
2	Barrington Road Storm Drain Improvement	52,971	0	359,500	101,500	0	0	0	513,971
3	Black Duck Way/Harlequin Way Storm Drain Improvement	27,987	265,086	44,500	0	0	0	0	337,573
4	D10 Manlove Storm Drainage Pump Station Generator Improvement	0	0	0	67,500	125,000	790,000	850,000	1,832,500
5	Eastern Avenue/Arden Way Storm Drain Improvement	51,228	0	25,000	10,000	390,000	757,500	0	1,233,728
6	El Sur Way/Arden Way Storm Drain Improvement	100,513	761,500	75,200	0	0	0	0	937,213
7	Elkhorn Blvd/Schofield Way Storm Drain Improvement - Phase 1	159,587	1,039,294	184,413	0	0	0	0	1,383,294
8	Elkhorn Blvd/Schofield Way Storm Drain Improvement - Phase 2	123,945	0	839,500	73,000	0	0	0	1,036,445
9	Elkhorn Blvd/Schofield Way Storm Drain Improvement - Phase 3	262,169	0	16,506	1,573,000	123,000	0	0	1,974,675
10	Flagstone Street/Agate Way Storm Drain Improvement	53,274	0	289,500	41,000	0	0	0	383,774
11	Kings Way/Verna Way Storm Drain Improvement	10,484	0	60,000	346,000	791,000	0	0	1,207,484
12	Miramar Storm Drain Improvement	5,130	0	0	0	382,500	85,000	0	472,630
13	New York Avenue/Oriana Court Storm Drain Improvement	80,546	0	168,000	32,000	0	0	0	280,546
14	Ravenwood Avenue Storm Drain Improvement	89,674	0	720,500	60,000	0	0	0	870,174
15	Rich Hill Drive Storm Drain Improvement	0	0	27,500	60,000	60,000	495,000	888,000	1,530,500

WATER RESOURCES - DRAINAGE

PROJ #	PROJECT	PRIOR YEARS	FISCAL YEAR 2011-12 PY Rollover	FISCAL YEAR 2011-12 Budget	FISCAL YEAR 2012-13	FISCAL YEAR 2013-14	FISCAL YEAR 2014-15	FISCAL YEAR 2015-16	TOTAL
16	Silver Legends Storm Drain Improvement	4,958	0	0	0	0	119,500	24,000	148,458
17	Somersby/Wixford Storm Drain Improvement	44,327	0	0	100,000	780,000	565,000	0	1,489,327
TOTAL		\$1,073,563	\$2,065,880	\$2,890,119	\$2,899,500	\$3,732,500	\$2,812,000	\$1,762,000	\$17,235,562

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PRIOR-YEAR COMPLETED/CANCELLED PROJECTS SUMMARY

PROJECT	PRIOR YEARS	FISCAL YEAR 2010-11	FISCAL YEAR 2011-12	FISCAL YEAR 2012-13	FISCAL YEAR 2013-14	FISCAL YEAR 2014-15	TOTAL	REASON DROPPED
Black Duck Way/Harlequin Way Storm Drain Improvement	\$455,817	\$37,500	\$325,000	\$2,646,000	\$0	\$0	\$3,464,317	Majority of project split into Elkhorn Blvd/Schofield Way Phase 1-3 projects
Crestview Drive Storm Drain Improvement	319,582	69,118	0	0	0	0	388,700	Construction complete
El Nido Way/La Playa Way Storm Drain Improvement	30,726	297,500	200,000	0	0	0	528,226	Project merged to create El Sur Way/Arden Way project
El Sur Way/Las Cruces Way Storm Drain Improvement	69,787	304,000	500,000	0	0	0	873,787	Project merged to create El Sur Way/Arden Way project
Glenwood Road/Chelsea Road Storm Drain	985,541	151,413	0	0	0	0	1,136,954	Construction complete
Hagginbottom Pump Station Generator	0	0	0	350,000	1,694,700	0	2,044,700	Revised the project schedule. This project is beyond Fiscal Year 2015-16.
Lloyd Lane Storm Drain Improvement	503,032	126,857	0	0	0	0	629,889	Construction complete
Wilhaggin Drive Storm Drainage Pump Station (D43) Trash Rake, Discharge Lines and Pump Improvement	278,523	0	0	3,193,000	291,000	0	3,762,523	Revised the project schedule. The project is beyond Fiscal Year 2015-16.
TOTAL	\$2,643,008	\$986,388	\$1,025,000	\$6,189,000	\$1,985,700	\$0	\$12,829,096	

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3509 El Camino Avenue Storm Drain Improvement

Sacramento, CA 95821

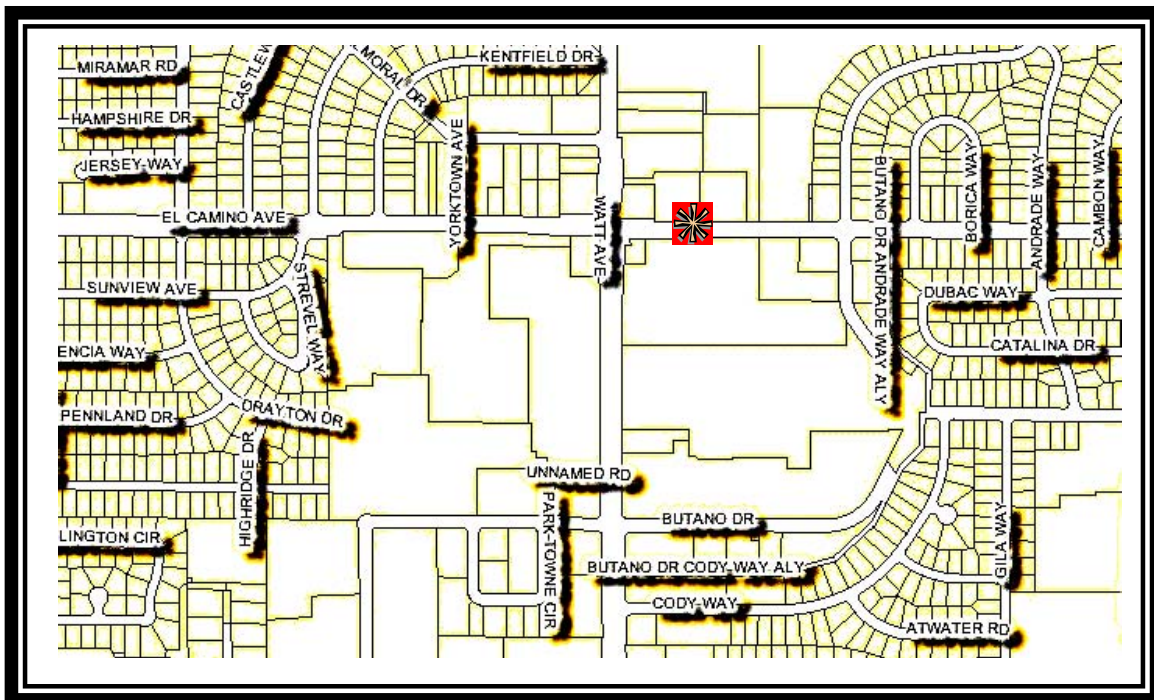
Project #1

Department: Water Resources

Estimated Project Cost: \$1,603,270

Expected Completion Date: 2013

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



Project Description:

This project will alleviate structure, garage, yard, and street flooding in the surrounding streets near the intersection of Watt Avenue and El Camino 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 be made along Watt Avenue, El Camino Avenue, and Kentfield Drive.

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3509 El Camino Avenue Storm Drain Improvement

Project Costs	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12		2012-13	2013-14	2014-15	2015-16	
	Expenses	PY Rollover	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	0	310,000	966,000	0	0	1,276,000
Project Management/ Design	6,770	0	80,000	80,000	25,000	0	0	191,770
Construction Inspection	0	0	0	38,000	90,000	0	0	128,000
Misc. Project Costs	0	0	0	7,500	0	0	0	7,500
TOTAL	6,770	0	80,000	435,500	1,081,000	0	0	1,603,270

Funding Sources	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12		2012-13	2013-14	2014-15	2015-16	
	Expenses	PY Rollover	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	6,770	0	80,000	435,500	1,081,000	0	0	1,603,270

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Barrington Road Storm Drain Improvement

Project Costs	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget		
Construction Costs	0	0	315,000	60,000	0	0	0	375,000
Project Management/ Design	52,971	0	26,000	15,000	0	0	0	93,971
Construction Inspection	0	0	11,000	26,500	0	0	0	37,500
Misc. Project Costs	0	0	7,500	0	0	0	0	7,500
TOTAL	52,971	0	359,500	101,500	0	0	0	513,971

Funding Sources	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget		
SWU Capital Construction Fund	52,971	0	359,500	101,500	0	0	0	513,971

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Black Duck Way/Harlequin Way Storm Drain Improvement

Sacramento, CA 95842

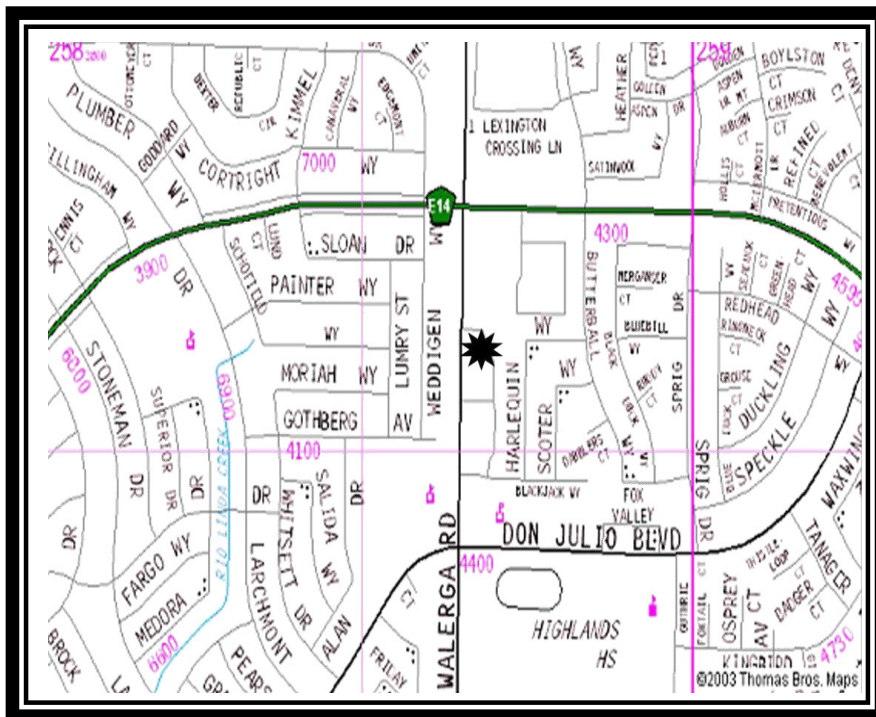
Project #3

Department: Water Resources

Estimated Project Cost: \$337,573

Expected Completion Date: 2011

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



Project Description:

This project, which was previously identified in past Capital Improvement Plan reports, included major and minor drainage facility improvements. In order to best address the unique needs of these two types of projects, the project was split into the following major and minor projects: Elkhorn Boulevard/Schofield Way and Black Duck Way/Harlequin Way.

This project, in conjunction with the Elkhorn Boulevard/Schofield Way Storm Drain Improvement Project, will alleviate house, garage, yard, and street flooding along Black Duck Way, Butterball 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, storm drain system improvements (mainline, laterals, and drainage inlets) will be made along Black Duck Way, Bluebill Way, Butterball Way, Harlequin Way, Lumry Street, and Weddigen Way.

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Operating Budget Impact:

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

Black Duck Way/Harlequin Way Storm Drain Improvement

Project Costs	Prior Years	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Fiscal Year 2014-15	Fiscal Year 2015-16	Fiscal Year 2015-16	Total
	Expenses	PY Rollover Budget	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	247,586	0	0	0	0	0	247,586
Project Management/ Design	27,987	15,000	12,000	0	0	0	0	54,987
Construction Inspection	0	0	32,500	0	0	0	0	32,500
Misc. Project Costs	0	2,500	0	0	0	0	0	2,500
TOTAL	27,987	265,086	44,500	0	0	0	0	337,573

Funding Sources	Prior Years	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Fiscal Year 2014-15	Fiscal Year 2015-16	Fiscal Year 2015-16	Total
	Expenses	PY Rollover Budget	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	27,987	265,086	44,500	0	0	0	0	337,573

NOTE: Construction Costs were encumbered in Fiscal Year 2010-11, but spent in Fiscal Years 2010-11 & 2011-12.

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D10 Manlove Storm Drainage Pump Station Generator Improvement

Sacramento, CA 95826

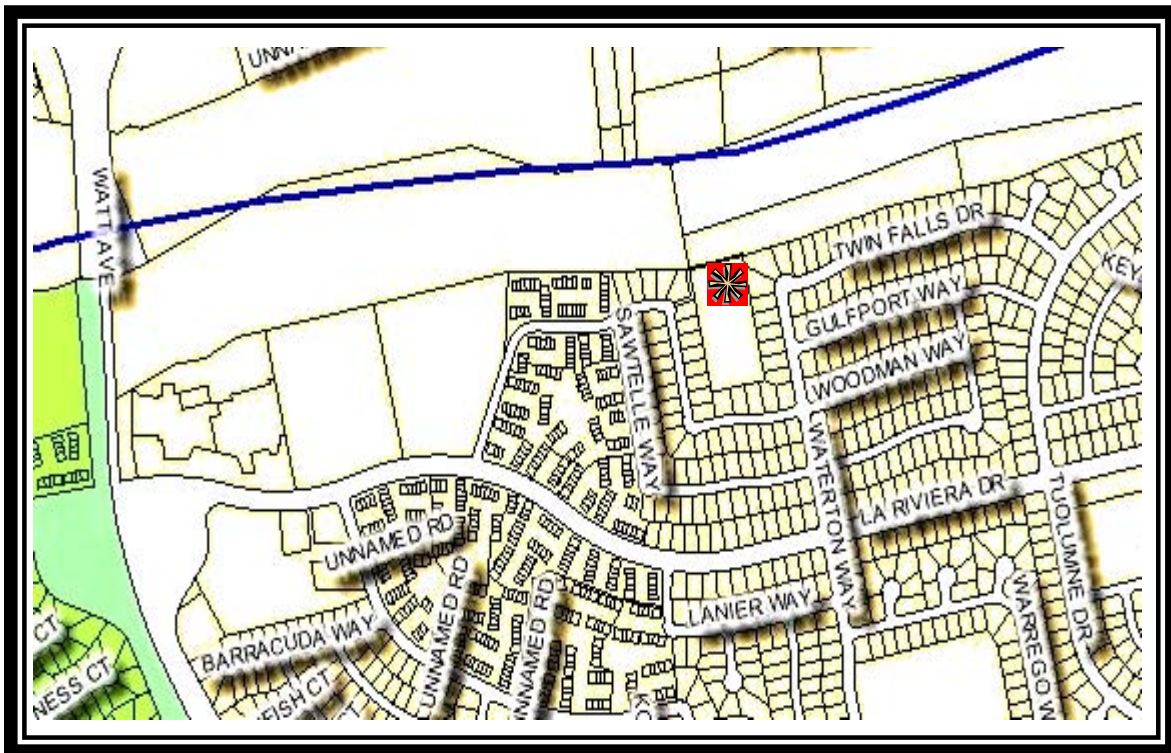
Project #4

Department: Water Resources

Estimated Project Cost: \$1,832,500

Expected Completion Date: 2015

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



Project Description:

This project will alleviate garage, yard, and street flooding within the drainage system served by the pump station during SMUD power outages. The existing pump station does not have an emergency generator causing two of the three pumps to be impacted during a power outage. Therefore, to alleviate the flooding during power outages, an on-site emergency generator and electrical connections that automatically turn the generator "on" will be installed.

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D10 Manlove Storm Drainage Pump Station Generator Improvement

Project Costs	Prior Years	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Fiscal Year 2014-15	Fiscal Year 2015-16	Total	
	Expenses	PY Rollover Budget	Budget	Budget	Budget	Budget		
Construction Costs	0	0	0	0	0	600,000	750,000	1,350,000
Project Management/ Design	0	0	0	7,500	25,000	25,000	10,000	67,500
Consultant Services	0	0	0	60,000	100,000	100,000	10,000	270,000
Construction Inspection	0	0	0	0	0	55,000	80,000	135,000
Misc. Project Costs	0	0	0	0	0	10,000	0	10,000
TOTAL	0	0	0	67,500	125,000	790,000	850,000	1,832,500

Funding Sources	Prior Years	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Fiscal Year 2014-15	Fiscal Year 2015-16	Total	
	Expenses	PY Rollover Budget	Budget	Budget	Budget	Budget		
SWU Capital Construction Fund	0	0	0	67,500	125,000	790,000	850,000	1,832,500

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Eastern Avenue/Arden Way Storm Drain Improvement

Sacramento, CA 95864

Project #5

Department: Water Resources

Estimated Project Cost: \$1,233,728

Expected Completion Date: 2014

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 be made on 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 drains 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 -

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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	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	0	0	310,000	665,000	0	975,000
Project Management/ Design	51,228	0	25,000	10,000	35,000	25,000	0	146,228
Construction Inspection	0	0	0	0	30,000	67,500	0	97,500
Misc. Project Costs	0	0	0	0	15,000	0	0	15,000
TOTAL	51,228	0	25,000	10,000	390,000	757,500	0	1,233,728

Funding Sources	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	51,228	0	25,000	10,000	390,000	757,500	0	1,233,728

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El Sur Way/Arden Way Storm Drain Improvement

Sacramento, CA 95864

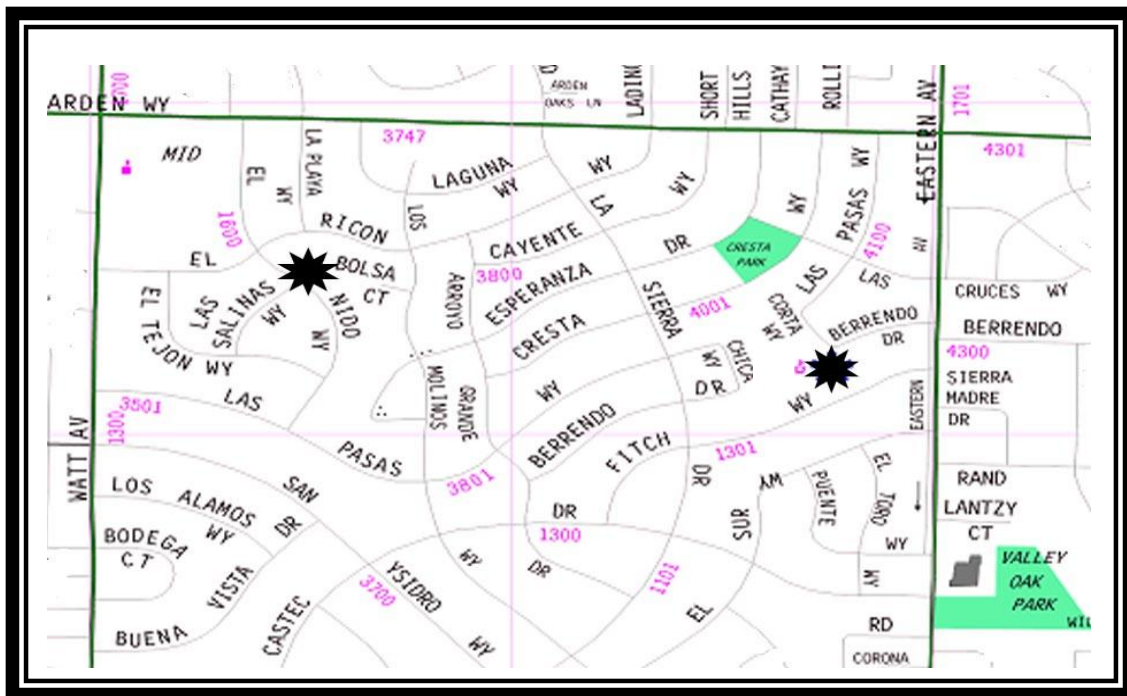
Project #6

Department: Water Resources

Estimated Project Cost: \$937,213

Expected Completion Date: 2011

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



Project Description:

The El Sur Way – Arden Way project is comprised of two individual projects that have been merged into a single project. The northwest segment was named El Nido Way/La Playa Way Storm Drain Improvement Project and the southeast segment was called El Sur Way/Las Cruces Way Storm Drain Improvement Project.

This project will alleviate structure and street flooding along El Nido Way, El Sur Way, Fitch Way, La Playa Way, and Las Pasas Way. 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 Arden Way, El Nido Way, El Sur Way, Fitch Way, and La Playa Way.

Operating Budget Impact:

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

WATER RESOURCES - DRAINAGE

El Sur Way/Arden Way Storm Drain Improvement

Project Costs	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget		
Construction Costs	0	720,000	0	0	0	0	0	720,000
Project Management/ Design	100,513	10,000	16,500	0	0	0	0	127,013
Construction Inspection	0	21,500	58,500	0	0	0	0	80,000
Misc. Project Costs	0	10,000	200	0	0	0	0	10,200
TOTAL	100,513	761,500	75,200	0	0	0	0	937,213

Funding Sources	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget		
SWU Capital Construction Fund	100,513	761,500	75,200	0	0	0	0	937,213

NOTE: Construction Costs were encumbered in Fiscal Year 2010-11, but spent in Fiscal Years 2010-11 & 2011-12.

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Elkhorn Boulevard/Schofield Way Storm Drain Improvement - Phase 1

Sacramento, CA 95842

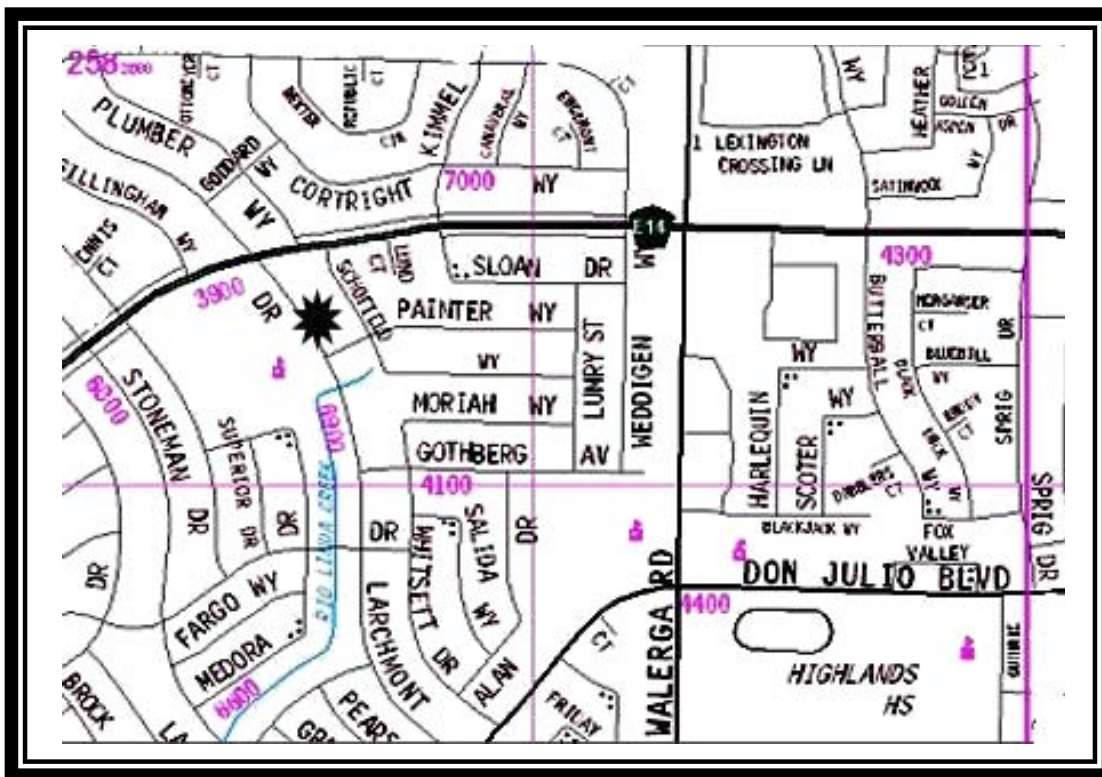
Project #7

Department: Water Resources

Estimated Project Cost: \$1,383,294

Expected Completion Date: 2011

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



Project Description:

This project, in conjunction with the Black Duck Way/Harlequin Way Storm Drain Improvement Project, will alleviate house, garage, yard and street flooding along Black Duck Way, Butterball Way, Harlequin Way, Lumry Street, Sea Duck Court, Weddigen Way and other surrounding streets. The project will be constructed in three phases by three separate construction contracts to best accommodate construction scheduling over three construction seasons. The phases are scheduled for construction in the spring and summer of 2011, 2012, and 2013.

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 Schofield Way and Elkhorn Boulevard from Schofield Way to McDermott Drive. In addition, the channel culvert on Larchmont Drive will be improved and channel lining will be upgraded between Larchmont Drive and Schofield Way. In this phase, the Schofield Way section of the

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trunk line will be installed, the channel culvert on Larchmont Drive will be improved, and the channel lining will be upgraded.

Operating Budget Impact:

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

Elkhorn Boulevard/Schofield Way Storm Drain Improvement - Phase 1

Project Costs	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget		
Construction Costs	0	1,019,294	0	0	0	0	0	1,019,294
Project Management/ Design	156,500	20,000	53,500	0	0	0	0	230,000
Construction Inspection	0	0	125,000	0	0	0	0	125,000
Misc. Project Costs	3,087	0	5,913	0	0	0	0	9,000
TOTAL	159,587	1,039,294	184,413	0	0	0	0	1,383,294

Funding Sources	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget		
SWU Capital Construction Fund	159,587	1,039,294	184,413	0	0	0	0	1,383,294

NOTE: Construction Costs were encumbered in Fiscal Year 2010-11, but spent in Fiscal Years 2010-11 & 2011-12.

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Elkhorn Boulevard/Schofield Way Storm Drain Improvement - Phase 2

Sacramento, CA 95842

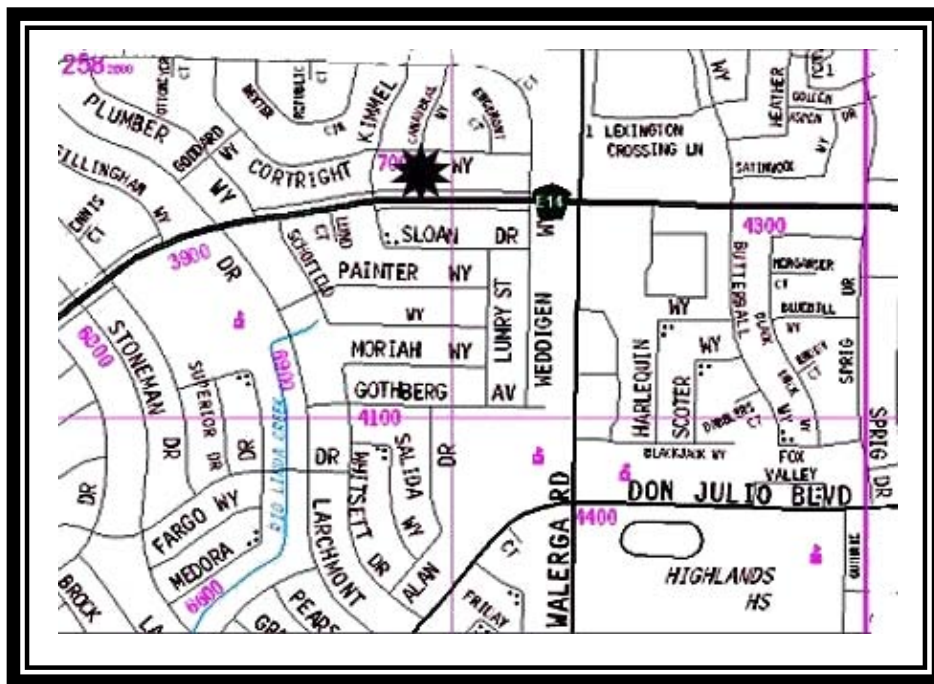
Project #8

Department: Water Resources

Estimated Project Cost: \$1,036,445

Expected Completion Date: 2012

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



Project Description:

This project, in conjunction with the Black Duck Way/Harlequin Way Storm Drain Improvement Project, will alleviate house, garage, yard and street flooding along Black Duck Way, Butterball Way, Harlequin Way, Lumry Street, Sea Duck Court, Weddigen Way and other surrounding streets. The project will be constructed in three phases by three separate construction contracts to best accommodate construction scheduling over three construction seasons. The phases are scheduled for construction in the spring and summer of 2011, 2012, and 2013.

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 Schofield Way and Elkhorn Boulevard from Schofield Way to McDermott Drive. In addition, the channel culvert on Larchmont Drive will be improved and channel lining will be upgraded between Larchmont Drive and Schofield Way. In this phase, a portion of the Elkhorn Boulevard section of the trunk line will be installed from Schofield Way to Walerga Road.

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Elkhorn Boulevard/Schofield Way Storm Drain Improvement - Phase 2

Project Costs	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	777,000	0	0	0	0	777,000
Project Management/ Design	123,945	0	30,000	20,000	0	0	0	173,945
Construction Inspection	0	0	25,000	53,000	0	0	0	78,000
Misc. Project Costs	0	0	7,500	0	0	0	0	7,500
TOTAL	123,945	0	839,500	73,000	0	0	0	1,036,445

Funding Sources	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	123,945	0	839,500	73,000	0	0	0	1,036,445

NOTE: Construction Costs are encumbered in Fiscal Year 2011-12, but spent in Fiscal Years 2011-12 & 2012-13.

WATER RESOURCES - DRAINAGE

Elkhorn Boulevard/Schofield Way Storm Drain Improvement - Phase 3

Sacramento, CA 95842

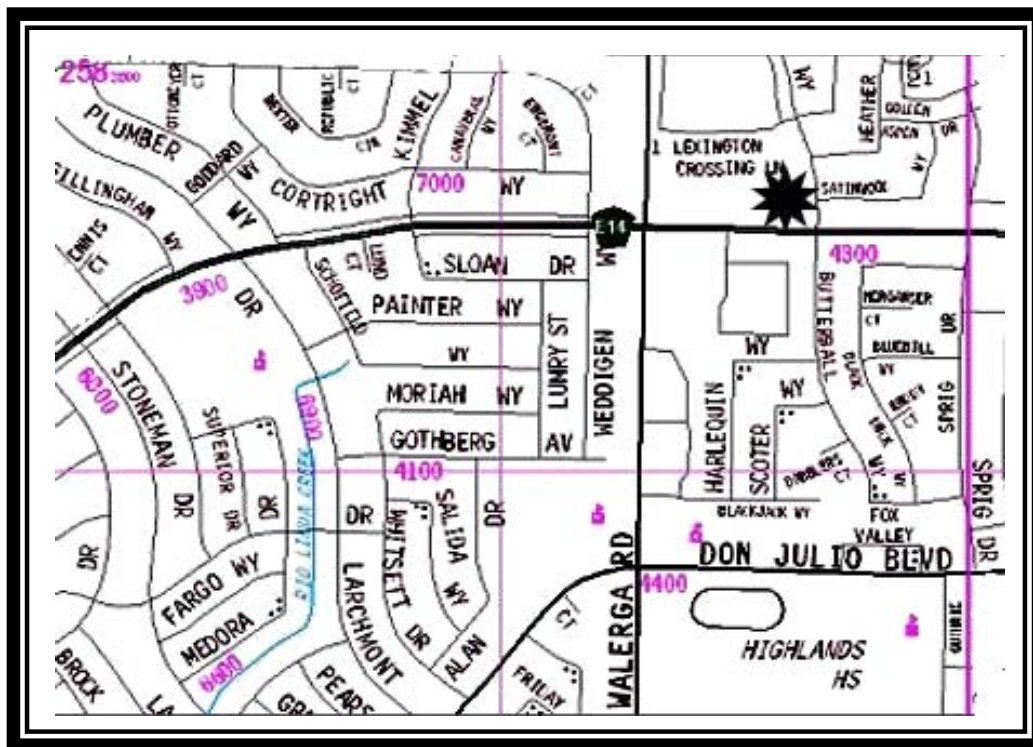
Project #9

Department: Water Resources

Estimated Project Cost: \$1,974,675

Expected Completion Date: 2013

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



Project Description:

This project, in conjunction with the Black Duck Way/Harlequin Way Storm Drain Improvement Project, will alleviate house, garage, yard and street flooding along Black Duck Way, Butterball Way, Harlequin Way, Lumry Street, Sea Duck Court, Weddigen Way and other surrounding streets. The project will be constructed in three phases by three separate construction contracts to best accommodate construction scheduling over three construction seasons. The phases are scheduled for construction in the spring and summer of 2011, 2012, and 2013.

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 Schofield Way and Elkhorn Boulevard from Schofield Way to McDermott Drive. In addition, the

WATER RESOURCES - DRAINAGE

channel culvert on Larchmont Drive will be improved and channel lining will be upgraded between Larchmont Drive and Schofield Way. In this phase, the remaining portion of the Elkhorn Boulevard section of the trunk line will be installed from Walerga Road to McDermott Drive.

Elkhorn Boulevard/Schofield Way Storm Drain Improvement - Phase 3

Project Costs	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget		
Construction Costs	0	0	0	1,483,000	0	0	0	1,483,000
Project Management/ Design	262,169	0	16,506	35,000	20,000	0	0	333,675
Construction Inspection	0	0	0	45,000	103,000	0	0	148,000
Misc. Project Costs	0	0	0	10,000	0	0	0	10,000
TOTAL	262,169	0	16,506	1,573,000	123,000	0	0	1,974,675

Funding Sources	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget		
SWU Capital Construction Fund	262,169	0	16,506	1,573,000	123,000	0	0	1,974,675

NOTE: Construction Costs are encumbered in Fiscal Year 2012-13, but spent in Fiscal Years 2012-13 & 2013-14.

WATER RESOURCES - DRAINAGE

Flagstone Street/Agate Way Storm Drain Improvement

Carmichael, CA 95608

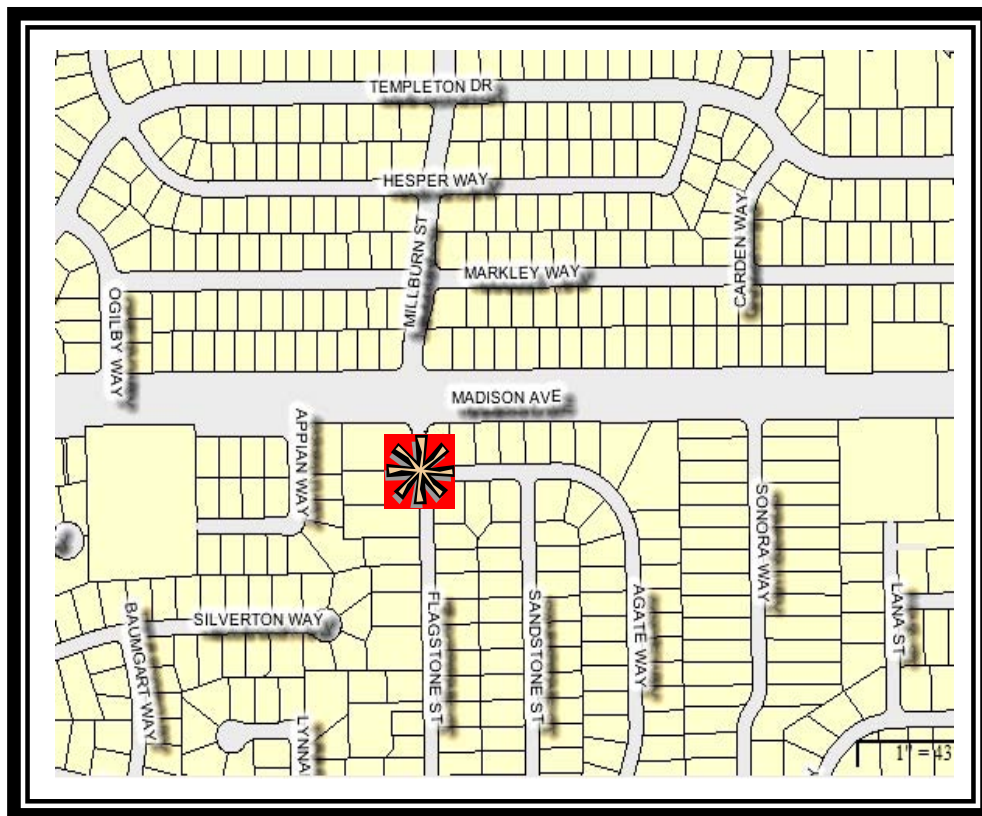
Project #10

Department: Water Resources

Estimated Project Cost: \$383,774

Expected Completion Date: 2012

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



Project Description:

This project will alleviate structure, garage, yard, and street flooding along Flagstone Street and Agate Way. 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 be made along Agate Way, Flagstone Street, Madison Avenue, and Millburn Street.

WATER RESOURCES - DRAINAGE

Flagstone Street/Agate Way Storm Drain Improvement

Project Costs	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget		
Construction Costs	0	0	246,000	0	0	0	0	246,000
Project Management/ Design	53,274	0	25,000	15,000	0	0	0	93,274
Construction Inspection	0	0	11,000	26,000	0	0	0	37,000
Misc. Project Costs	0	0	7,500	0	0	0	0	7,500
TOTAL	53,274	0	289,500	41,000	0	0	0	383,774

Funding Sources	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget		
SWU Capital Construction Fund	53,274	0	289,500	41,000	0	0	0	383,774

NOTE: Construction Costs are encumbered in Fiscal Year 2011-12, but spent in Fiscal Years 2011-12 & 2012-13.

WATER RESOURCES - DRAINAGE

Kings Way/Verna Way Storm Drain Improvement

Sacramento, CA 95821

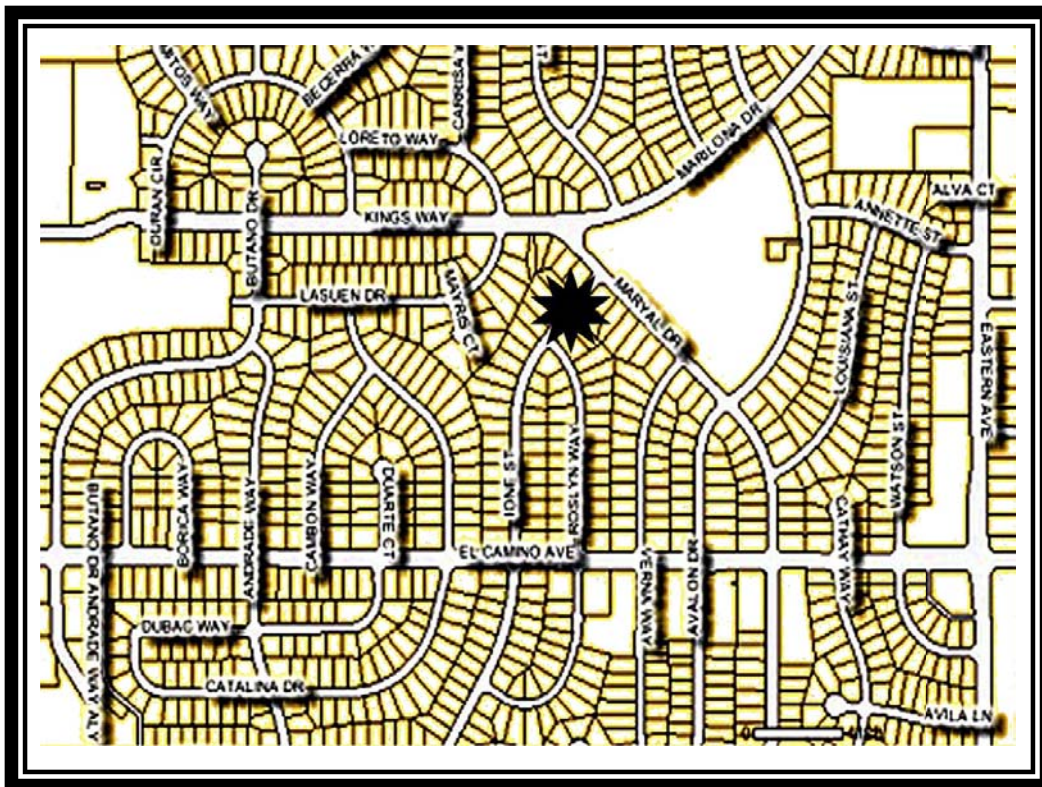
Project #11

Department: Water Resources

Estimated Project Cost: \$1,207,484

Expected Completion Date: 2013

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



Project Description:

This project will alleviate structure, garage, yard, and street flooding in the surrounding streets near the intersection of Kings 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 be made along Kings Way, Marilona Drive, Maryal Drive, Lasuen Drive, and Verna Way.

WATER RESOURCES - DRAINAGE

Kings Way/Verna Way Storm Drain Improvement

Project Costs	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12		2012-13	2013-14	2014-15	2015-16	
	Expenses	PY Rollover	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	0	260,000	700,000	0	0	960,000
Project Management/ Design	10,484	0	60,000	48,500	25,000	0	0	143,984
Construction Inspection	0	0	0	30,000	66,000	0	0	96,000
Misc. Project Costs	0	0	0	7,500	0	0	0	7,500
TOTAL	10,484	0	60,000	346,000	791,000	0	0	1,207,484

Funding Sources	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12		2012-13	2013-14	2014-15	2015-16	
	Expenses	PY Rollover	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	10,484	0	60,000	346,000	791,000	0	0	1,207,484

WATER RESOURCES - DRAINAGE

Miramar Storm Drain Improvement

Project Costs	Prior Years Expenses	Fiscal Year 2011-12 PY Rollover	Fiscal Year 2012-13 Budget	Fiscal Year 2013-14 Budget	Fiscal Year 2013-14 Budget	Fiscal Year 2014-15 Budget	Fiscal Year 2015-16 Budget	Total
Construction Costs	0	0	0	0	330,000	0	0	330,000
Project Management/ Design	5,130	0	0	0	30,000	15,000	0	50,130
Construction Inspection	0	0	0	0	15,000	35,000	0	50,000
Misc. Project Costs	0	0	0	0	7,500	35,000	0	42,500
TOTAL	5,130	0	0	0	382,500	85,000	0	472,630

Funding Sources	Prior Years Expenses	Fiscal Year 2011-12 PY Rollover	Fiscal Year 2012-13 Budget	Fiscal Year 2013-14 Budget	Fiscal Year 2013-14 Budget	Fiscal Year 2014-15 Budget	Fiscal Year 2015-16 Budget	Total
SWU Capital Construction Fund	5,130	0	0	0	382,500	85,000	0	472,630

NOTE: Construction Costs are encumbered in Fiscal Year 2013-14, but spent in Fiscal Years 2013-14 & 2014-15.

WATER RESOURCES - DRAINAGE

New York Avenue/Oriana Court Storm Drain Improvement

Fair Oaks, CA 95628

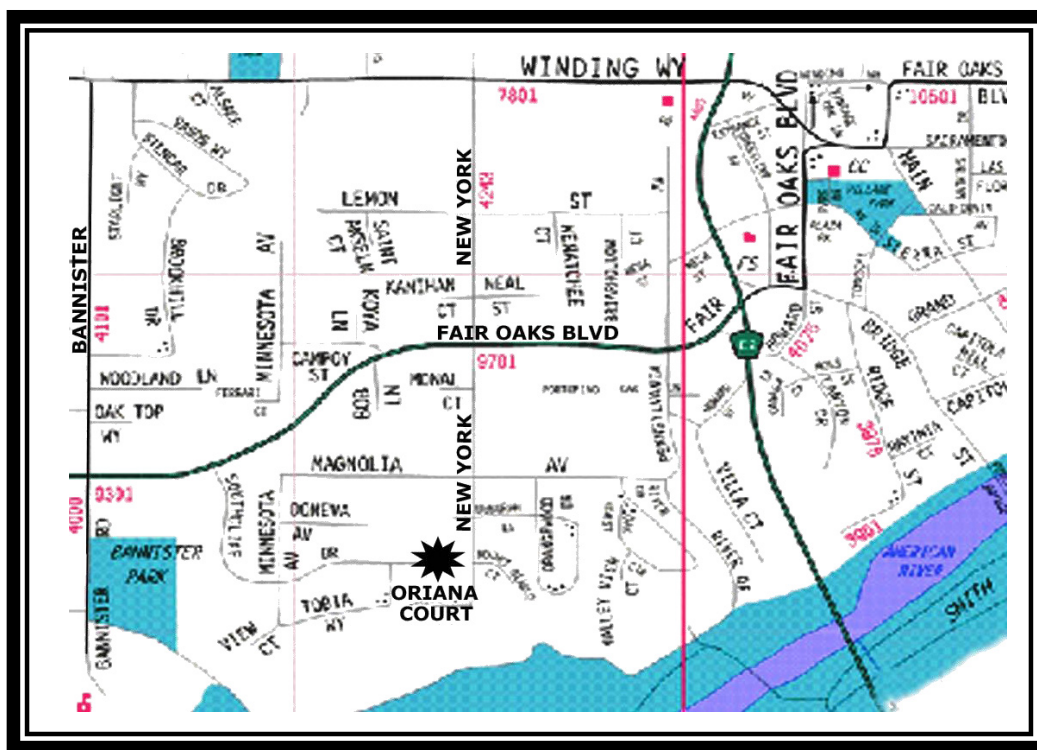
Project #13

Department: Water Resources

Estimated Project Cost: \$280,546

Expected Completion Date: 2012

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



Project Description:

This project will alleviate structure, garage, yard and street flooding along New York Avenue and Oriana 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 be made along New York Avenue and Oriana Court.

WATER RESOURCES - DRAINAGE

New York Avenue/Oriana Court Storm Drain Improvement

Project Costs	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	121,000	0	0	0	0	121,000
Project Management/ Design	75,703	0	20,000	15,000	0	0	0	110,703
Construction Inspection	0	0	7,000	17,000	0	0	0	24,000
Misc. Project Costs	4,843	0	20,000	0	0	0	0	24,843
TOTAL	80,546	0	168,000	32,000	0	0	0	280,546

Funding Sources	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	80,546	0	168,000	32,000	0	0	0	280,546

NOTE: Construction Costs are encumbered in Fiscal Year 2011-12, but spent in Fiscal Years 2011-12 & 2012-13.

WATER RESOURCES - DRAINAGE

Ravenwood Avenue Storm Drain Improvement

Sacramento, CA 95821

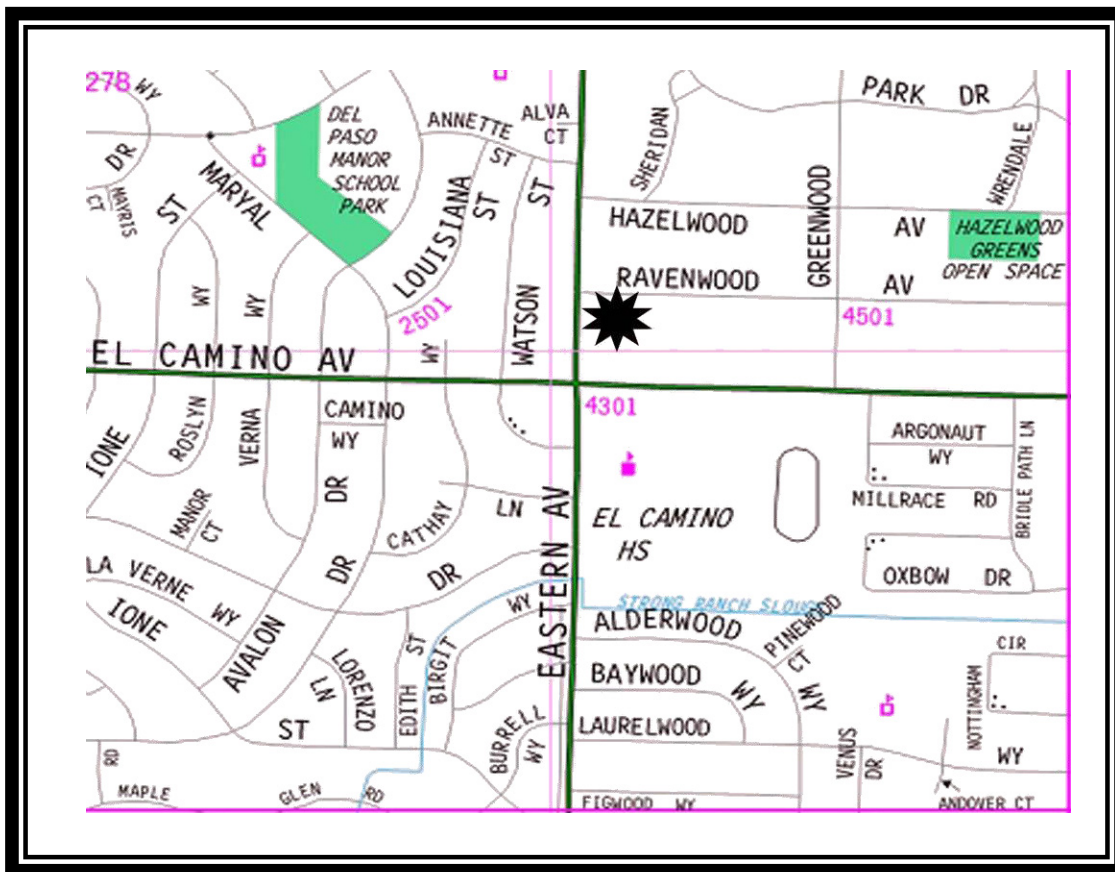
Project #14

Department: Water Resources

Estimated Project Cost: \$870,174

Expected Completion Date: 2012

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



Project Description:

This project will alleviate structure, garage, yard, and street flooding along Hazelwood and 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 (mainlines, laterals, and drainage inlets) will be made along Eastern Avenue, Hazelwood Avenue, and Ravenwood Avenue.

WATER RESOURCES - DRAINAGE

Ravenwood Avenue Storm Drain Improvement

Project Costs	Prior Years	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Fiscal Year 2014-15	Fiscal Year 2015-16	Total
	Expenses	PY Rollover Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	658,000	0	0	0	658,000
Project Management/ Design	87,516	0	35,000	15,000	0	0	137,516
Construction Inspection	0	0	20,000	45,000	0	0	65,000
Misc. Project Costs	2,158	0	7,500	0	0	0	9,658
TOTAL	89,674	0	720,500	60,000	0	0	870,174

Funding Sources	Prior Years	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Fiscal Year 2014-15	Fiscal Year 2015-16	Total
	Expenses	PY Rollover Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	89,674	0	720,500	60,000	0	0	870,174

NOTE: Construction Costs are encumbered in Fiscal Year 2011-12, but spent in Fiscal Years 2011-12 & 2012-13.

WATER RESOURCES - DRAINAGE

Rich Hill Drive Storm Drain Improvement

Orangevale, CA 95662

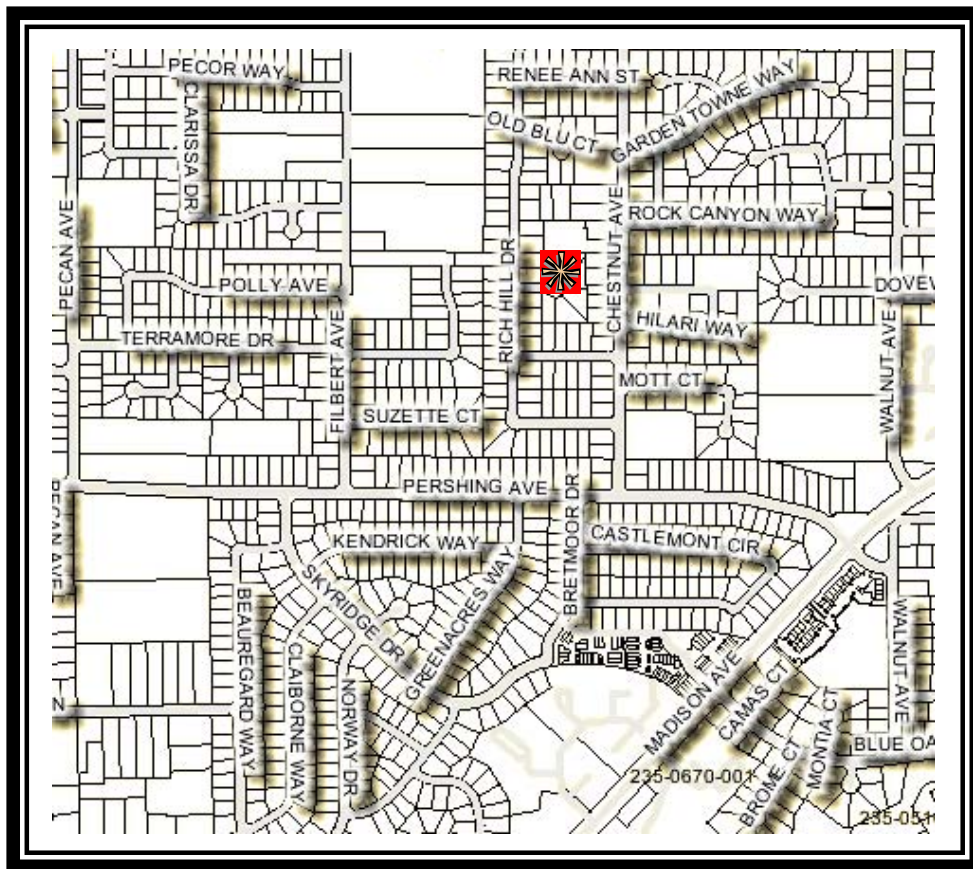
Project #15

Department: Water Resources

Estimated Project Cost: \$1,530,500

Expected Completion Date: 2015

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



Project Description:

This project will alleviate structure, garage, yard, and street flooding along Bobbeck Court, Chestnut Avenue, Garden Towne Way, Mott Court, Rich Hill Drive, Rock Canyon Way, Sherilee Way, Suzette Court, and Terramore 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 be made along Bobbeck Court, Chestnut Avenue, Filbert Avenue, Mott Court, Pershing Avenue, Rich Hill Drive, Sherrilee Way, and Suzette Court.

WATER RESOURCES - DRAINAGE

Rich Hill Drive Storm Drain Improvement

Project Costs	Prior Years	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Fiscal Year 2014-15	Fiscal Year 2015-16	Total	
	Expenses	PY Rollover	Budget	Budget	Budget	Budget		
Construction Costs	0	0	0	0	0	390,000	768,000	1,158,000
Project Management/ Design	0	0	27,500	50,000	50,000	50,000	25,000	202,500
Construction Inspection	0	0	0	0	0	40,000	95,000	135,000
Misc. Project Costs	0	0	0	10,000	10,000	15,000	0	35,000
TOTAL	0	0	27,500	60,000	60,000	495,000	888,000	1,530,500

Funding Sources	Prior Years	Fiscal Year 2011-12	Fiscal Year 2012-13	Fiscal Year 2013-14	Fiscal Year 2014-15	Fiscal Year 2015-16	Total	
	Expenses	PY Rollover	Budget	Budget	Budget	Budget		
SWU Capital Construction Fund	0	0	27,500	60,000	60,000	495,000	888,000	1,530,500

WATER RESOURCES - DRAINAGE

Silver Legends Storm Drain Improvement

Sacramento, CA 95829

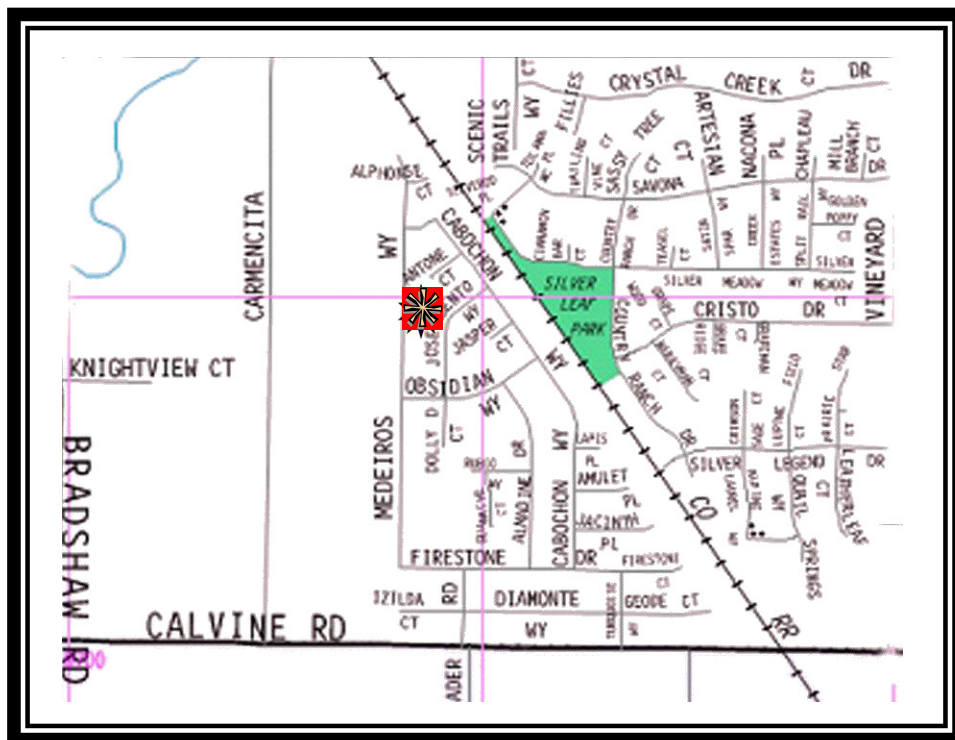
Project #16

Department: Water Resources

Estimated Project Cost: \$148,458

Expected Completion Date: 2015

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



Project Description:

This project will improve drainage adjacent to the D22 Silver Legends Pump Station by relocating the discharge to a recently placed drainage system directly south of the existing pump station. This project will include the removal of the existing drainage outlet, installation of 700 linear feet of storm drain pipe and connection and modification to the downstream manhole.

WATER RESOURCES - DRAINAGE

Silver Legends Storm Drain Improvement

Project Costs	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget		
Construction Costs	0	0	0	0	0	96,000	0	96,000
Project Management/ Design	4,958	0	0	0	0	10,000	10,000	24,958
Construction Inspection	0	0	0	0	0	6,000	14,000	20,000
Misc. Project Costs	0	0	0	0	0	7,500	0	7,500
TOTAL	4,958	0	0	0	0	119,500	24,000	148,458

Funding Sources	Prior	Fiscal Year		Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Total
	Years	2011-12	2012-13	2013-14	2014-15	2015-16		
	Expenses	PY Rollover	Budget	Budget	Budget	Budget		
SWU Capital Construction Fund	4,958	0	0	0	0	119,500	24,000	148,458

NOTE: Construction Costs are encumbered in Fiscal Year 2014-15, but spent in Fiscal Years 2014-15 & 2015-16.

WATER RESOURCES - DRAINAGE

Somersby/Wixford Storm Drain Improvement

Sacramento, CA 95864

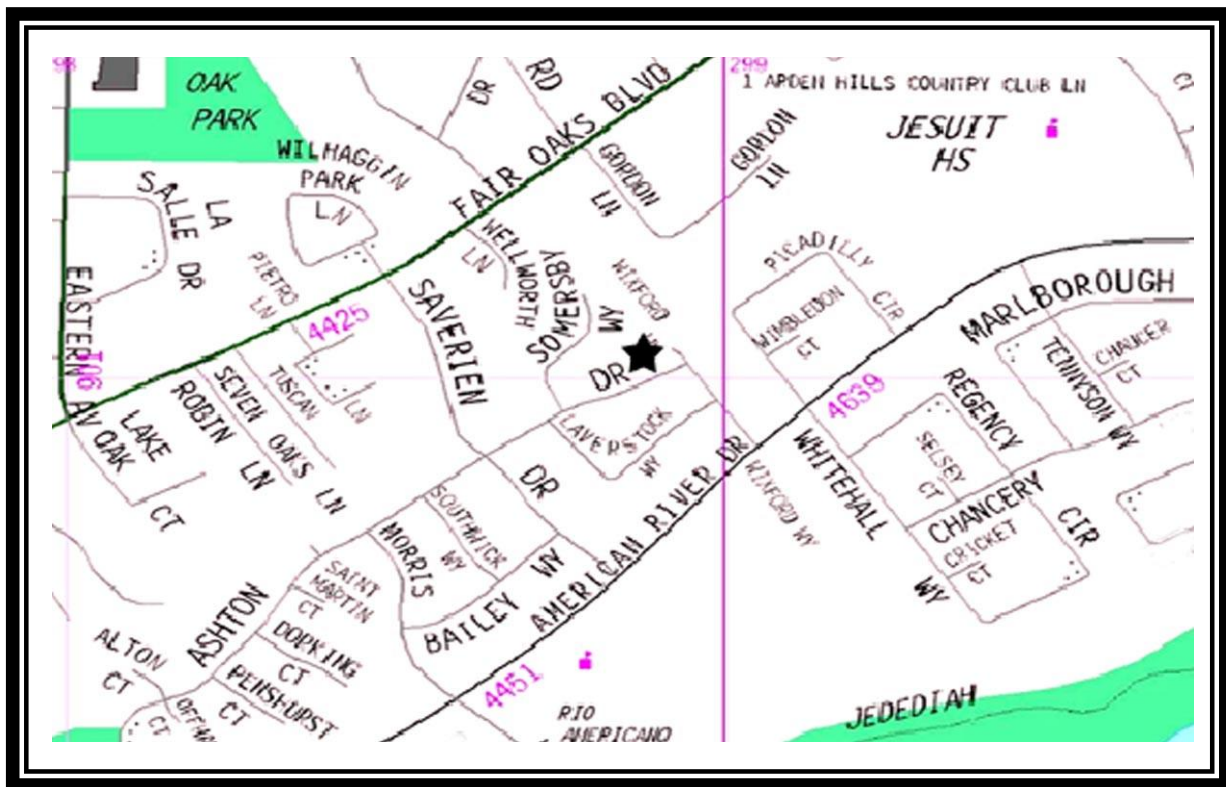
Project #17

Department: Water Resources

Estimated Project Cost: \$1,489,327

Expected Completion Date: 2014

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 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.

WATER RESOURCES - DRAINAGE

Somersby/Wixford Storm Drain Improvement

Project Costs	Prior Years	Fiscal Year 2011-12 PY Rollover	Fiscal Year 2012-13 Budget	Fiscal Year 2013-14 Budget	Fiscal Year 2014-15 Budget	Fiscal Year 2015-16 Budget	Total	
Construction Costs	0	0	0	0	640,000	460,000	0	1,100,000
Project Management/ Design	44,327	0	0	100,000	100,000	25,000	0	269,327
Construction Inspection	0	0	0	0	30,000	80,000	0	110,000
Misc. Project Costs	0	0	0	0	10,000	0	0	10,000
TOTAL	44,327	0	0	100,000	780,000	565,000	0	1,489,327

Funding Sources	Prior Years	Fiscal Year 2011-12 PY Rollover	Fiscal Year 2012-13 Budget	Fiscal Year 2013-14 Budget	Fiscal Year 2014-15 Budget	Fiscal Year 2015-16 Budget	Total	
SWU Capital Construction Fund	44,327	0	0	100,000	780,000	565,000	0	1,489,327