

# WATER RESOURCES

## 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 forty 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 projects identified in the Five-Year CIP is \$18.5 million. Projects proposed to be completed in the Fiscal Year 2009-10 Capital Budget include an "Operating Budget Impact" statement.

There are seventeen projects identified in the Fiscal Year 2009-10 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.

**Clairidge Way Storm Drain Improvement** -- 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 Robertson Avenue. Some of these improvements will involve the use of existing drainage easements. **Estimated Total Cost: \$1,053,854**

**Kinross Road/Root Avenue Storm Drain Improvement** -- 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 Root Avenue. **Estimated Total Cost: \$898,303**

**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 2009-10	FISCAL YEAR 2010-11	FISCAL YEAR 2011-12	FISCAL YEAR 2012-13	FISCAL YEAR 2013-14	TOTAL
1	Black Duck Way/Harlequin Way Storm Drain Improvement	\$428,317	\$10,000	\$2,835,000	\$125,000	\$0	\$0	\$3,398,317
2	Clairidge Way Storm Drain Improvement	988,144	65,710	0	0	0	0	1,053,854
3	Crestview Drive Storm Drain Improvement	111,183	217,000	28,000	0	0	0	356,183
4	El Nido Way/La Playa Way Storm Drain Improvement	0	0	35,000	55,000	469,750	0	559,750
5	El Sur Way/Las Cruces Way Storm Drain Improvement	0	30,000	30,000	761,000	50,000	0	871,000
6	Glenwood Road/Chelsea Road Storm Drain Improvement	162,012	756,000	50,000	0	0	0	968,012
7	Hagginbottom Pump Station Generator	0	0	0	0	350,000	1,694,700	2,044,700
8	Kinross Road/Root Avenue Storm Drain Improvement	840,603	57,700	0	0	0	0	898,303
9	Large Oak Court Storm Drain Improvement	7,013	146,563	0	0	0	0	153,576
10	Leedy Lane Storm Drain Improvement	1,523	0	128,813	0	0	0	130,336
11	Lloyd Lane Storm Drain Improvement	236,264	495,700	30,000	0	0	0	761,964
12	Miramar Storm Drain Improvement	5,130	338,628	0	0	0	0	343,758
13	Old Ranch Road Storm Drain Improvement	791,778	42,000	0	0	0	0	833,778
14	Ravenwood Avenue Storm Drain Improvement	3,659	20,000	25,000	23,000	693,500	44,000	809,159
15	Silver Legends Pump Station Improvements	4,958	105,925	0	0	0	0	110,883
16	Somersby/Wixford Storm Drain	44,327	0	80,000	1,267,000	75,000		1,466,327
17	Wilhaggin Drive Storm Drainage Pump Station (D43) Trash Rake, Discharge Lines and Pump Improvement	278,523	0	0	0	2,693,000	291,000	3,262,523
	<b>TOTAL</b>	<b>\$3,903,434</b>	<b>\$2,285,226</b>	<b>\$3,241,813</b>	<b>\$2,231,000</b>	<b>\$4,331,250</b>	<b>\$2,029,700</b>	<b>\$18,022,423</b>

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### PRIOR-YEAR COMPLETED/CANCELLED PROJECTS SUMMARY

PROJ #	PROJECT	PRIOR YEARS	FISCAL YEAR 2009-10	FISCAL YEAR 2010-11	FISCAL YEAR 2011-12	FISCAL YEAR 2012-13	FISCAL YEAR 2013-14	TOTAL	REASON DROPPED
1	Berrendo Drive/La Sierra Drive Storm Drain Improvement	\$849,148	\$0	\$0	\$0	\$0	\$0	\$849,148	Construction Complete
3	Bonnie Way Storm Drain Improvement	146,099	0	0	0	0	0	146,099	Construction Complete
4	Cedar Drive Storm Drain Improvement	206,544	0	0	0	0	0	206,544	Construction Complete
7	El Nido Way/El Tejon Way Storm Drain Improvement	1,116,098	0	0	0	0	0	1,116,098	Construction Complete
9	Engle Road Storm Drain Improvement	313,038	0	0	0	0	0	313,038	Construction Complete
10	Gingerblossom Drive Storm Drain Improvement	102,886	0	0	0	0	0	102,886	Construction Complete
16	Mt. Hood Court Storm Drain Improvement	0	134,825	0	0	0	0	134,825	Cancelled
18	Q Street/Front Street to Dry Creek Road Storm Drain Improvement	799,252	0	0	0	0	0	799,252	Construction Complete
19	Raleigh Way Storm Drain Improvement	0	0	0	0	0	0	0	Cancelled
23	Tallac and Bell Storm Drain Improvement	644,954	0	0	0	0	0	644,954	Construction Complete
24	Valmonte Drive/Stewart Road Storm Drain Improvement	1,285,488	0	0	0	0	0	1,285,488	Construction Complete
25	Von Way Storm Drain Improvement	5,632	0	0	0	0	0	5,632	Project merged with Kinross
26	Wedge Circle/Madison Avenue Storm Drain Improvement	398,515	0	0	0	0	0	398,515	Construction Complete
<b>TOTAL</b>		<b>\$5,867,654</b>	<b>\$134,825</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,002,479</b>	

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Black Duck Way/Harlequin Way Storm Drain Improvement

Sacramento, CA 95842

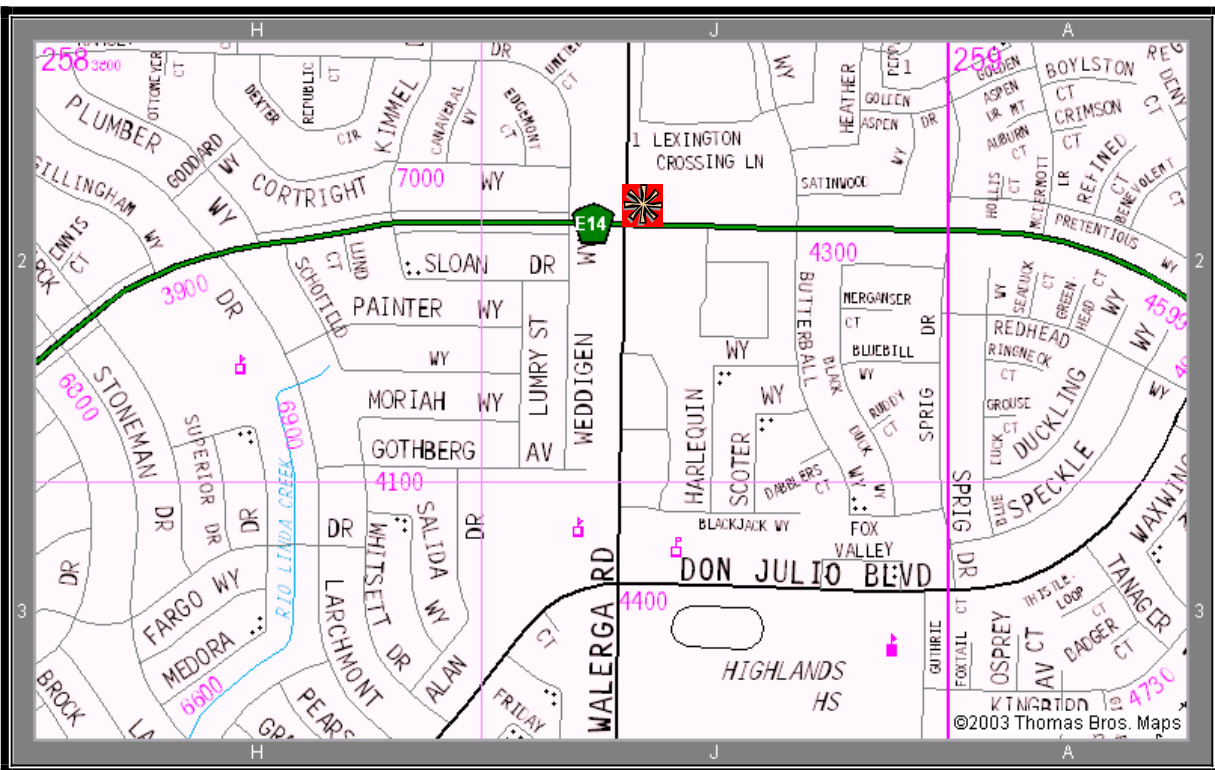
Project #1

Department: Water Resources

Estimated Project Cost: \$3,398,317

Expected Completion Date: 2011

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 was coordinated with the Sacramento County Department of Transportation project – Elkhorn Boulevard Widening Project (Watt Avenue to Don Julio Boulevard) but that project has been indefinitely postponed.

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Black Duck Way/Harlequin Way Storm Drain Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	0	0	2,700,000	0	0	0	2,700,000
Project Management/Design	425,230	10,000	35,000	36,000	0	0	506,230
Construction Inspection	0	0	100,000	89,000	0	0	189,000
Misc. Project Costs	3,087	0	0	0	0	0	3,087
<b>TOTAL</b>	<b>428,317</b>	<b>10,000</b>	<b>2,835,000</b>	<b>125,000</b>	<b>0</b>	<b>0</b>	<b>3,398,317</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	428,317	10,000	2,835,000	125,000	0	0	3,398,317

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Clairidge Way Storm Drain Improvement

Sacramento, CA 95821

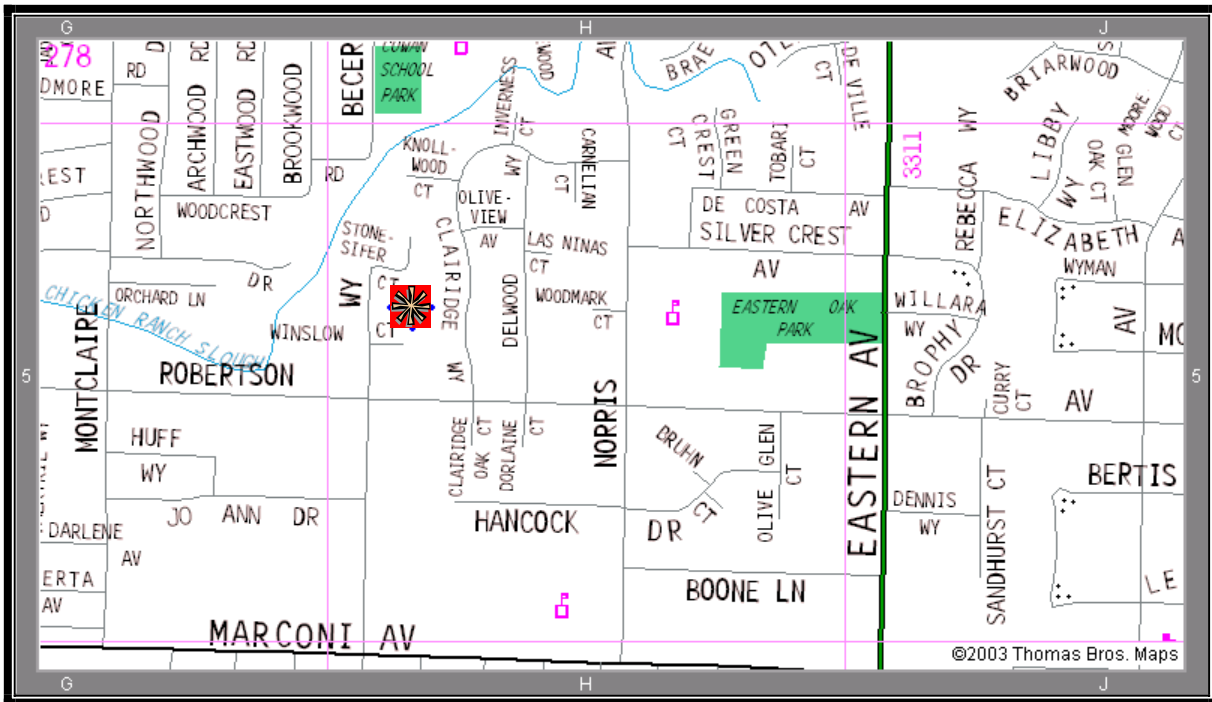
Project #2

Department: Water Resources

Estimated Project Cost: \$1,053,854

Expected Completion Date: 2009

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 Robertson 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.

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Clairidge Way Storm Drain Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	683,877	0	0	0	0	0	683,877
Project Management/Design	261,254	32,000	0	0	0	0	293,254
Construction Inspection	16,725	33,710	0	0	0	0	50,435
Misc. Project Costs	26,288	0	0	0	0	0	26,288
<b>TOTAL</b>	<b>988,144</b>	<b>65,710</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,053,854</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	988,144	65,710	0	0	0	0	1,053,854

# CAPITAL IMPROVEMENT PLAN WATER RESOURCES

## Crestview Drive Storm Drain Improvement

Carmichael, CA 95608

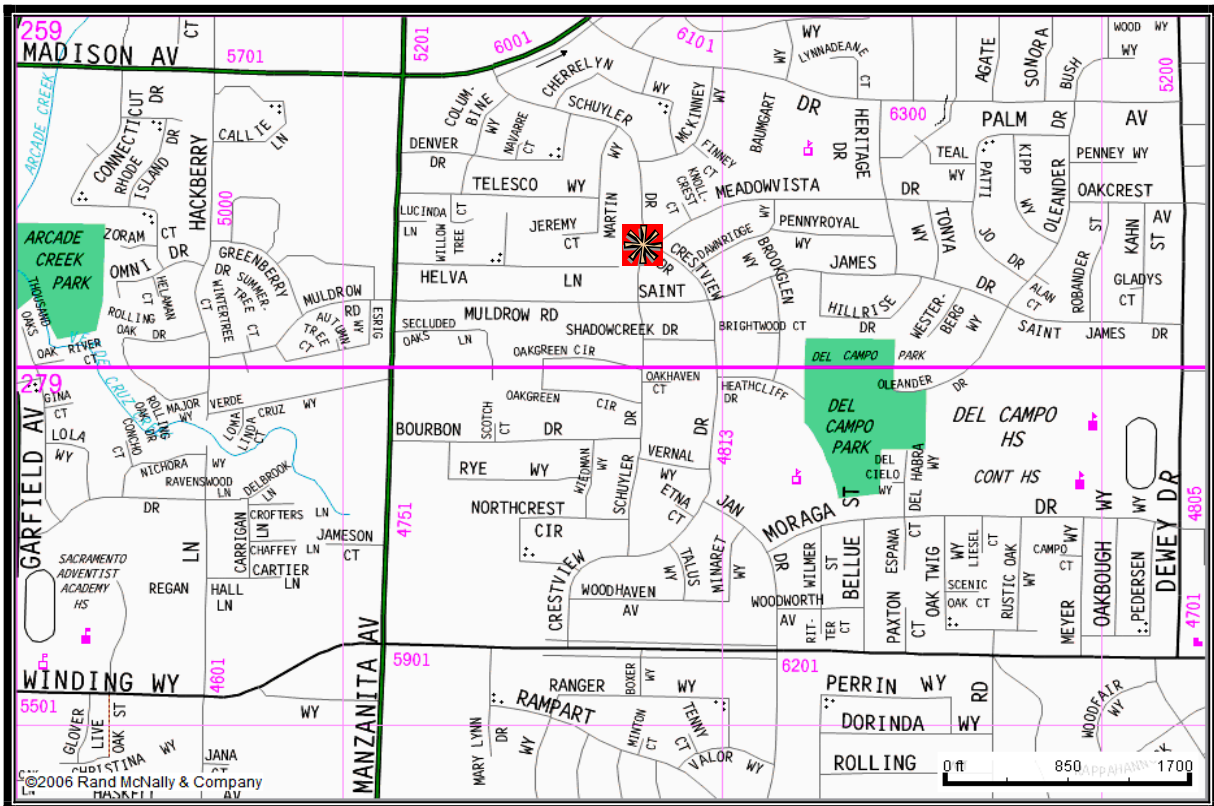
Project #3

Department: Water Resources

Estimated Project Cost: \$356,183

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.



# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Crestview Drive Storm Drain Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	0	163,000	0	0	0	0	163,000
Project Management/Design	73,633	38,000	16,000	0	0	0	127,633
Construction Inspection	0	12,000	12,000	0	0	0	24,000
Misc. Project Costs	37,550	4,000	0	0	0	0	41,550
<b>TOTAL</b>	<b>111,183</b>	<b>217,000</b>	<b>28,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>356,183</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	111,183	217,000	28,000	0	0	0	356,183

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### El Nido Way/La Playa Way Storm Drain Improvement

Sacramento, CA 95864

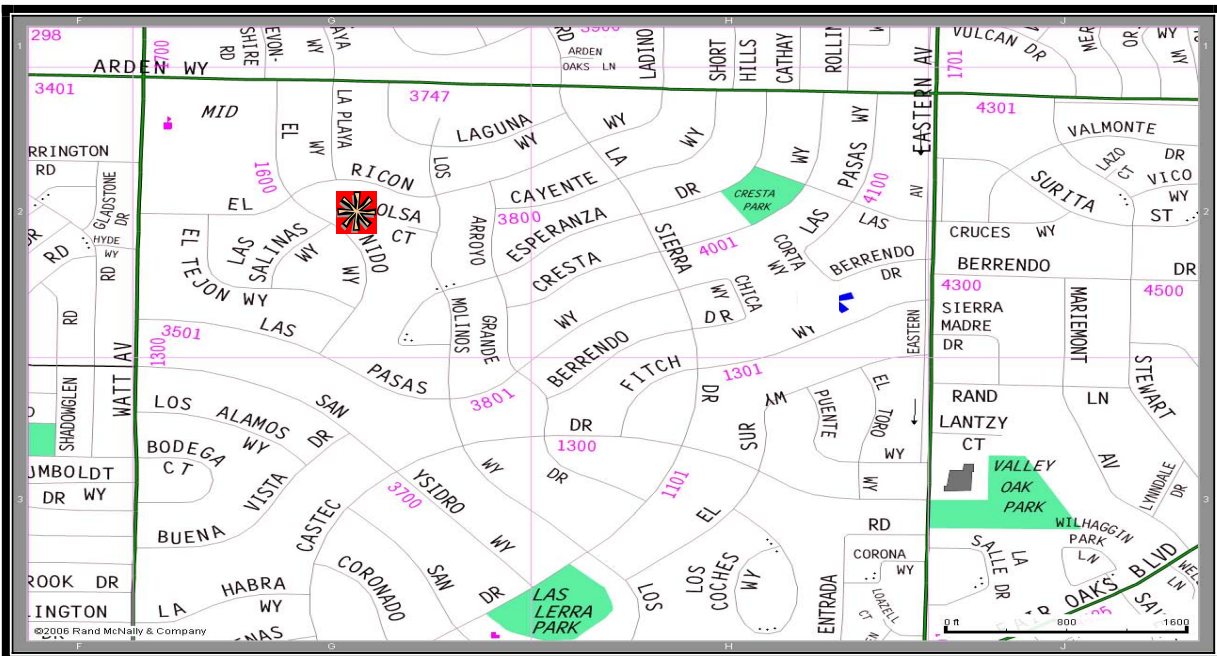
Project #4

Department: Water Resources

Estimated Project Cost: \$559,750

Expected Completion Date: 2012

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



#### Project Description:

This project will alleviate structure and street flooding along El Nido Way and La Playa 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 El Nido Way and La Playa Way.

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### El Nido Way/Las Playa Way Storm Drain Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	0	0	0	0	425,000	0	425,000
Project Management/Design	0	0	35,000	25,000	15,000	0	75,000
Construction Inspection	0	0	0	0	29,750	0	29,750
Misc. Project Costs	0	0	0	30,000	0	0	30,000
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>35,000</b>	<b>55,000</b>	<b>469,750</b>	<b>0</b>	<b>559,750</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	0	0	35,000	55,000	469,750	0	559,750

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### El Sur Way/Las Cruces Way Storm Drain Improvement

Sacramento, CA 95864

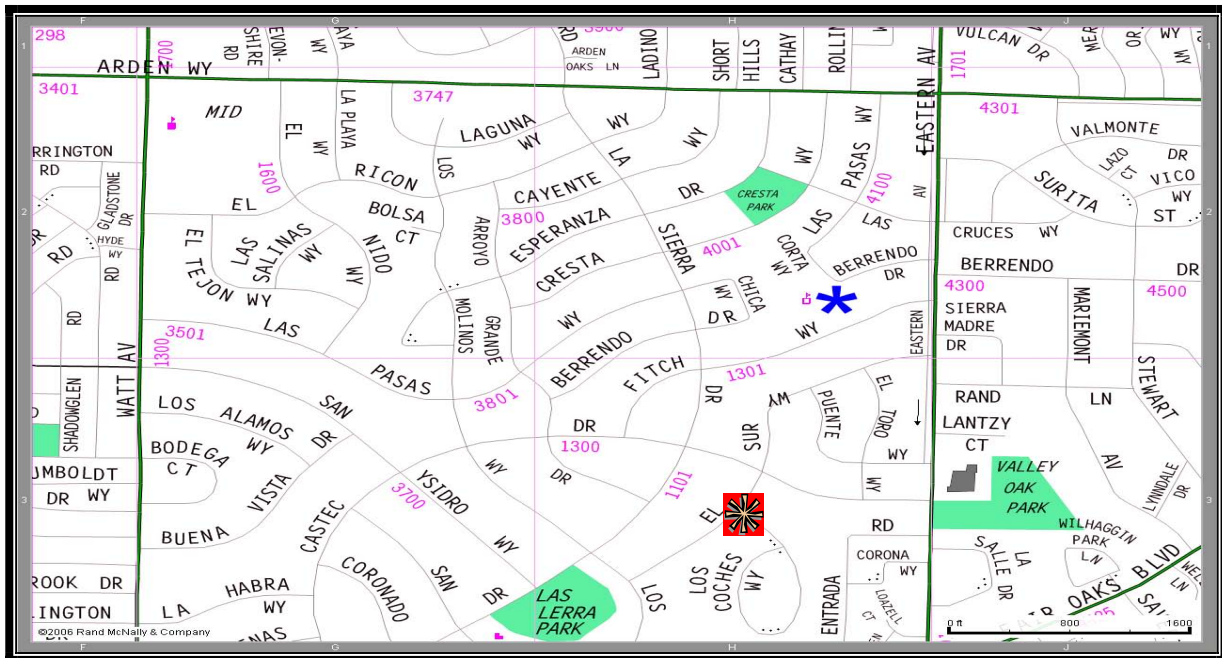
Project #5

Department: Water Resources

Estimated Project Cost: \$871,000

Expected Completion Date: 2012

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



#### Project Description:

This project will alleviate structure and street flooding along Fitch Way, El Sur 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 El Sur Way, Fitch Way, Eastern Avenue, Las Pasas Way, and Las Cruces Way.

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### El Sur Way/Las Cruces Way Storm Drain Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	0	0	0	700,000	0	0	700,000
Project Management/Design	0	30,000	30,000	35,000	15,000	0	110,000
Construction Inspection	0	0	0	14,000	35,000	0	49,000
Misc. Project Costs	0	0	0	12,000	0	0	12,000
<b>TOTAL</b>	<b>0</b>	<b>30,000</b>	<b>30,000</b>	<b>761,000</b>	<b>50,000</b>	<b>0</b>	<b>871,000</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	0	30,000	30,000	761,000	50,000	0	871,000

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Glenwood Road/Chelsea Road Storm Drain Improvement

Sacramento, CA 95864

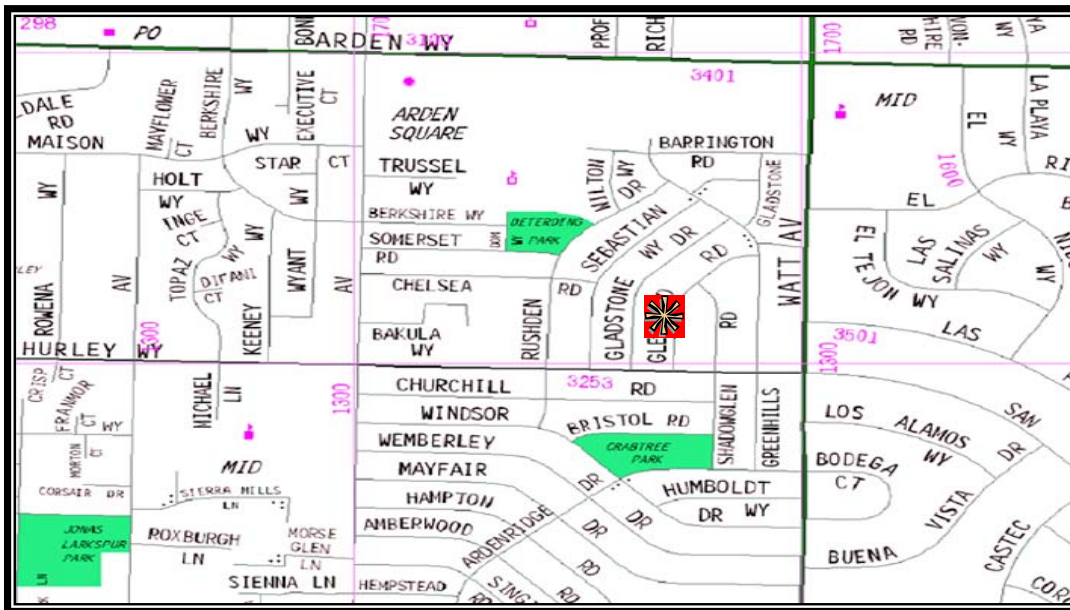
Project #6

Department: Water Resources

Estimated Project Cost: \$968,012

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.

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Glenwood Road/Chelsea Road Storm Drain Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	0	700,000	0	0	0	0	700,000
Project Management/Design	162,012	30,000	15,000	0	0	0	207,012
Construction Inspection	0	14,000	35,000	0	0	0	49,000
Misc. Project Costs	0	12,000	0	0	0	0	12,000
<b>TOTAL</b>	<b>162,012</b>	<b>756,000</b>	<b>50,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>968,012</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	162,012	756,000	50,000	0	0	0	968,012

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Hagginbottom Pump Station Generator

Sacramento, CA 95608

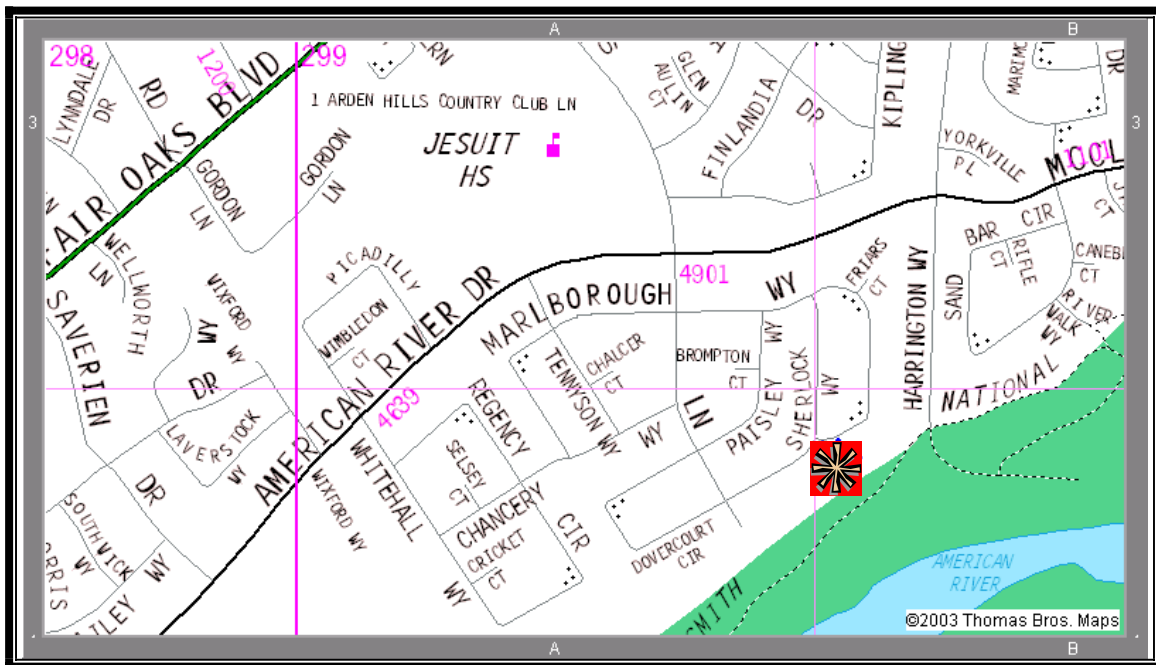
Project #7

Department: Water Resources

Estimated Project Cost: \$2,044,700

Expected Completion Date: 2014

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



#### Project Description:

This project will alleviate structure and street flooding along Marlborough Way adjacent to the pump station during SMUD power outages. The existing pump station currently does not have an emergency generator and the County maintenance crews do not have a mobile generator large enough to run this station at full power during power outages, which subjects the surrounding area to flooding. In addition, during major storm events street flooding limits access to the pump station. Therefore, to alleviate flooding during power outages, an on-site emergency generator and electrical connections that turn the generator “on” automatically need to be installed.



# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Hagginbottom Pump Station Generator

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	0	0	0	0	0	1,500,000	1,500,000
Project Management/Design	0	0	0	0	50,000	25,000	75,000
Consultant Services	0	0	0	0	300,000	75,000	375,000
Construction Inspection	0	0	0	0	0	89,700	89,700
Misc. Project Costs	0	0	0	0	0	5,000	5,000
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>350,000</b>	<b>1,694,700</b>	<b>2,044,700</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	0	0	0	0	350,000	1,694,700	2,044,700

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Kinross Road/Root Avenue Storm Drain Improvement

Carmichael, CA 95608

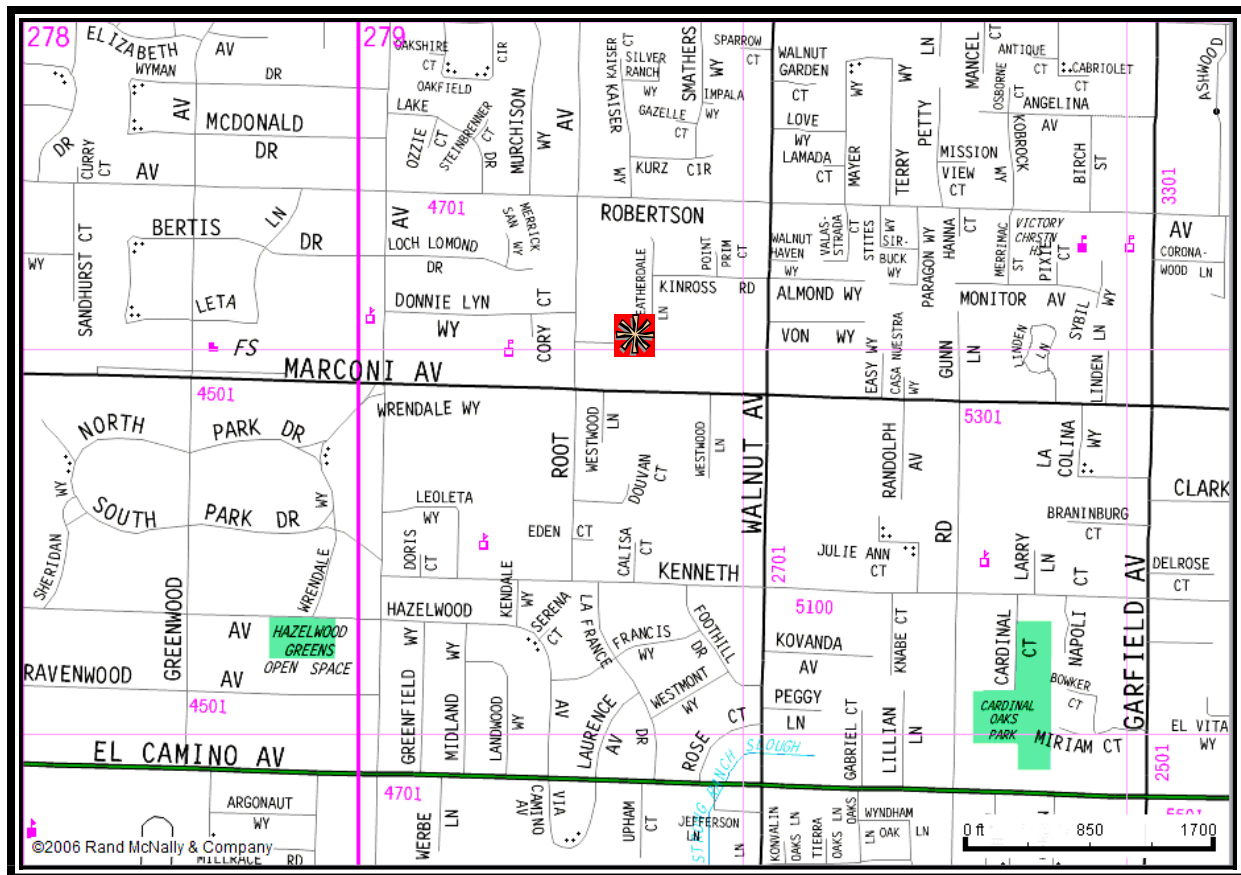
Project #8

Department: Water Resources

Estimated Project Cost: \$898,303

Expected Completion Date: 2009

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



#### Project Description:

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

#### Operating Budget Impact:

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

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Kinross Road/Root Avenue Storm Drain Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	653,090	0	0	0	0	0	653,090
Project Management/ Design	167,261	12,000	0	0	0	0	179,261
Construction Inspection	0	45,700	0	0	0	0	45,700
Misc. Project Costs	20,252	0	0	0	0	0	20,252
<b>TOTAL</b>	<b>840,603</b>	<b>57,700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>898,303</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	840,603	57,700	0	0	0	0	898,303

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Large Oak Court Storm Drain Improvement

Sacramento, CA 95841

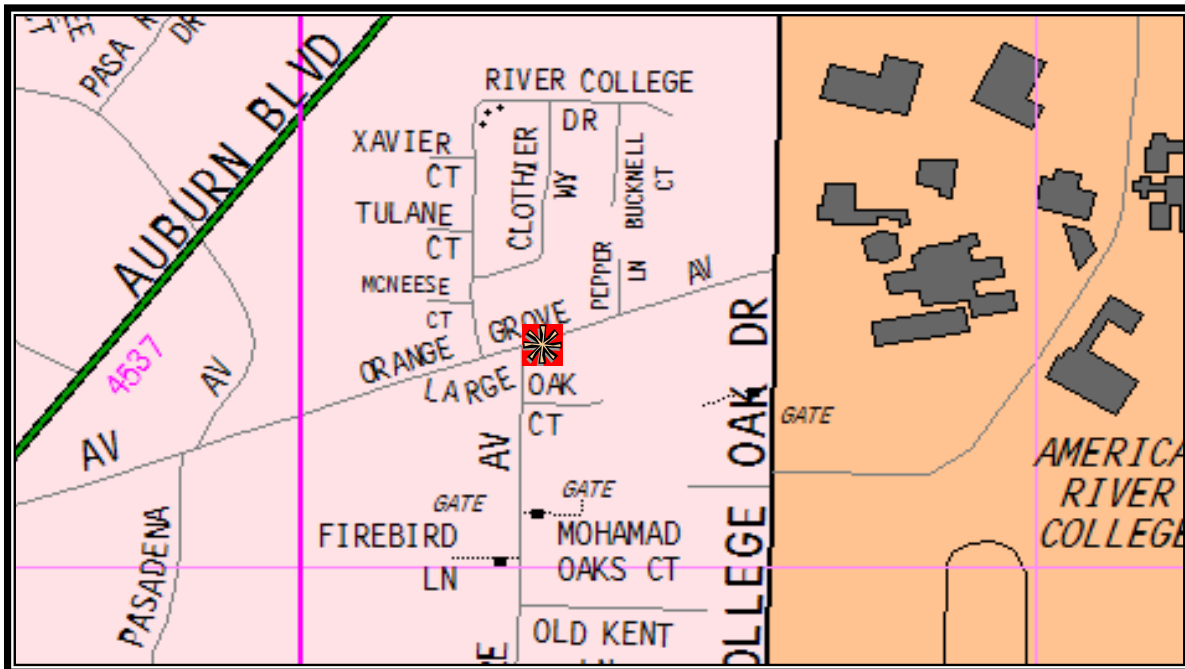
Project #9

**Department:** Water Resources

**Estimated Project Cost:** \$153,576

**Expected Completion Date:** 2009-10

**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 due to several portions of collapsed pipe, and areas with separated joints and severe corrosion. This project will include improvements to the mainline, laterals, and drain inlets along the rear property lines of various parcels on Large Oak Court.

#### Operating Budget Impact:

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

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Large Oak Court Storm Drain Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	0	134,563	0	0	0	0	134,563
Project Management/ Design	7,013	2,000	0	0	0	0	9,013
Construction Inspection	0	10,000	0	0	0	0	10,000
<b>TOTAL</b>	<b>7,013</b>	<b>146,563</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>153,576</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	7,013	146,563	0	0	0	0	153,576

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Leedy Lane Storm Drain Improvement

Fair Oaks, CA 95628

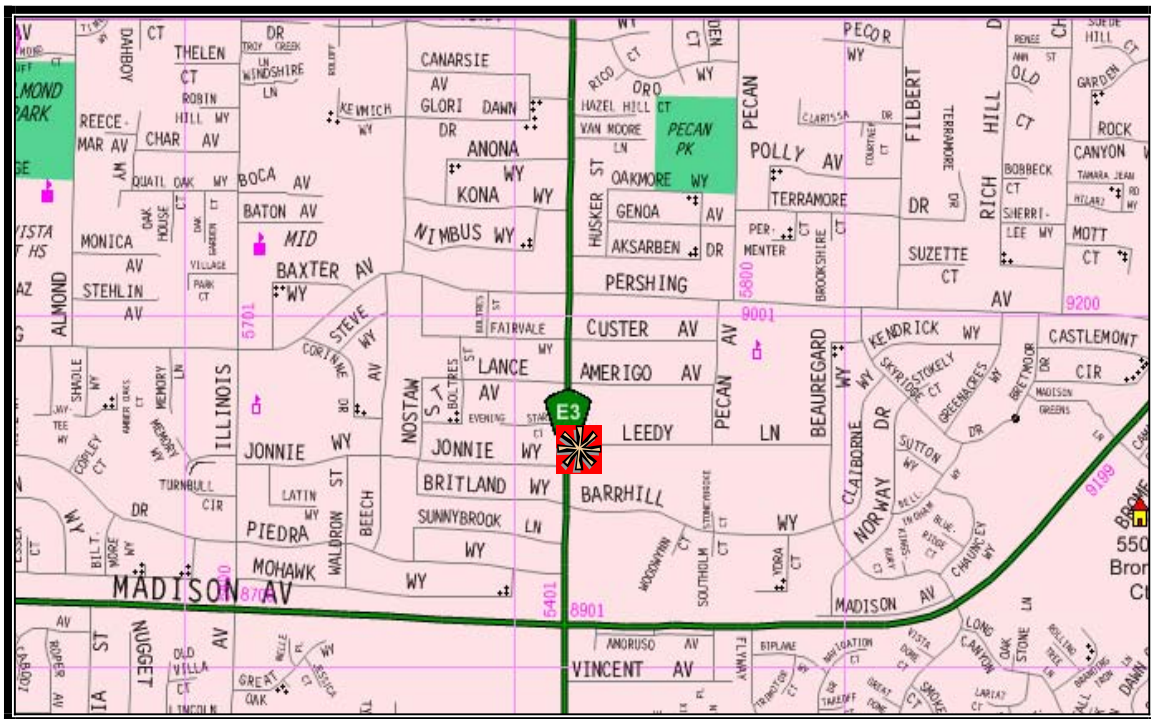
Project #10

Department: Water Resources

Estimated Project Cost: \$130,336

Expected Completion Date: 2010-11

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



#### Project Description:

This project will improve drainage on Leedy Lane. This area has a history of backyard flooding due to partial frontage improvements. The project proposes to bring the drainage system currently in the backyard to the road right-of-way and connect to a system downstream. The project would require installation of 620 lateral feet of twelve inch storm drain pipe and three manholes.

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Leedy Lane Storm Drain Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	0	0	118,813	0	0	0	118,813
Project Management/ Design	1,523	0	2,000	0	0	0	3,523
Construction Inspection	0	0	8,000	0	0	0	8,000
<b>TOTAL</b>	<b>1,523</b>	<b>0</b>	<b>128,813</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>130,336</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	1,523	0	128,813	0	0	0	130,336

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Lloyd Lane Storm Drain Improvement

Sacramento, CA 95825

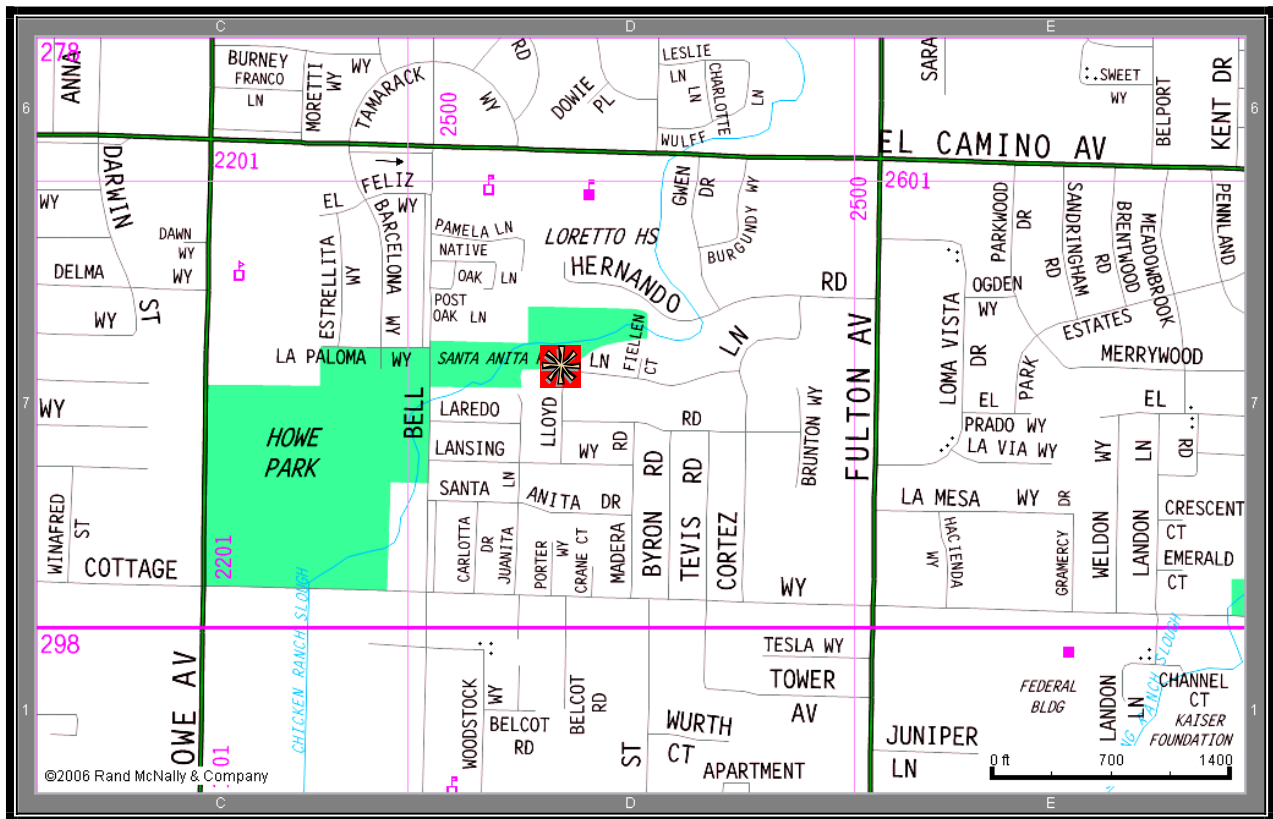
Project #11

Department: Water Resources

Estimated Project Cost: \$761,964

Expected Completion Date: 2010

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



#### Project Description:

This project will alleviate street flooding along Lloyd Lane and Barcelona 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 Lloyd Lane, Barcelona Way and La Paloma Way.



# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Lloyd Lane Storm Drain Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	0	460,000	0	0	0	0	460,000
Project Management/Design	187,524	15,000	10,000	0	0	0	212,524
Construction Inspection	0	12,200	20,000	0	0	0	32,200
Misc. Project Costs	48,740	8,500	0	0	0	0	57,240
<b>TOTAL</b>	<b>236,264</b>	<b>495,700</b>	<b>30,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>761,964</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	236,264	495,700	30,000	0	0	0	761,964

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Miramar Storm Drain Improvement

Sacramento, CA 95821

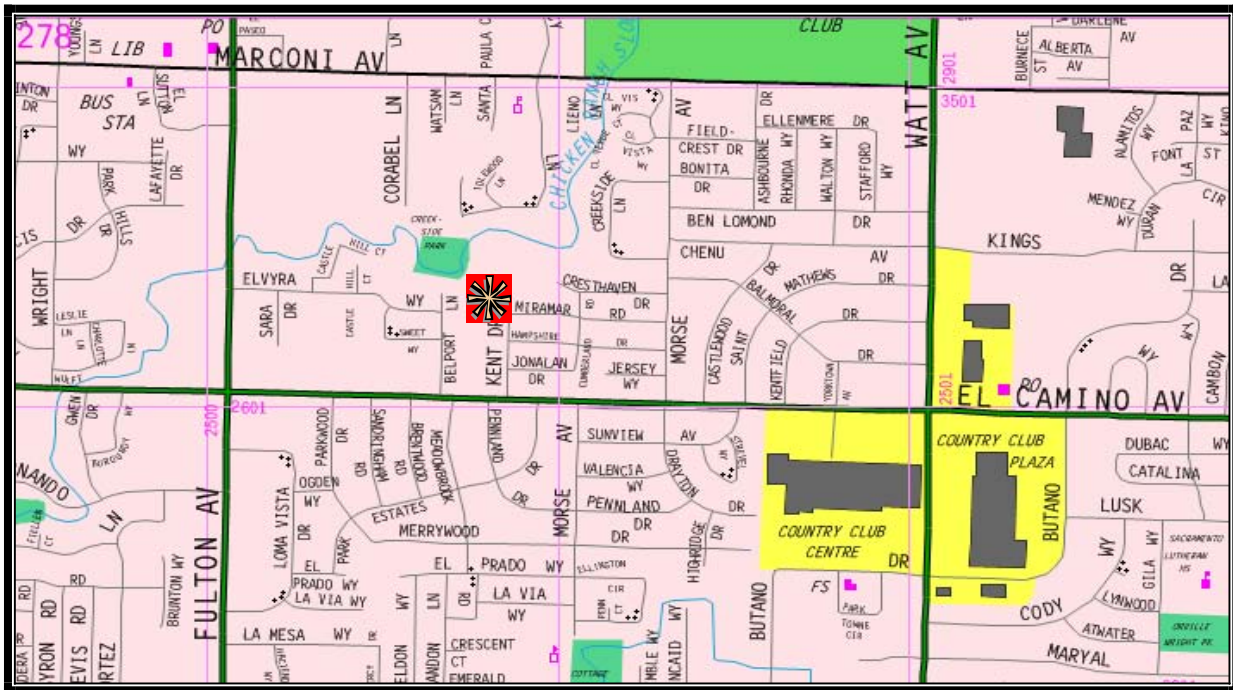
Project #12

Department: Water Resources

Estimated Project Cost: \$343,758

Expected Completion Date: 2009-10

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



#### Project Description:

This project will improve drainage on Miramar Road, Cumberland Road, Jonalan Drive, and Kent Drive. This storm drain system is comprised of six inch and eight inch diameter pipe with 14x14, type D, and type E drain inlets. There has been history of street and yard flooding as well as cracking in the pipe. The project would require installation of 1235 lateral feet of twelve inch pipe, 223 lateral feet of eighteen inch pipe, four type B drain inlets, four type C drain inlets, and six storm drain manholes.

#### Operating Budget Impact:

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

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Miramar Storm Drain Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	0	328,628	0	0	0	0	328,628
Project Management/Design	5,130	2,000	0	0	0	0	7,130
Construction Inspection	0	8,000	0	0	0	0	8,000
<b>TOTAL</b>	<b>5,130</b>	<b>338,628</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>343,758</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	5,130	338,628	0	0	0	0	343,758

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Old Ranch Road Storm Drain Improvement

Orangevale, CA 95662

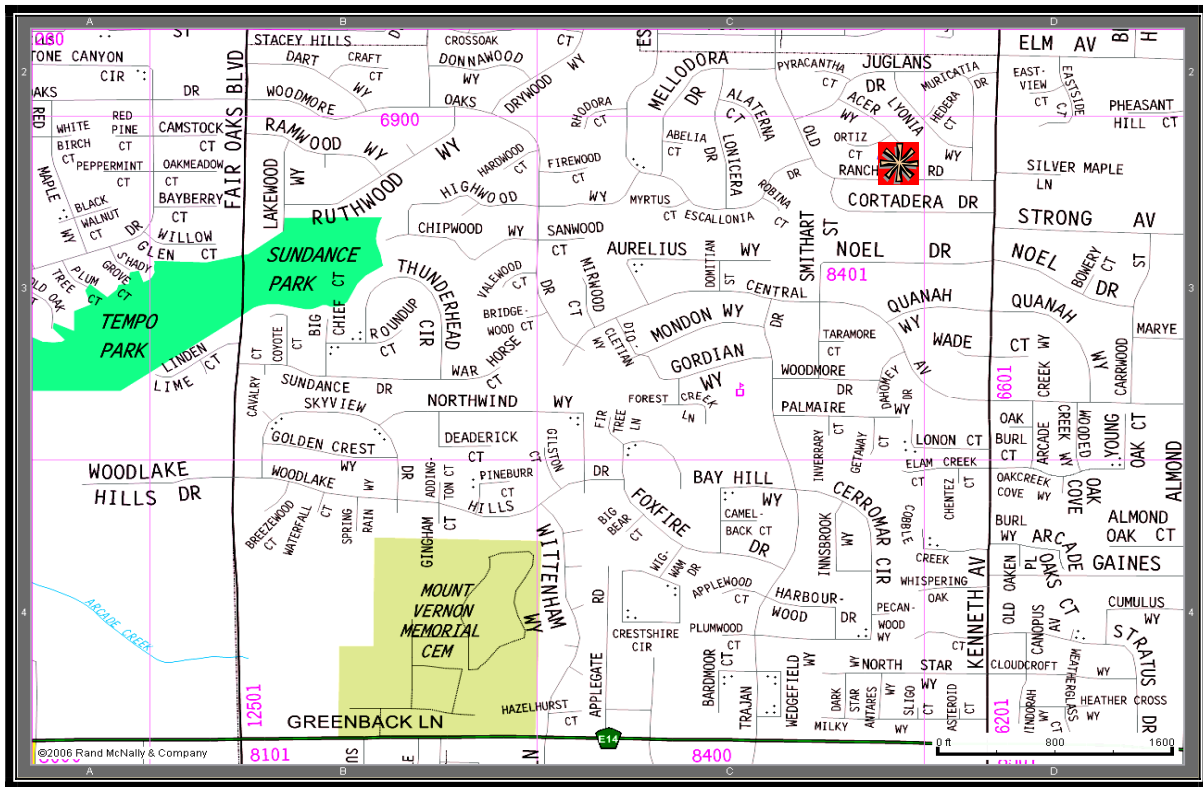
Project #13

Department: Water Resources

Estimated Project Cost: \$833,778

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.

#### Operating Budget Impact:

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

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Old Ranch Road Storm Drain Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	580,000	0	0	0	0	0	580,000
Project Management/Design	160,446	12,000	0	0	0	0	172,446
Construction Inspection	10,600	30,000	0	0	0	0	40,600
Misc. Project Costs	40,732	0	0	0	0	0	40,732
<b>TOTAL</b>	<b>791,778</b>	<b>42,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>833,778</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	791,778	42,000	0	0	0	0	833,778

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Ravenwood Avenue Storm Drain Improvement

Sacramento, CA 95821

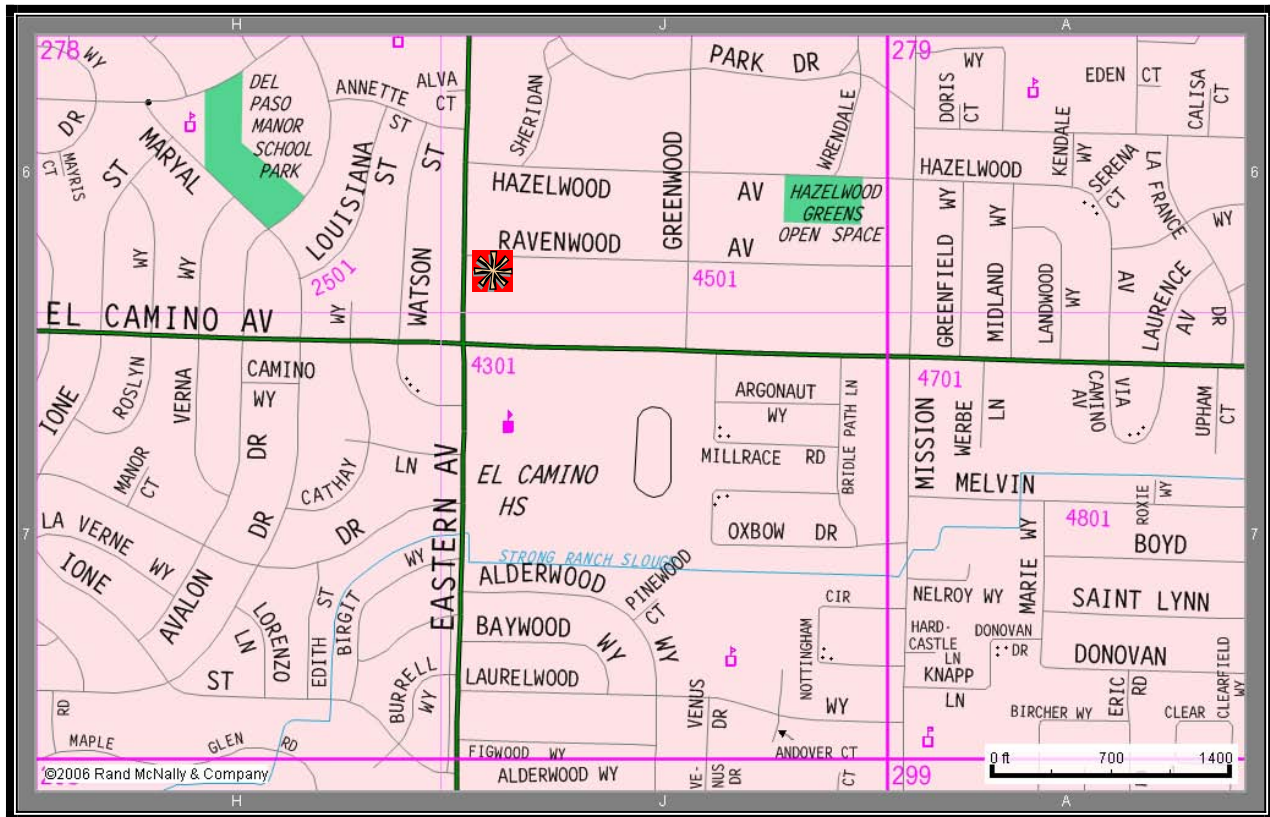
Project #14

Department: Water Resources

Estimated Project Cost: \$809,159

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 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 need to be made along Ravenwood Avenue and Eastern Avenue.

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Ravenwood Avenue Storm Drain Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	0	0	0	0	650,000	0	650,000
Management/Design	3,659	20,000	25,000	11,000	28,000	14,000	101,659
Construction Inspection	0	0	0	0	15,500	30,000	45,500
Misc. Project Costs	0	0	0	12,000	0	0	12,000
<b>TOTAL</b>	<b>3,659</b>	<b>20,000</b>	<b>25,000</b>	<b>23,000</b>	<b>693,500</b>	<b>44,000</b>	<b>809,159</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	3,659	20,000	25,000	23,000	693,500	44,000	809,159

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Silver Legends Pump Station Improvement

Sacramento, CA 95829

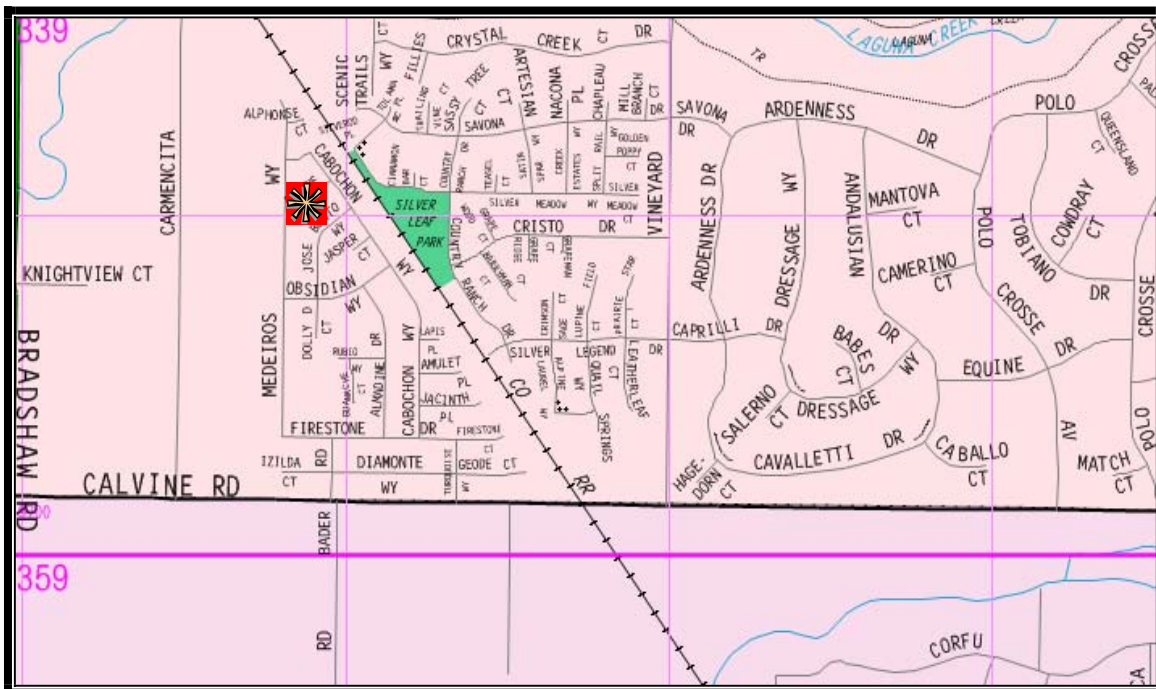
Project #15

Department: Water Resources

Estimated Project Cost: \$110,883

Expected Completion Date: 2009-10

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.

#### Operating Budget Impact:

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



# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Silver Legends Pump Station Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	0	95,925	0	0	0	0	95,925
Project Management/ Design	4,958	2,000	0	0	0	0	6,958
Construction Inspection	0	8,000	0	0	0	0	8,000
<b>TOTAL</b>	<b>4,958</b>	<b>105,925</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>110,883</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	4,958	105,925	0	0	0	0	110,883

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Somersby/Wixford Storm Drain Improvement

Sacramento, CA 95864

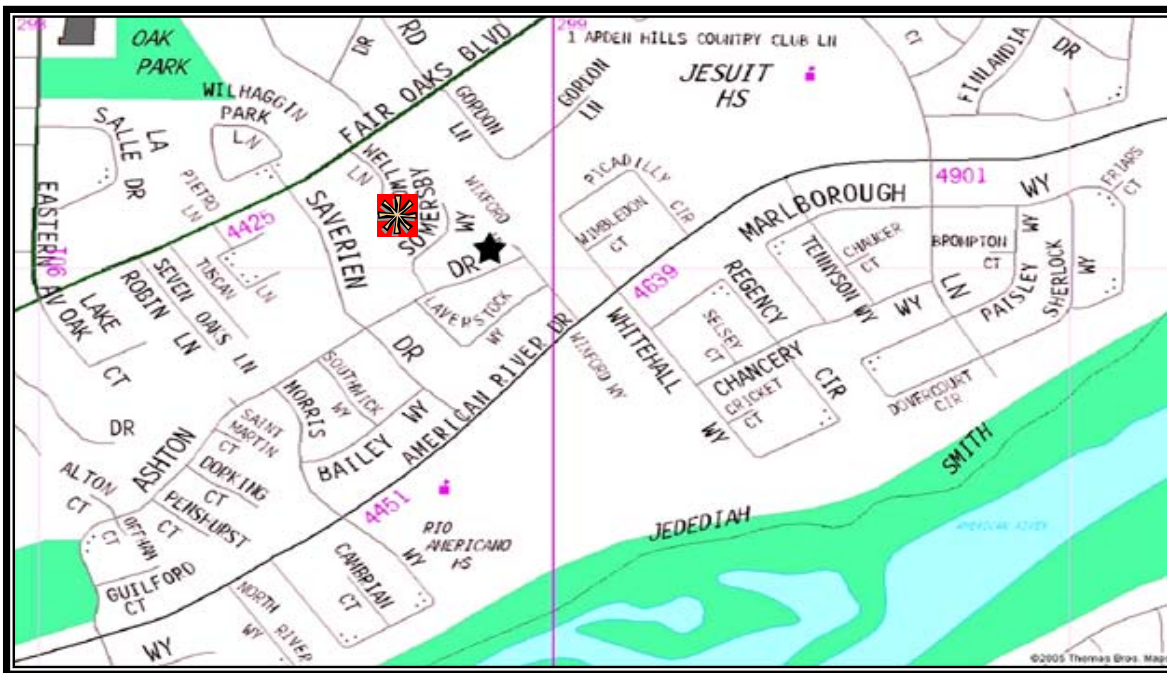
Project #16

Department: Water Resources

Estimated Project Cost: \$1,466,327

Expected Completion Date: 2011

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.

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

### Somersby/Wixford Storm Drain Improvement

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	0	0	0	1,100,000	0	0	1,100,000
Project Management/ Design	44,327	0	75,000	130,000	25,000	0	274,327
Construction Inspection	0	0	0	27,000	50,000	0	77,000
Misc. Project Costs	0	0	5,000	10,000	0	0	15,000
<b>TOTAL</b>	<b>44,327</b>	<b>0</b>	<b>80,000</b>	<b>1,267,000</b>	<b>75,000</b>	<b>0</b>	<b>1,466,327</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	44,327	0	80,000	1,267,000	75,000	0	1,466,327

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

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

Sacramento, CA 95864

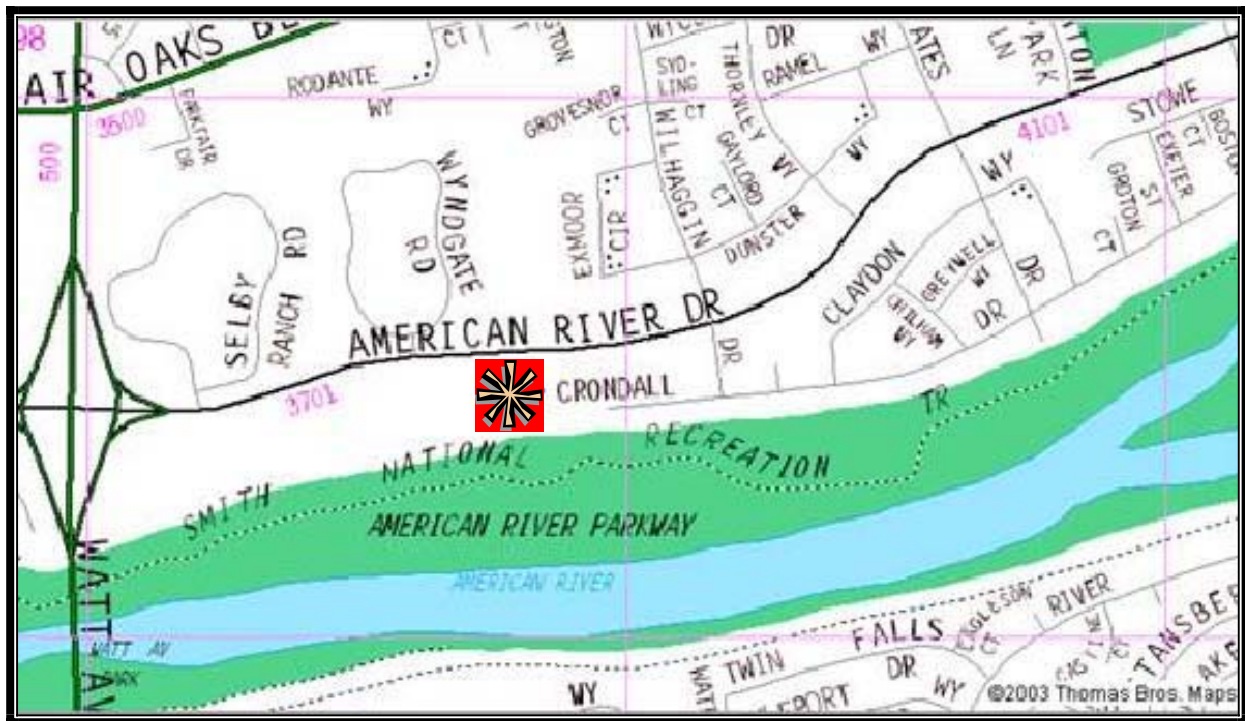
Project #17

Department: Water Resources

Estimated Project Cost: \$3,262,523

Expected Completion Date: 2013

Funding Sources: Storm Water Utility (SWU)  
Capital Construction Fund, Sacramento  
County Water Agency Zone 11



#### 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 rake 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.

# CAPITAL IMPROVEMENT PLAN

## WATER RESOURCES

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

<b>Project Costs</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
Construction Costs	0	0	0	0	2,500,000	0	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
<b>TOTAL</b>	<b>278,523</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,693,000</b>	<b>291,000</b>	<b>3,262,523</b>

<b>Funding Sources</b>	<b>Prior Years</b>	<b>Fiscal Year 2009-10</b>	<b>Fiscal Year 2010-11</b>	<b>Fiscal Year 2011-12</b>	<b>Fiscal Year 2012-13</b>	<b>Fiscal Year 2013-14</b>	<b>Total</b>
SWU Capital Construction Fund	278,523	0	0	0	2,193,000	291,000	2,762,523
Sacramento County Water Agency Zone 11	0	0	0	0	500,000	0	500,000
<b>TOTAL</b>	<b>278,523</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,693,000</b>	<b>291,000</b>	<b>3,262,523</b>