EXECUTIVE SUMMARY

The Department of Water Resources (DWR) constructs drainage improvement projects intended to mitigate or prevent flood damage in developed areas. 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. This report summarizes those construction projects identified in the Five-Year Capital Improvement Plan (CIP) for the period from Fiscal Year 2018-19 through Fiscal Year 2022-23.

Most of the drainage 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.

DWR also constructs projects providing upgrades to existing drainage pump stations, creeks, and channels. Pump station projects have included adding pumping capacity, upgrading old electrical systems, and installing back-up power sources and automated trash rakes. Creeks and channel projects have included improvements to existing linings and naturalization restorations.

The estimated capital cost for the 22 projects identified in the Five-Year CIP is \$28.0 million. There are three projects identified in the Five-Year CIP that either are under construction or will be substantially complete by DWR in Fiscal 2018-19. The following brief descriptions highlight two projects that demonstrate the magnitude and range of construction undertaken by DWR.

Miramar Road/Kent Drive Storm Drain Improvement Project

This project will improve drainage on Miramar Road and Kent Drive. This storm drain system is comprised of undersized mainlines with gutter drains and older drain inlets. There has been a history of street and yard flooding as well as cracking in the pipe. The project will install larger pipes and inlets to replace the existing smaller drainage facilities. **Estimated Total Cost: \$721,905**

Gerber Creek

Phase 3 Improvement Project -- This project will improve the flood protection and natural features of 2,100 linear feet of Upper Gerber Creek south of Gerber Road west of Bradshaw Road. This project was formerly titled "Upper Gerber Creek Improvement". **Estimated Total Cost: \$4,706,154**

PROJECT SUMMARY

	Projects Not	Appearing	on Previou	<mark>s 5-Year Cl</mark>	P are Highl	ighted		
PROJ #	PROJECT	PRIOR YEARS	FISCAL YEAR 2018-19	FISCAL YEAR 2019-20	FISCAL YEAR 2020-21	FISCAL YEAR 2021-22	FISCAL YEAR 2022-23	TOTAL
1	Channel Lining Rehabilitation - Chicken Ranch Slough	87,303	180,000	563,750	0	0	0	\$831,053
2	D01 Hagginbottom Storm Drain Pump Station Rehabilitation	640,000	1,200,000	0	0	0	0	\$1,840,000
3	D05 Howe Avenue Storm Drain Pump Station Rehabilitation	6,437,659	25,000	0	0	0	0	\$6,462,659
4	D06 North Mayhew Storm Drain Pump Station Rehabilitation	51,300	292,400	504,800	0	0	0	\$848,500
5	D10 Manlove Storm Drain Pump Station Generator Improvement	0	0	100,500	400,000	1,269,500	0	\$1,770,000
6	D24 North Lindale Storm Drain Pump Station Rehabilitation	0	130,000	326,000	494,800	0	0	\$950,800
7	D45 Franklin/Morrison Storm Drain Pump Station Rehabilitation	177,755	324,000	419,200	0	0	0	\$920,955
8	Foster Way Storm Drain Improvement	51,088	201,100	432,650	0	0	0	\$684,838
9 10	Gerber Creek - Phase 3 Improvement I Street/32nd Street Storm Drain Improvement	1,526,954 124,411	3,179,200 132,100	0	0	0	0	\$4,706,154 \$256,511
11	Kings Way/Verna Way Storm Drain Improvement	170,962	886,750	0	0	0	0	\$1,057,712
12	Miramar Road/Kent Drive Storm Drain Improvement	308,405	413,500	0	0	0	0	\$721,905
13	Rich Hill Drive Storm Drain Improvement	129,269	15,000	418,640	906,660	0	0	\$1,469,569
14	Silver Legends Storm Drain Improvement	6,980	52,300	91,200	0	0	0	\$150,480
15	Storm Drain Improvements - 2021	0	0	89,000	300,000	950,000	0	\$1,339,000
16	Storm Drain Improvements - 2022	0	0	0	89,000	300,000	2,100,000	\$2,489,000
17	Storm Drain Improvements - 2023	0	0	0	0	89,000	1,300,000	\$1,389,000
18	Storm Drain Maintenance & Operations Equipment	75,000	134,000	0	74,000	74,000	0	\$357,000
19	Storm Drain Maintenance & Operations Projects - Various Locations	453,950	460,000	460,000	410,000	340,000	300,000	\$2,423,950
20	Storm Drain Pump Stations Rehabilitation - Phase 5	7,169	50,000	425,000	790,000	0	0	\$1,272,169
21	Storm Drain Pump Stations Rehabilitation - Phase 6	7,169	0	50,000	425,000	790,000	0	\$1,272,169
22	Storm Drain Rehabilitation - Job Order Contracts (JOCs)	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	\$6,000,000
	TOTAL	\$11,255,374	\$8,675,350	\$4,880,740	\$4,889,460	\$4,812,500	\$4,700,000	\$39,213,424

PRIOR-YEAR COMPLETED/CANCELLED PROJECTS SUMMARY

PROJ #	PROJECT	PRIOR YEARS	FISCAL YEAR 2018-19	FISCAL YEAR 2019-20	FISCAL YEAR 2020-21	FISCAL YEAR 2021-22	FISCAL YEAR 2022-23	TOTAL	REASON DROPPED
7	Elder Creek - Phase 4 Improvement	2,653,606	0	0	0	0	0	\$2,653,606	Completed
10	Kenneth Avenue/Vernon Way Storm Drain Improvement	493,564	0	0	0	0	0	\$493,564	Completed
12	Mather Dam Improvement	4,240,510	0	0	0	0	0	\$4,240,510	Completed
16	Storm Drain Improvements - 2020	0	89,000	500,000	2,100,000	0	0		The project was a generic placeholder replaced by specific projects.
	TOTAL	\$7,387,680	\$89,000	\$500,000	\$2,100,000	\$0	\$0	\$10,076,680	

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Channel Lining Rehabilitation – Chicken Ranch Slough

Sacramento, CA 95828

Project #1

Department: Water Resources

Expected Completion Date: 2019

Estimated Project Cost: \$831,053

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



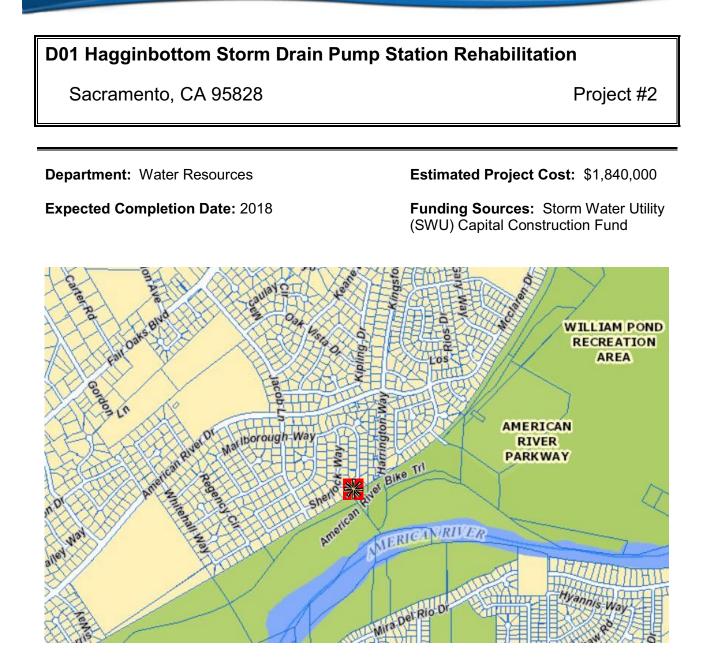
Project Description:

This project will upgrade the channel lining by replacing damaged or missing sections of lining. The upgrades will vary depending upon site-specific issues and will range from isolated repairs to the complete removal and replacement of lining sections. The improvements will correct long-standing maintenance issues.

	Prior	Fiscal Year					
Estimated Project Costs	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	110,000	475,000	0	0	0	585,000
Project Management/ Design (In- House)	51,109	15,000	15,000	0	0	0	81,109
Project Management/ Design (Consultant)	36,194	30,000	10,000	0	0	0	76,194
Construction Fees and Services	0	25,000	63,750	0	0	0	88,750
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	87,303	180,000	563,750	0	0	0	831,053
	Prior	Fiscal Year					
Funding Sources	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	87,303	180,000	563,750	0	0	0	831,053
TOTAL	87,303	180,000	563,750	0	0	0	831,053

Channel Lining Rehabilitation - Chicken Ranch Slough

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.



Project Description:

This project is one of the two projects developed from the Storm Drain Pump Stations Rehabilitation – Phase 3 project. This project will upgrade electrical systems and make minor site improvements to the storm drain pump station. The electrical system upgrades will replace outdated equipment to improve station reliability and decrease maintenance issues. The site improvements will correct long-standing maintenance issues.

	Prior	Fiscal Year					
Estimated Project Costs	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	366,400	1,026,600	0	0	0	0	1,393,000
Project Management/ Design (In- House)	92,575	10,000	0	0	0	0	102,575
Project Management/ Design (Consultant)	136,025	20,000	0	0	0	0	156,025
Construction Fees and Services	45,000	143,400	0	0	0	0	188,400
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	640,000	1,200,000	0	0	0	0	1,840,000
	Prior	Fiscal Year					
Funding Sources	Years Expenses	2018-19 Budget	2019-20 Budget	2020-21 Budget	2021-22 Budget	2022-23 Budget	Total
SWU Capital Construction Fund	640,000	1,200,000	0	0	0	0	1,840,000
TOTAL	640,000	1,200,000	0	0	0	0	1,840,000

D01 Hagginbottom Storm Drain Pump Station Rehabilitation

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.

D05 Howe Avenue Storm Drain Pump Station Rehabilitation

Sacramento, CA 95825

Project #3

Department: Water Resources

Expected Completion Date: 2019

Estimated Project Cost: \$6,462,659

Funding Sources: Storm Water Utility (SWU) Capital Construction Fund & SCWA Zone 11B Fund



Project Description:

This project is the lone project developed from the Storm Drain Pump Stations Rehabilitation – Phase 1 project. This project will increase pumping capacity, upgrade electrical systems, and make minor site improvements to the storm drain pump station. The pumping capacity increase will come from replacing four and rehabilitating three of the 56-year old pump/motor units. The electrical system upgrades will replace outdated equipment to improve station reliability and decrease maintenance issues. The site improvements will correct long-standing maintenance issues.

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Fiscal Year 2021-22 Budget	Fiscal Year 2022-23 Budget	Total
Construction Costs Project Management/ Design (In-	5,153,040	0	0	0	0	0	5,153,040
House) Project Management/ Design	518,638	25,000	0	0	0	0	543,638
(Consultant)	564,177	0	0	0	0	0	564,177
Construction Fees and Services	201,804	. 0	0	0	0	0	201,804
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	6,437,659	25,000	0	0	0	0	6,462,659

D05 Howe Avenue Storm Drain Pump Station Rehabilitation

Funding Sources	Prior Years Expenses	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Fiscal Year 2021-22 Budget	Fiscal Year 2022-23 Budget	Total
SWU Capital Construction Fund	3,054,968	25,000	0	0	0	0	3,079,968
SCWA Zone 11B Fund	3,382,691	0	0	0	0	0	3,382,691
TOTAL	6,437,659	25,000	0	0	0	0	6,462,659

Analysis Done	Analysis Results
Operating budget impact	Project has no measurable impact on the operating budget.
analyzed	

D06 North Mayhew Storm Drain Pump Station Rehabilitation

Sacramento, CA 95828

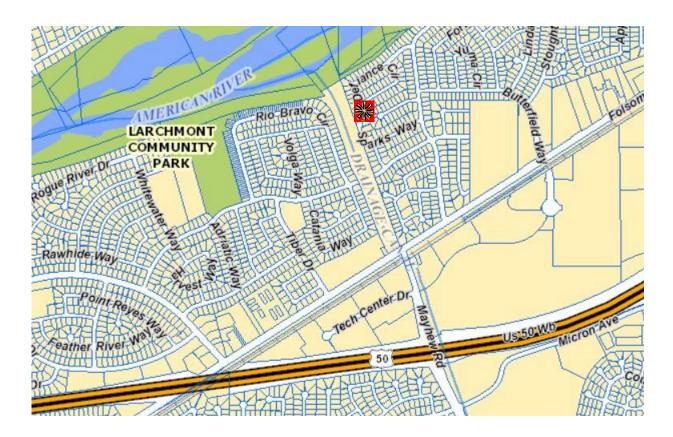
Project #4

Department: Water Resources

Expected Completion Date: 2019

Estimated Project Cost: \$848,500

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



Project Description:

This project is one of the two projects developed from the Storm Drain Pump Stations Rehabilitation – Phase 4 project. This project will upgrade electrical systems and make minor site improvements to the storm drain pump station. The electrical system upgrades will replace outdated equipment to improve station reliability and decrease maintenance issues. The site improvements will correct long-standing maintenance issues.

	Prior	Fiscal Year					
Estimated Project Costs	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	101,200	404,800	0	0	0	506,000
Project Management/ Design (In- House)	10,000	25,000	10,000	0	0	0	45,000
Project Management/ Design (Consultant)	41,300	135,000	20,000	0	0	0	196,300
Construction Fees and Services	0	31,200	70,000	0	0	0	101,200
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	51,300	292,400	504,800	0	0	0	848,500
	Prior	Fiscal Year					
Funding Sources	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	51,300	292,400	504,800	0	0	0	848,500
TOTAL	51,300	292,400	504,800	0	0	0	848,500

D06 North Mayhew Storm Drain Pump Station Rehabilitation

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.

D10 Manlove Storm Drain Pump Station Generator Improvement

Sacramento, CA 95826

Project #5

Department: Water Resources

Estimated Project Cost: \$1,770,000

Expected Completion Date: 2021

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



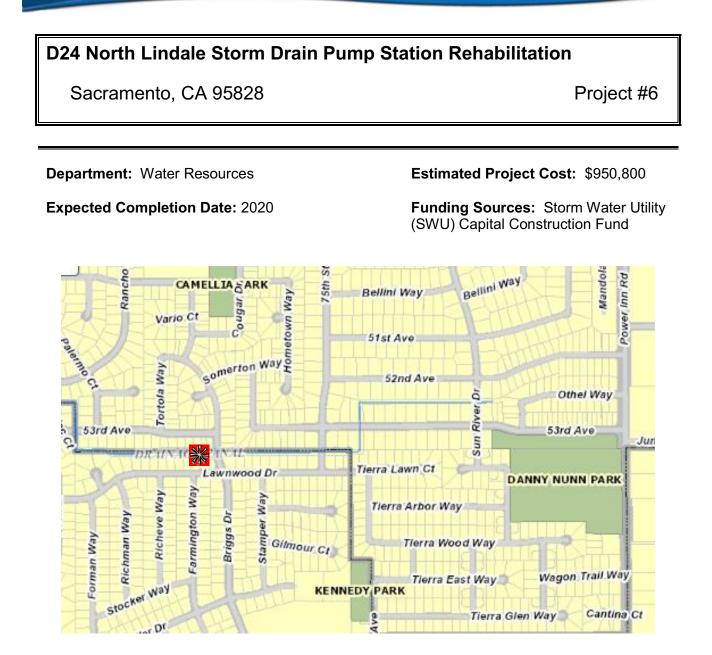
Project Description:

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.

	Prior	Fiscal Year					
Estimated Project Costs	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	0	205,000	1,145,000	0	1,350,000
Project Management/ Design (In- House)	0	0	20,000	37,500	10,000	0	67,500
Project Management/ Design (Consultant)	0	0	80,500	102,000	20,000	0	202,500
Construction Fees and Services	0	0	0	55,500	94,500	0	150,000
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	0	0	100,500	400,000	1,269,500	0	1,770,000
	Prior	Fiscal Year					
Funding Sources	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	0	0	100,500	400,000	1,269,500	0	1,770,000
TOTAL	0	0	100,500	400,000	1,269,500	0	1,770,000

D10 Manlove Storm Drain Pump Station Generator Improvement

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.



Project Description:

This project is one of the two projects developed from the Storm Drain Pump Stations Rehabilitation – Phase 4 project. This project will upgrade electrical systems and make minor site improvements to the storm drain pump station. The electrical system upgrades will replace outdated equipment to improve station reliability and decrease maintenance issues. The site improvements will correct long-standing maintenance issues.

	Prior	Fiscal Year					
Estimated Project Costs	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	242,000	362,800	0	0	604,800
Project Management/ Design (In- House)	0	45,000	30,000	15,000	0	0	90,000
Project Management/ Design (Consultant)	0	85,000	20,000	20,000	0	0	125,000
Construction Fees and Services	0	0	34,000	97,000	0	0	131,000
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	0	130,000	326,000	494,800	0	0	950,800
	Prior	Fiscal Year					
Funding Sources	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	0	130,000	326,000	494,800	0	0	950,800
TOTAL	0	130,000	326,000	494,800	0	0	950,800

D24 North Lindale Storm Drain Pump Station Rehabilitation

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.

D45 Franklin/Morrison Storm Drain Pump Station Rehabilitation

Sacramento, CA 95823

Project #7

Department: Water Resources

Expected Completion Date: 2019

Estimated Project Cost: \$920,955

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



Project Description:

This project is one of the two projects developed from the Storm Drain Pump Stations Rehabilitation – Phase 3 project. This project will upgrade electrical systems and make minor site improvements to the storm drain pump station. The electrical system upgrades will replace outdated equipment to improve station reliability and decrease maintenance issues. The site improvements will correct long-standing maintenance issues.

	Prior	Fiscal Year					
Estimated Project Costs	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	234,000	352,000	0	0	0	586,000
Project Management/ Design (In- House)	73,798	10,000	10,000	0	0	0	93,798
Project Management/ Design (Consultant)	101,871	10,000	10,000	0	0	0	121,871
Construction Fees and Services	2,086	70,000	47,200	0	0	0	119,286
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	177,755	324,000	419,200	0	0	0	920,955
	Prior	Fiscal Year					
Funding Sources	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	177,755	324,000	419,200	0	0	0	920,955
TOTAL	177,755	324,000	419,200	0	0	0	920,955

D45 Franklin/Morrison Storm Drain Pump Station Rehabilitation

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.

Foster Way Storm Drain Improvement

Carmichael, CA 95608

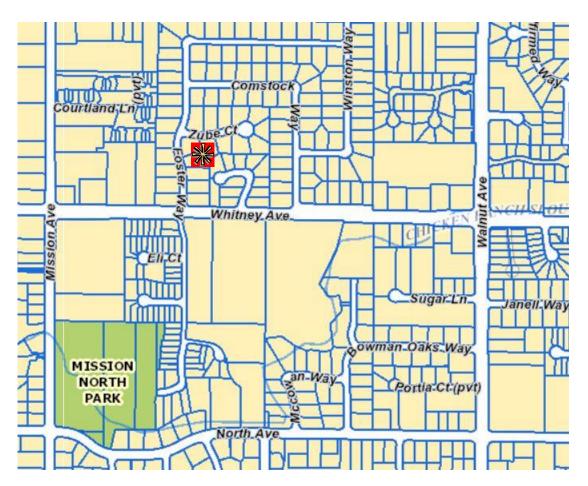
Project #8

Department: Water Resources

Estimated Project Cost: \$684,838

Expected Completion Date: 2019

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



Project Description:

This project will improve drainage on Foster Way, Whitney Avenue, and Zube Court. The storm drain system is comprised of backyard mainlines and gutter drains that easily clog with debris or get overwhelmed due to limited inlet capacity. The project will install larger pipes and inlets to replace the existing smaller drainage facilities.

	Prior	Fiscal Year					
Estimated Project Costs	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	157,500	367,500	0	0	0	525,000
Project Management/ Design (In- House)	51,088	15,000	10,000	0	0	0	76,088
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	28,600	55,150	0	0	0	83,750
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	51,088	201,100	432,650	0	0	0	684,838
	Prior	Fiscal Year					
Funding Sources	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	51,088	201,100	432,650	0	0	0	684,838
TOTAL	51,088	201,100	432,650	0	0	0	684,838

Foster Way Storm Drain Improvement

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.

Gerber Creek – Phase 3 Improvement

Sacramento, CA 95829

Project #9

Department: Water Resources

Expected Completion Date: 2018

Estimated Project Cost: \$4,706,154

Funding Sources: Storm Water Utility (SWU) Capital Construction Fund & SCWA Zone 11A Fund



Project Description:

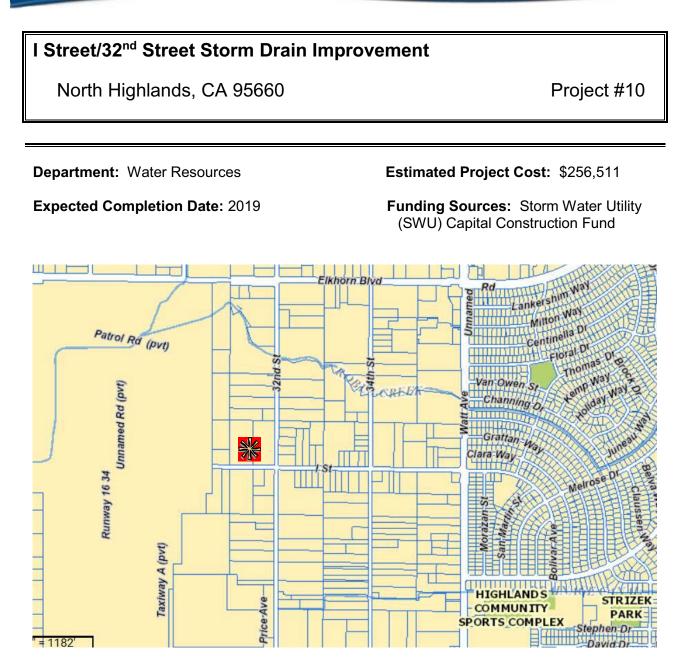
This project will improve the flood protection and natural features of 2,100 linear feet of Upper Gerber Creek south of Gerber Road west of Bradshaw Road. This project was formerly titled "Upper Gerber Creek Improvement".

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Fiscal Year 2021-22 Budget	Fiscal Year 2022-23 Budget	Total
Construction Costs Project Management/ Design (In-	516,000	2,924,000	0	0	0	0	3,440,000
House) Project Management/ Design	363,420	30,000	0	0	0	0	393,420
(Consultant)	49,236	0	0	0	0	0	49,236
Construction Fees and Services	144,198	225,200	0	0	0	0	369,398
Right-of-way/Land Acquisition	454,100	0	0	0	0	0	454,100
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	1,526,954	3,179,200	0	0	0	0	4,706,154

Gerber Creek - Phase 3 Improvement

Funding Sources	Prior Years Expenses	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Fiscal Year 2021-22 Budget	Fiscal Year 2022-23 Budget	Total
SWU Capital Construction Fund	942,252	2,236,948	0	0	0	0	3,179,200
SCWA Zone 11A Fund	584,702	942,252	0	0	0	0	1,526,954
TOTAL	1,526,954	3,179,200	0	0	0	0	4,706,154

Analysis Done	Analysis Results
Operating budget impact	Project has no measurable impact on the operating budget.
analyzed	



Project Description:

This project will improve drainage on I Street and 32nd Street. The storm drain system is comprised of mainlines outside of the street right-of-way and grate-style drain inlets that easily clog with debris or get overwhelmed due to limited inlet capacity. The project will install larger pipes and inlets to replace the existing smaller drainage facilities.

	Prior	Fiscal Year					
Estimated Project Costs	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	42,000	100,000	0	0	0	0	142,000
Project Management/ Design (In- House)	69,011	10,000	0	0	0	0	79,011
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	13,400	22,100	0	0	0	0	35,500
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	124,411	132,100	0	0	0	0	256,511
Funding Sources	Prior Years	Fiscal Year 2018-19	Fiscal Year 2019-20	Fiscal Year 2020-21	Fiscal Year 2021-22	Fiscal Year 2022-23	Total
Funding Sources	Expenses	Budget	Budget	Budget	Budget	Budget	TOLAI
SWU Capital Construction Fund	124,411	132,100	0	0	0	0	256,511
TOTAL	124,411	132,100	0	0	0	0	256,511

I Street/32nd Street Storm Drain Improvement

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.

Kings Way/Verna Way Storm Drain Improvement

Sacramento, CA 95821

Project #11

Department: Water Resources

Estimated Project Cost: \$1,057,712

Expected Completion Date: 2019

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 drainage design standards. The project will install new mainlines and drain inlets on Kings Way, Marilona Drive, Maryal Drive, Lasuen Drive, and Verna Way.

	Prior	Fiscal Year					
Estimated Project Costs	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	735,000	0	0	0	0	735,000
Project Management/ Design (In- House)	170,962	36,500	0	0	0	0	207,462
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	115,250	0	0	0	0	115,250
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	170,962	886,750	0	0	0	0	1,057,712
	Prior	Fiscal Year					
Funding Sources	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	170,962	886,750	0	0	0	0	1,057,712
TOTAL	170,962	886,750	0	0	0	0	1,057,712

Kings Way/Verna Way Storm Drain Improvement

Analysis Done	Analysis Results
Operating budget impact	Project has no measurable impact on the operating budget.
analyzed	

Miramar Road/Kent Drive Storm Drain Improvement

Sacramento, CA 95821

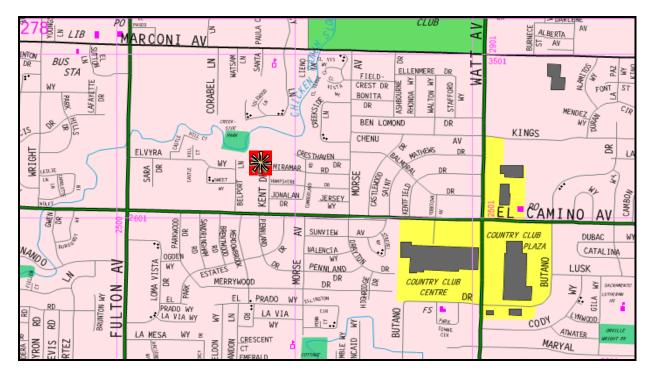
Project #12

Department: Water Resources

Estimated Project Cost: \$721,905

Expected Completion Date: 2018

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



Project Description:

This project will improve drainage on Miramar Road and Kent Drive. This storm drain system is comprised of undersized mainlines with gutter drains and older drain inlets. There has been a history of street and yard flooding as well as cracking in the pipe. The project will install larger pipes and inlets to replace the existing smaller drainage facilities.

	Prior	Fiscal Year					
Estimated Project Costs	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	145,500	348,500	0	0	0	0	494,000
Project Management/ Design (In- House)	137,030	15,000	0	0	0	0	152,030
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	25,875	50,000	0	0	0	0	75,875
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	308,405	413,500	0	0	0	0	721,905
	Prior	Fiscal Year					
Funding Sources	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	308,405	413,500	0	0	0	0	721,905
TOTAL	308,405	413,500	0	0	0	0	721,905

Miramar Road/Kent Drive Storm Drain Improvement

Analysis Done	Analysis Results
Operating budget impact	Project has no measurable impact on the operating budget.
analyzed	

Rich Hill Drive Storm Drain Improvement

Orangevale, CA 95662

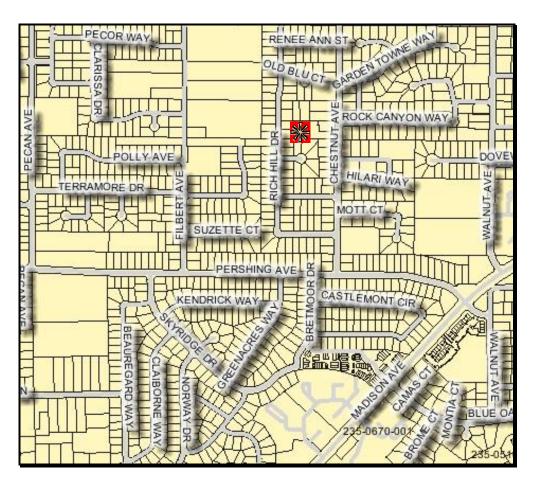
Project #13

Department: Water Resources

Estimated Project Cost: \$1,469,569

Expected Completion Date: 2020

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 drainage design standards. The project will install mainlines and drain inlets on Bobbeck Court, Chestnut Avenue, Filbert Avenue, Mott Court, Pershing Avenue, Rich Hill Drive, Sherrilee Way, and Suzette Court.

Prior	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Expenses	Budget	Budget	Budget	Budget	Budget	
0	0	347,400	810,600	0	0	1,158,000
129,269	15,000	36,500	15,000	0	0	195,769
0	0	0	0	0	0	0
0	0	34,740	81,060	0	0	115,800
0	0	0	0	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	0	0
129,269	15,000	418,640	906,660	0	0	1,469,569
Prior	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Expenses	Budget	Budget	Budget	Budget	Budget	
129,269	15,000	418,640	906,660	0	0	1,469,569
129,269	15,000	418,640	906,660	0	0	1,469,569
	Years Expenses 0 129,269 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Years 2018-19 Expenses Budget 0 0 129,269 15,000 129,269 15,000 0 0 0	Years 2018-19 2019-20 Expenses Budget Budget 0 0 347,400 129,269 15,000 36,500 129,269 15,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 129,269 15,000 418,640 Prior Years 2018-19 Years 2018-19 2019-20 Expenses Budget Budget 129,269 15,000 418,640	Years 2018-19 2019-20 2020-21 Expenses Budget Budget Budget 0 0 347,400 810,600 129,269 15,000 36,500 15,000 0 0 0 0 0 0 0 0 0 0 0 0 34,740 81,060 0 0 0 0 0 0 0 34,740 81,060 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 129,269 15,000 418,640 906,660 Prior Fiscal Year Fiscal Year 2020-21 Years 2018-19 2019-20 2020-21 Expenses Budget Budget Budget 129,269 15,000 418,640 906,660	Years 2018-19 2019-20 2020-21 2021-22 Expenses Budget Budget Budget Budget 0 0 347,400 810,600 0 129,269 15,000 36,500 15,000 0 0 0 0 0 0 0 0 0 36,500 15,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 129,269 15,000 418,640 906,660 0 0 1 Prior Fiscal Year Fiscal Year Z021-22 Z021-22 2021-22 Expenses Budget Budget	Years 2018-19 2019-20 2020-21 2021-22 2022-23 Expenses Budget Budget Budget Budget Budget Budget 0 0 347,400 810,600 0 0 129,269 15,000 36,500 15,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Rich Hill Drive Storm Drain Improvement

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.

Silver Legends Storm Drain Improvement

Sacramento, CA 95829

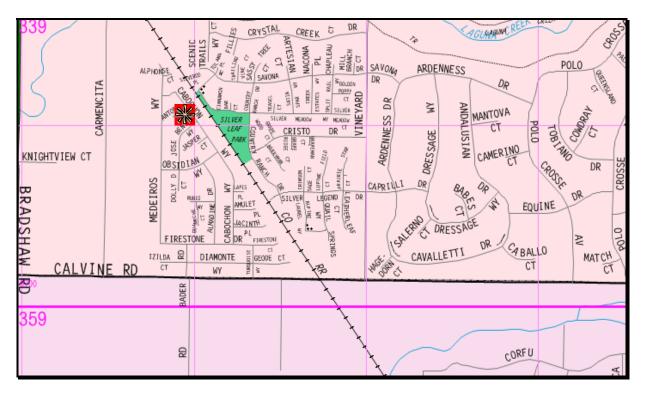
Project #14

Department: Water Resources

Estimated Project Cost: \$150,480

Expected Completion Date: 2019

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.

	Prior	Fiscal Year					
Estimated Project Costs	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	28,800	67,200	0	0	0	96,000
Project Management/ Design (In- House)	6,980	17,500	10,000	0	0	0	34,480
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	6,000	14,000	0	0	0	20,000
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	6,980	52,300	91,200	0	0	0	150,480
	Prior	Fiscal Year					
Funding Sources	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	6,980	52,300	91,200	0	0	0	150,480
TOTAL	6,980	52,300	91,200	0	0	0	150,480

Silver Legends Storm Drain Improvement

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.

Storm Drain Improvements – 2021

Sacramento County

Project #15

Department: Water Resources

Estimated Project Cost: \$1,339,000

Expected Completion Date: 2021

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

Project Description:

This project will upgrade storm drain facilities to alleviate flooding and decrease maintenance issues. This project will upgrade mainlines and drain inlets in one large project or a combination of medium or small projects.

	Prior	Fiscal Year					
Estimated Project Costs	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	0	210,000	665,000	0	875,000
Project Management/ Design (In-							
House)	0	0	89,000	60,000	190,000	0	339,000
Project Management/ Design							
(Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	30,000	95,000	0	125,000
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	0	0	89,000	300,000	950,000	0	1,339,000
	Prior	Fiscal Year					
Funding Sources	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
-	Expenses	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	0	0	89,000	300,000	950,000	-	1,339,000
TOTAL	0	0	89,000	300,000	950,000	0	1,339,000

Storm Drain Improvements - 2021

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.

Storm Drain Improvements – 2022

Sacramento County, CA

Project #16

Department: Water Resources

Estimated Project Cost: \$2,489,000

Expected Completion Date: 2022

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

Project Description:

This project will upgrade storm drain facilities to alleviate flooding and decrease maintenance issues. This project will upgrade mainlines and drain inlets in one large project or a combination of medium or small projects.

	Prior		Fiscal Year		Fiscal Year		T .(.)
Estimated Project Costs	Years Expenses	2018-19 Budget	2019-20 Budget	2020-21 Budget	2021-22 Budget	2022-23 Budget	Total
Construction Costs	0	0	0	0	210,000	1,470,000	1,680,000
Project Management/ Design (In-	0	0	0	00.000	00.000	400.000	500.000
House) Project Management/ Design	0	0	0	89,000	60,000	420,000	569,000
(Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	0	30,000	210,000	240,000
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	0	0	0	89,000	300,000	2,100,000	2,489,000
	Prior	Fiscal Year					
Funding Sources	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	0	0	0	89,000	300,000	2,100,000	2,489,000
TOTAL	0	0	0	89,000	300,000	2,100,000	2,489,000

Storm Drain Improvements - 2022

Analysis Done	Analysis Results
Operating budget impact	Project has no measurable impact on the operating budget.
analyzed	

Storm Drain Improvements – 2023

Sacramento County, CA

Project #17

Department: Water Resources

Estimated Project Cost: \$1,389,000

Expected Completion Date: 2023

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

Project Description:

This project will upgrade storm drain facilities to alleviate flooding and decrease maintenance issues. This project will upgrade mainlines and drain inlets in one large project or a combination of medium or small projects.

	Prior	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Estimated Project Costs	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	0	0	0	0	0	910,000	910,000
Project Management/ Design (In-						,	,
House)	0	0	0	0	89,000	260,000	349,000
Project Management/ Design							
(Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	0	0	130,000	130,000
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	0	0	0	0	89,000	1,300,000	1,389,000
	Prior	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	
Funding Sources	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	0	0	0	0	89,000	1,300,000	1,389,000
TOTAL	0	0	0	0	89,000	1,300,000	1,389,000

Storm Drain Improvements - 2023

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.

Storm Drain Maintenance & Operations EquipmentSacramento CountyProj

Project #18

Department: Water Resources

Estimated Project Cost: \$357,000

Expected Completion Date: on-going

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

Project Description:

This Maintenance & Operations Section purchases equipment required to maintain and operate the drainage system. The equipment ranges from portable pumps and generators to utility trucks and construction equipment such as backhoes and hauling trailers.

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Fiscal Year 2021-22 Budget	Fiscal Year 2022-23 Budget	Total
Construction Costs	0	0	0	0	0	0	0
Project Management/ Design (In-							
House)	0	0	0	0	0	0	0
Project Management/ Design							
(Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	0	0	0	0
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	75,000	134,000	0	74,000	74,000	0	357,000
Other	0	0	0	0	0	0	0
TOTAL	75,000	134,000	0	74,000	74,000	0	357,000
Funding Sources	Prior Years Expenses	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Fiscal Year 2021-22 Budget	Fiscal Year 2022-23 Budget	Total
SWU Capital Construction Fund	75,000	134,000	0	74,000	74,000	-	357,000
TOTAL	75,000	134,000	0	74,000	74,000	0	357,000

Storm Drain Maintenance & Operations Equipment

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.

Storm Drain Maintenance & Operations Projects – Various Locations

Sacramento County

Project #19

Department: Water Resources

Estimated Project Cost: \$2,423,950

Expected Completion Date: on-going

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

Project Description:

This project provides for routine maintenance improvements of deteriorated drainage facilities throughout the system. Specific project locations are determined based on maintenance and engineering section consultations.

	Prior	Fiscal Year					
Estimated Project Costs	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
	Expenses	Budget	Budget	Budget	Budget	Budget	
Construction Costs	453,950	460,000	460,000	410,000	340,000	300,000	2,423,950
Project Management/ Design (In-	,	,	,	,	,		
House)	0	0	0	0	0	0	0
Project Management/ Design							
(Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	0	0	0	0
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	453,950	460,000	460,000	410,000	340,000	300,000	2,423,950
	Prior	Fiscal Year					
Funding Sources	Years	2018-19	2019-20	2020-21	2021-22	2022-23	Total
-	Expenses	Budget	Budget	Budget	Budget	Budget	
SWU Capital Construction Fund	453,950	460,000	460,000	410,000	340000	300000	2,423,950
TOTAL	453,950	460,000	460,000	410,000	340,000	300,000	2,423,950

Storm Drain Maintenance & Operations Projects - Various Locations

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.

Storm Drain Pump Stations Rehabilitation – Phase 5					
Sacramento County	Project #20				
Department: Water Resources	Estimated Project Cost: \$1,272,169				
Expected Completion Date: 2020	Funding Sources: Storm Water Utility (SWU) Capital Construction Fund				

Project Description:

This project will upgrade two storm drain pump stations. This project will upgrade electrical systems and make minor site improvements. The electrical system upgrades will replace outdated equipment to improve station reliability and decrease maintenance difficulties. The minor site improvements will correct long-standing maintenance issues.

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Fiscal Year 2021-22 Budget	Fiscal Year 2022-23 Budget	Total
Construction Costs Project Management/ Design (In-	0	0	300,000	700,000	0	0	1,000,000
House) Project Management/ Design	7,169	20,000	35,000	10,000	0	0	72,169
(Consultant)	0	30,000	60,000	10,000	0	0	100,000
Construction Fees and Services	0	0	30,000	70,000	0	0	100,000
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	7,169	50,000	425,000	790,000	0	0	1,272,169
Funding Sources	Prior Years Expenses	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Fiscal Year 2021-22 Budget	Fiscal Year 2022-23 Budget	Total
SWU Capital Construction Fund	7,169	50,000	425,000	790,000	0	0	1,272,169
TOTAL	7,169	50,000	425,000	790,000	0	0	1,272,169

Storm Drain Pump Stations Rehabilitation - Phase 5

Analysis Done	Analysis Results
Operating budget impact	Project has no measurable impact on the operating budget.
analyzed	

Storm Drain Pump Stations Rehabilitation – Phase 6

Sacramento County

Project #21

Department: Water Resources

Estimated Project Cost: \$1,272,169

Expected Completion Date: 2021

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

Project Description:

This project will upgrade two storm drain pump stations. This project will upgrade electrical systems and make minor site improvements. The electrical system upgrades will replace outdated equipment to improve station reliability and decrease maintenance difficulties. The minor site improvements will correct long-standing maintenance issues.

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Fiscal Year 2021-22 Budget	Fiscal Year 2022-23 Budget	Total
Construction Costs	0	0	0	300,000	700,000	0	1,000,000
Project Management/ Design (In- House)	7,169	0	20,000	35,000	10,000	0	72,169
Project Management/ Design (Consultant)	0	0	30,000	60,000	10,000	0	100,000
Construction Fees and Services	0	0	0	30,000	70,000	0	100,000
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	7,169	0	50,000	425,000	790,000	0	1,272,169
Funding Sources	Prior Years Expenses	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Fiscal Year 2021-22 Budget	Fiscal Year 2022-23 Budget	Total
SWU Capital Construction Fund	7,169	0	50,000	425,000	790,000	0	1,272,169
TOTAL	7,169	0	50,000	425,000	790,000	0	1,272,169

Storm Drain Pump Stations Rehabilitation - Phase 6

Analysis Done	Analysis Results
Operating budget impact	Project has no measurable impact on the operating budget.
analyzed	

Storm Drain Rehabilitation – Job Order Contracts (JOCs)

Sacramento County

Project #22

Department: Water Resources

Estimated Project Cost: \$6,000,000

Expected Completion Date: on-going

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

Project Description:

This project provides for routine rehabilitation of deteriorated drainage facilities throughout the system. Specific project locations are determined based on maintenance and engineering section consultations.

Fiscal Year Fiscal Year Fiscal Year Fiscal Year Fiscal Year Prior **Estimated Project Costs** Years 2018-19 2019-20 2020-21 2021-22 2022-23 Total Expenses Budget Budget Budget Budget Budget Construction Costs 760,000 760,000 760.000 760,000 760,000 760.000 4,560,000 Project Management/ Design (In-House) 60,000 60.000 60.000 60.000 60.000 60.000 360,000 Project Management/ Design (Consultant) 10,000 10,000 10,000 10,000 10,000 10,000 60,000 **Construction Fees and Services** 170000 170,000 170,000 170,000 170,000 170,000 1,020,000 Right-of-way/Land Acquisition 0 0 0 0 0 0 0 Purchase Cost (Equip/Vehicle) 0 0 0 0 0 0 0 Other 0 0 0 0 0 0 0 TOTAL 1,000,000 1,000,000 1,000,000 1,000,000 1,000,000 1,000,000 6,000,000 Prior Fiscal Year Fiscal Year Fiscal Year Fiscal Year **Funding Sources** Years 2018-19 2019-20 2020-21 2021-22 2022-23 Total Expenses Budget Budget Budget Budget Budget SWU Capital Construction Fund 6.000.000 1,000,000 1.000.000 1.000.000 1.000.000 1,000,000 1.000.000 TOTAL 1,000,000 1,000,000 1.000.000 1,000,000 1,000,000 1,000,000 6.000.000

Storm Drain Rehabilitation - Job Order Contracts (JOCs)

Analysis Done	Analysis Results
Operating budget impact analyzed	Project has no measurable impact on the operating budget.