

WATER RESOURCES - WATER SUPPLY

EXECUTIVE SUMMARY

Sacramento County Water Agency (SCWA) constructs water supply improvement projects to serve both newly developing areas and existing customers. This report summarizes those construction projects identified in the Five-Year Capital Improvement Plan (CIP) for the period from Fiscal Year 2016-17 through Fiscal Year 2020-21.

Most of the water construction projects consist of new facilities such as wells, pump stations, transmission mains, and treatment facilities to serve water to the developing portions of the unincorporated County and Cities of Elk Grove and Rancho Cordova. SCWA also constructs projects in support of maintenance activities such as pump replacement, well rehabilitation, and water system retrofits. The estimated capital cost for the 31 projects identified in the 5-Year CIP is **\$122.2 Million**. There are seven projects identified in the Five-Year CIP that either are under construction or will be substantially completed by SCWA in Fiscal Year 2016-17. The following brief descriptions provide examples of the type and magnitude of construction projects undertaken by SCWA.

- **Waterman Road/Grant Line Road Wholesale Water Meter Station** – This project involves the construction of a below grade wholesale water meter station at an existing point of connection between SCWA and Elk Grove Water Service. The location of the proposed meter station is on the new Waterman Road alignment, northwest of its intersection with Grant Line Road. Easements are required for the project. **Estimated Total Cost: \$441,851**
- **Hood Manganese Treatment Facilities** – The township of Hood is served by an older water system that is supplied by two wells. The water from these wells has elevated levels of manganese, which does not raise a health concern, but causes aesthetic challenges for the residents. Even though manganese is not a health issue, the State of California now requires this constituent to be addressed for new water systems and requires existing systems to create a plan to address this issue. The project includes the following facilities: water treatment plant & well improvements, well pumps, backwash tank, sludge tank, chemical storage, 150,000-gallon storage tank, booster pump station, and a control room. **Estimated Total Cost: \$1,023,272**
- **NSA Pipeline – Phase 1** – This project includes the construction of a large diameter potable water transmission main that will convey treated water from the Vineyard Surface Water Treatment Plant (VSWTP) to an existing Raw Water pipeline in Excelsior Road. A 66-inch pipe will be constructed on Florin Road from the VSWTP to Excelsior Road. A 30-inch pipe will be constructed north on Excelsior Road from Florin Road to the existing 30-inch pipeline. Improvements (additional pumps, electrical and instrumentation upgrades, and site improvements) will be made at both the VSWTP and the Anatolia Water Treatment Plant (AWTP) to convey the treated water. The treated water from the VSWTP will be combined with raw water from three existing offsite wells. This combined water will be treated at the AWTP. The project was formerly titled NSA Pipeline – Interim. **Estimated Total Cost: \$10,198,515**

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PROJECT SUMMARY

Projects Not Appearing on Previous 5-Year CIP are Highlighted								
PROJ #	PROJECT	PRIOR YEARS	FISCAL YEAR 2016-17	FISCAL YEAR 2017-18	FISCAL YEAR 2018-19	FISCAL YEAR 2019-20	FISCAL YEAR 2020-21	TOTAL
1	Arden Service Area Water Mains & Meters	100,000	300,000	3,400,000	4,500,000	8,019,473	19,122,843	\$35,442,316
2	Arden Way Well	1,125,993	720,000	0	0	0	0	\$1,845,993
3	Big Horn Water Treatment Plant - Phase 2 - On-site Well/Blend Line/Filter	46,954	0	0	0	1,000,000	0	\$1,046,954
4	East Elk Grove Water Treatment Plant - Phase 4 - Rhone River Well	163,995	668,500	1,212,000	0	0	0	\$2,044,495
5	Fieldstone Well - Drilling	0	0	922,500	0	0	0	\$922,500
6	Freeport Regional Water Authority (FRWA) Facilities Upgrade Projects	0	707,000	500,000	500,000	500,000	300,000	\$2,507,000
7	Hood Manganese Treatment Facilities	473,272	550,000	0	0	0	0	\$1,023,272
8	Land/Easement Purchases - Various Locations	0	60,000	212,745	841,035	55,000	700,000	\$1,868,780
9	Lakeside Water Treatment Plant - Backwash Tank Expansion & Arsenic Filter Media	0	300,000	360,000	0	0	0	\$660,000
10	Mather Tanks Seismic Retrofit	0	50,000	600,000	0	0	0	\$650,000
11	Meter Installation/Inspection Projects - Various Locations	0	325,000	325,000	325,000	325,000	325,000	\$1,625,000
12	Miscellaneous Facilities Maintenance Projects - Various Locations	0	187,945	141,783	145,736	239,808	154,002	\$869,274
13	NSA Pipeline - Phase 1	6,965,215	3,233,300	0	0	0	0	\$10,198,515
14	NSA Pipeline - Phase 2	477,838	800,000	264,199	749,302	2,569,754	1,964,915	\$6,826,008
15	Pipe Replacement Projects - Various Locations	0	300,000	255,000	257,000	260,000	262,000	\$1,334,000
16	Rio Del Oro Storage Tank Property	0	0	0	0	611,000	152,000	\$763,000
17	SCWA Distribution & Operations Equipment	0	393,200	500,000	350,000	125,000	244,900	\$1,613,100
18	SCWA Guidance Plans	0	500,000	400,000	0	320,000	0	\$1,220,000
19	Sheldon Road/East Stockton Boulevard Wholesale Water Meter Station	0	250,000	0	0	0	0	\$250,000
20	Trihalomethanes (THM) Removal Project - Metro Air Park	0	672,358	0	0	0	0	\$672,358
21	TM - Bradshaw Road/Sheldon Road Intersection	0	100,000	899,000	0	0	0	\$999,000
22	TM - Development Projects - Various Locations	0	7,678,192	4,964,017	6,302,840	7,112,866	8,290,075	\$34,347,990
23	TM - Elk Grove-Florin Road - Elder Creek Bridge	15,000	15,000	5,000	240,000	0	0	\$275,000
24	TM - Elk Grove-Florin Road - Florin Road to Elder Creek Bridge	55,000	50,000	1,001,100	0	0	0	\$1,106,100
25	TM - Grant Line Road - New Waterman Road to Mosher Road	0	100,000	370,450	0	0	0	\$470,450
26	TM - Kammerer Road - Big Horn Boulevard to Lent Ranch Parkway	29,200	1,155,000	568,200	0	0	0	\$1,752,400

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PROJECT SUMMARY

PROJ #	PROJECT	PRIOR YEARS	FISCAL YEAR 2016-17	FISCAL YEAR 2017-18	FISCAL YEAR 2018-19	FISCAL YEAR 2019-20	FISCAL YEAR 2020-21	TOTAL
27	TM - Walnut Grove Improvements	0	50,000	500,000	0	0	0	\$550,000
28	Walnut Grove Tank & Booster Pump Improvements	0	200,000	0	0	0	0	\$200,000
29	Waterman Road/Grant Line Road Wholesale Water Meter Station	67,851	374,000	0	0	0	0	\$441,851
30	Water Treatment Plant Maintenance Projects - Various Locations	0	955,000	1,348,000	839,000	1,254,000	388,000	\$4,784,000
31	Water Well Maintenance Projects - Various Locations	0	704,100	907,500	710,900	764,700	768,200	\$3,855,400
	TOTAL	\$9,520,318	\$21,398,595	\$19,656,494	\$15,760,813	\$23,156,601	\$32,671,935	\$122,164,756

WATER RESOURCES - WATER SUPPLY

PRIOR-YEAR COMPLETED/CANCELLED PROJECTS SUMMARY

PROJ #	PROJECT	PRIOR YEARS	FISCAL YEAR 2016-17	FISCAL YEAR 2017-18	FISCAL YEAR 2018-19	FISCAL YEAR 2019-20	FISCAL YEAR 2020-21	TOTAL	REASON DROPPED
1	Arden Park Water Main	2,112,295	0	0	0	0	0	\$2,112,295	Completed
3	Big Horn Well #3 - Drilling	116,202	73,500	806,500	0	0	0	\$996,202	Revised project schedule. Project is scheduled beyond Fiscal
4	Big Horn Well #6 - Drilling	30,411	0	100,000	800,000	0	0	\$930,411	Revised project schedule. Project is scheduled beyond Fiscal
7	Elk Grove-Florin Road Wholesale Water Meter Station	718,433	0	0	0	0	0	\$718,433	Completed
8	Grant Line Road - UPRR Grade Separation	1,258,880	83,000	83,000	83,000	0	0	\$1,507,880	Completed
10	Kammerer Road/Promenade Parkway Flow Control Station	82,907	0	0	0	0	0	\$82,907	Cancelled
13	Sheldon Road/Highway 99 Flow Control Station	64,177	153,500	0	0	0	0	\$217,677	Cancelled
14	Sunrise Boulevard/Douglas Road Pressure Reducing Valve Stations	229,390	0	0	0	0	0	\$229,390	Cancelled
15	TM - Sheldon Road/Waterman Road Intersection	0	550,000	0	0	0	0	\$550,000	Revised project schedule. Project is scheduled beyond Fiscal
19	Walgreens Well	20,000	0	0	0	0	0	\$20,000	Revised project schedule. Project is scheduled beyond Fiscal
	TOTAL	\$4,632,695	\$860,000	\$989,500	\$883,000	\$0	\$0	\$7,365,195	

Arden Service Area Water Mains & Meters

Sacramento, CA 95825 & 95864

Project #1

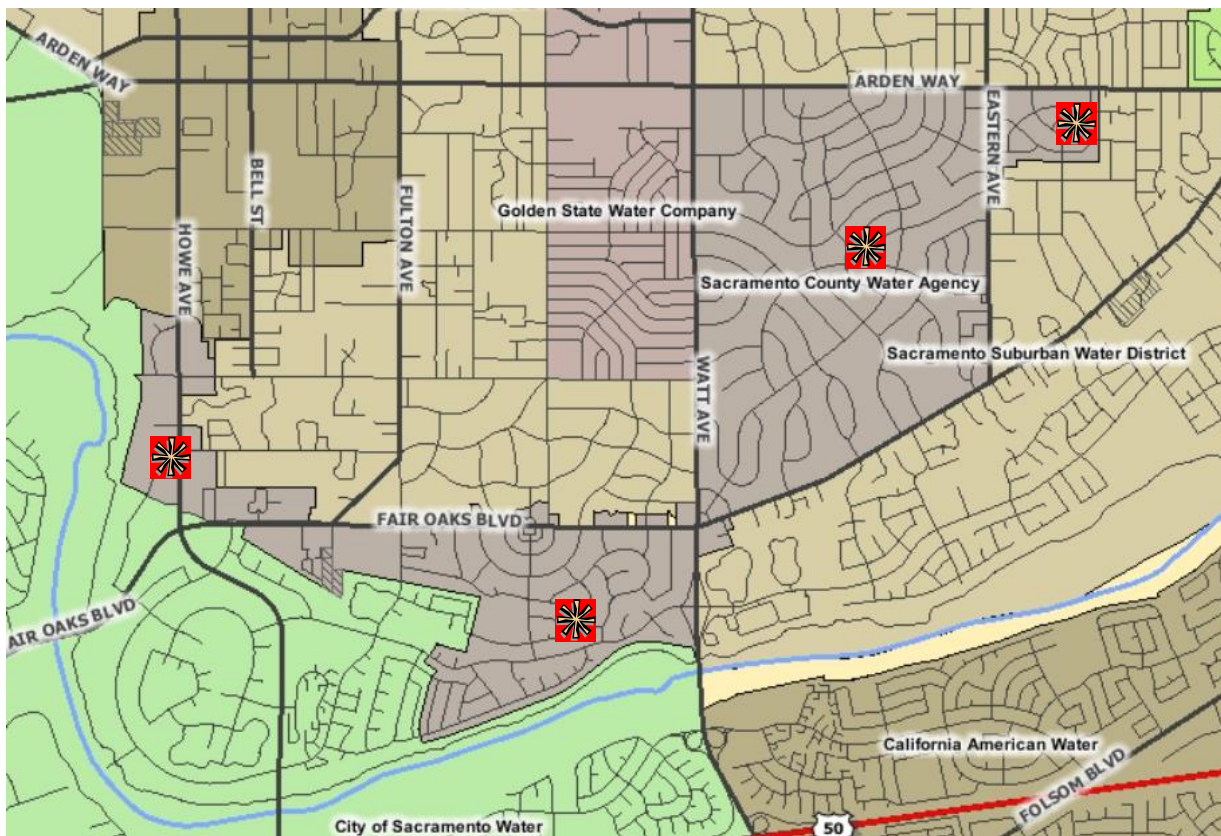
Department: Water Resources (SCWA)

Est. Cost during 5 YR CIP: \$35,442,316

Estimated Total Project Cost: \$75 million

Expected Completion Date: 2023

Funding Sources: SCWA Zone 41



Project Description:

The Arden Service Area was constructed between 1929 and 1970. The system consists of 2-inch to 8-inch pipes that are undersized compared to current standards, significantly aged, and their useful life can no longer be extended by means of short-term repairs. Many of the distribution pipes are located in the backyards rather than in the street right-of-way, which makes routine maintenance challenging. SCWA is required by California Water Code Section 527 to install meters in this area by January 1, 2025. Additionally the California Department of Public Health has required SCWA to submit a plan for the replacement of the smaller distribution pipes within this system.

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The project will upgrade the water distribution system by installing larger pipes to increase system capacity and reliability and meters for all service connections. The project covers the entire service area shown in grey shading in the project map above. The project is scheduled for construction from 2017 and 2023.

Arden Service Area Water Mains & Meters

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	0	3,050,140	4,036,950	7,194,270	17,155,103	31,436,463
Project Management/ Design (In-House)	30,000	90,000	35,020	46,350	82,600	196,965	480,935
Project Management/ Design (Consultant)	70,000	210,000	81,600	108,000	192,467	458,948	1,121,015
Services	0	0	233,240	308,700	550,136	1,311,827	2,403,903
Right-of-way/Land Acquisition (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	100,000	300,000	3,400,000	4,500,000	8,019,473	19,122,843	35,442,316

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	100,000	300,000	3,400,000	4,500,000	8,019,473	19,122,843	35,442,316
TOTAL	100,000	300,000	3,400,000	4,500,000	8,019,473	19,122,843	35,442,316

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

Arden Way Well

Sacramento, CA 95864

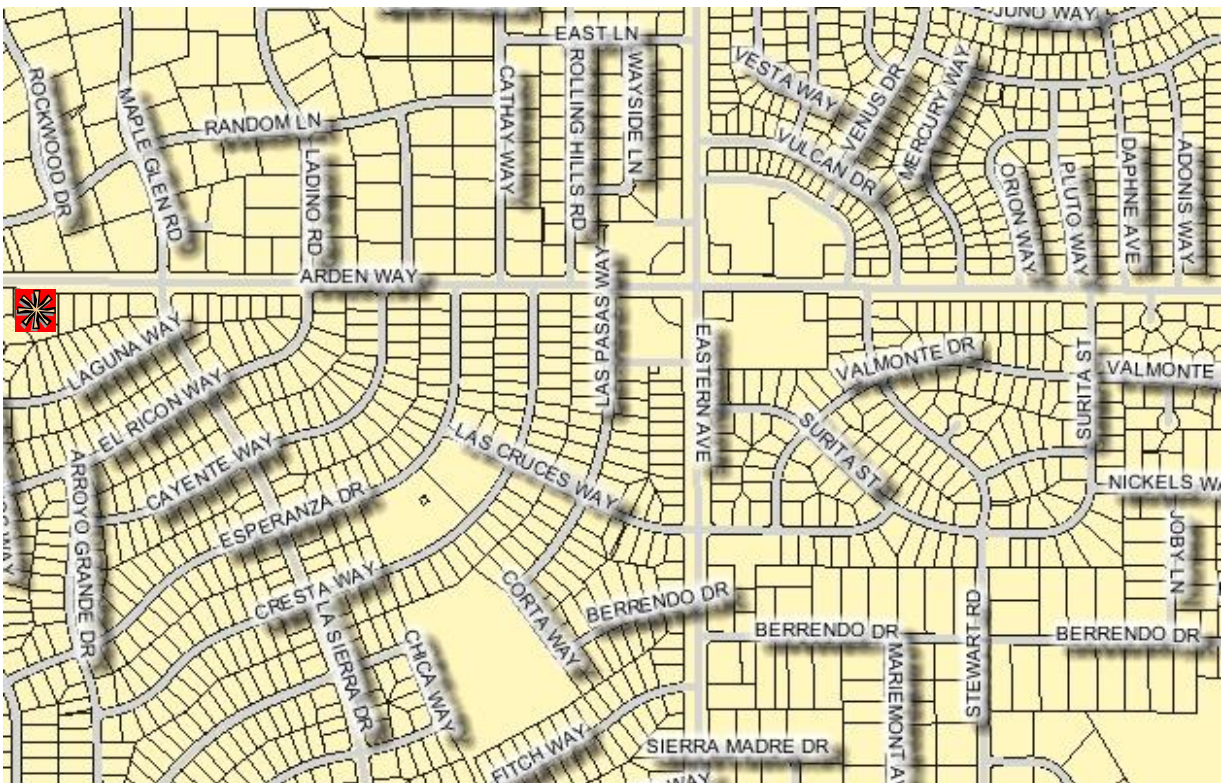
Project #2

Department: Water Resources (SCWA)

Estimated Project Cost: \$1,845,993

Expected Completion Date: 2017

Funding Sources: SCWA Zone 41



Project Description:

The Arden Park Vista service area was constructed beginning in the post WWII 1940's. The northeastern tip of the service area, located east of Eastern Boulevard and south of Arden Way, consists of the Stewart Well which is located on Stewart Road. In the spring of 2011 the Stewart Well failed requiring major rehabilitation. During the assessment of the well, it was found the geology had changed and the well can only safely produce about 1/3 the original capacity. The Arden Way Well will bridge the production gap between the previous and current capacity of the Stewart Well.

The Arden Way Well project will include the construction of a domestic potable water well, chemical feed system, electrical panels, SCADA system, and distribution main pipe connecting the well to the existing distribution system.

WATER RESOURCES - WATER SUPPLY

Arden Way Well

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	441,000	620,000	0	0	0	0	1,061,000
Project Management/ Design (In-House)	134,671	20,000	0	0	0	0	154,671
Project Management/ Design (Consultant)	204,000	30,000	0	0	0	0	234,000
Construction Fees and Services	34,000	50,000	0	0	0	0	84,000
Right-of-way/Land Acquisition	308,104	0	0	0	0	0	308,104
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	4,218	0	0	0	0	0	4,218
TOTAL	1,125,993	720,000	0	0	0	0	1,845,993

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	1,125,993	720,000	0	0	0	0	1,845,993
TOTAL	1,125,993	720,000	0	0	0	0	1,845,993

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

Big Horn Water Treatment Plant - Phase 2 – On-site Well/Blend Line/Filter

Elk Grove, CA 95758

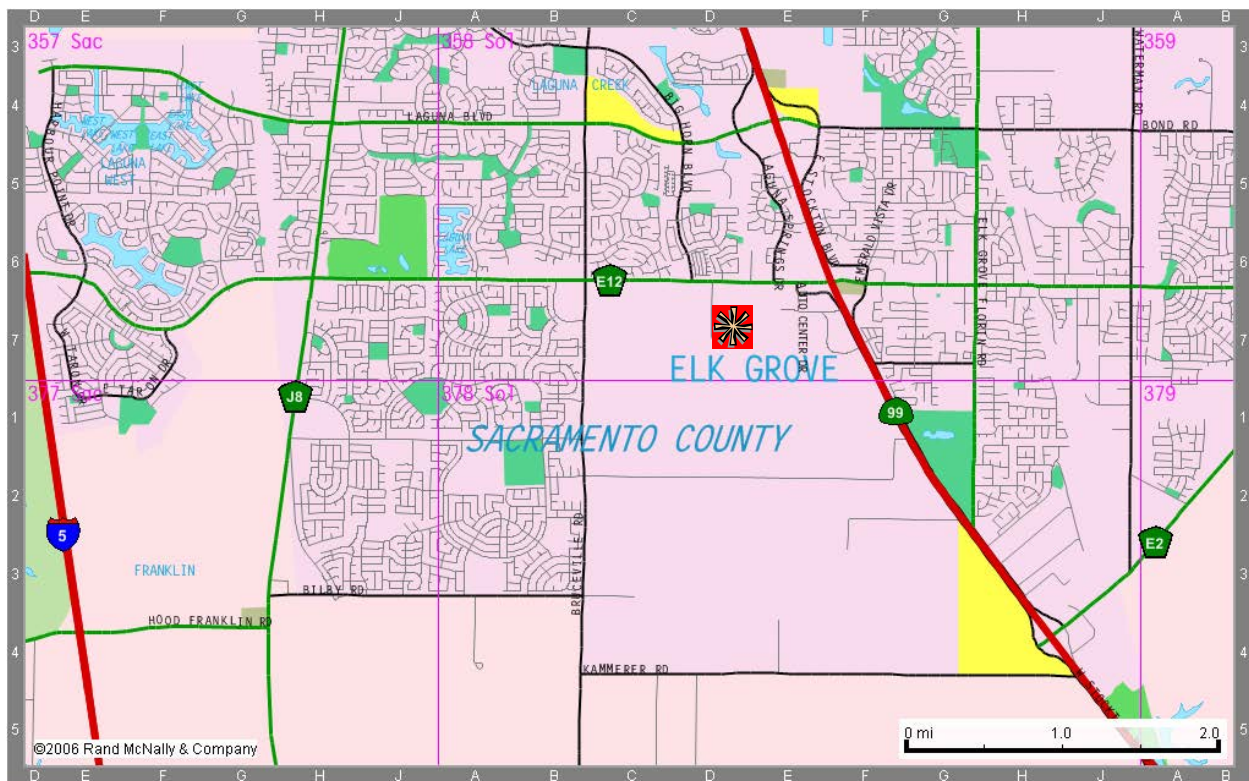
Project #3

Department: Water Resources (SCWA)

Estimated Project Cost: \$1,046,954

Expected Completion Date: 2020

Funding Sources: SCWA Zone 40



Project Description:

This project will increase water production capacity in the South Service Area (SSA) of Zone 40 and help replace capacity lost due to closure of wells with arsenic levels above the Maximum Contaminant Level. It will include equipping the Big Horn On-Site Well (#1) and constructing a “blend-line” feature on the existing filter system. The blend-line allows the operation of an additional supply well without added treatment. The additional water supply bypasses the filter system and is blended with the water that is filtered. This is not a typical operational mode, but can be used if water storage levels are drawn below normal levels. An additional filter will be installed with this project as well.

WATER RESOURCES - WATER SUPPLY

Big Horn Water Treatment Plant - Phase 2 - On-site Well/Blend Line/Filter

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	4,931	0	0	0	780,000	0	784,931
Project Management/ Design (In-House)	20,786	0	0	0	99,000	0	119,786
Project Management/ Design (Consultant)	15,775	0	0	0	37,000	0	52,775
Construction Fees and Services	0	0	0	0	84,000	0	84,000
Right-of-way/Land Acquisition	5,462	0	0	0	0	0	5,462
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	46,954	0	0	0	1,000,000	0	1,046,954

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	46,954	0	0	0	1,000,000	0	1,046,954
TOTAL	46,954	0	0	0	1,000,000	0	1,046,954

Project Analysis:

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

East Elk Grove Water Treatment Plant - Phase 4 – Rhone River Well

Elk Grove, CA 95758

Project #4

Department: Water Resources (SCWA)

Estimated Project Cost: \$2,044,495

Expected Completion Date: 2017

Funding Sources: SCWA Zone 40



Project Description:

This project will increase water production capacity in the South Service Area (SSA) of Zone 40. It will include equipping the Rhone River Well, constructing water pipe to connect the new well site to the East Elk Grove Water Treatment Plant, and on-site improvements to the treatment plant.

WATER RESOURCES - WATER SUPPLY

East Elk Grove Water Treatment Plant - Phase 4 - Rhone River Well

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	455,000	1,062,000	0	0	0	1,517,000
Project Management/ Design (In-House)	108,995	143,500	30,000	0	0	0	282,495
Project Management/ Design (Consultant)	20,000	20,000	10,000	0	0	0	50,000
Construction Fees and Services	35,000	50,000	110,000	0	0	0	195,000
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	163,995	668,500	1,212,000	0	0	0	2,044,495

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	163,995	668,500	1,212,000	0	0	0	2,044,495
TOTAL	163,995	668,500	1,212,000	0	0	0	2,044,495

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

Fieldstone Well - Drilling

Elk Grove, CA 95624

Project #5

Department: Water Resources (SCWA)

Estimated Project Cost: \$922,500

Expected Completion Date: 2018

Funding Sources: SCWA Zone 40



Project Description:

This project will provide another source of supply for the East Elk Grove Water Treatment Plant. The well drilling is expected to be completed in spring 2018. Equipping of the well will occur in the future when demand reaches a level making the supply from the well necessary.

WATER RESOURCES - WATER SUPPLY

Fieldstone Well - Drilling

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	0	750,000	0	0	0	750,000
Project Management/ Design (In-House)	0	0	40,000	0	0	0	40,000
Project Management/ Design (Consultant)	0	0	92,500	0	0	0	92,500
Construction Fees and Services	0	0	40,000	0	0	0	40,000
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	922,500	0	0	0	922,500

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	0	0	922,500	0	0	0	922,500
TOTAL	0	0	922,500	0	0	0	922,500

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

Freeport Regional Water Authority (FRWA) Facilities Upgrade Projects

Sacramento County

Project #6

Department: Water Resources (SCWA)

Estimated Project Cost: \$2,507,000

Expected Completion Date: On-going

Funding Sources: SCWA Zone 41 & East Bay Municipal Utility District (EBMUD)

Project Description:

This project provides for routine facility upgrades for FRWA facilities. Specific projects are determined based on maintenance and engineering section consultations.

Freeport Regional Water Authority (FRWA) Facilities Upgrade Projects

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	600,950	425,000	425,000	425,000	255,000	2,130,950
Project Management/ Design (In-House)	0	106,050	75,000	75,000	75,000	45,000	376,050
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	0	707,000	500,000	500,000	500,000	300,000	2,507,000

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	0	325,220	230,000	230,000	230,000	138,000	1,153,220
EBMUD	0	381,780	270,000	270,000	270,000	162,000	1,353,780
TOTAL	0	707,000	500,000	500,000	500,000	300,000	2,507,000

Project Analysis:

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

Hood Manganese Treatment Facilities

Hood, CA 95639

Project #7

Department: Water Resources (SCWA)

Estimated Project Cost: \$1,023,272

Expected Completion Date: 2016

Funding Sources: SCWA Zone 41



Project Description:

The township of Hood is served by an older water system that is supplied by two wells. The water from these wells has elevated levels of manganese, which does not raise a health concern, but causes aesthetic challenges for the residents. Even though manganese is not a health issue, the State of California now requires this constituent to be addressed for new water systems and requires existing systems to create a plan to address this issue.

Project includes:

- Water Treatment Plant & Well improvements
- Well Pumps
- Backwash Tank
- Sludge Tank
- Chemical Storage
- 150,000 Gallon Storage Tank
- Booster Pump Station
- Control Room

WATER RESOURCES - WATER SUPPLY

Hood Manganese Treatment Facilities

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	76,780	440,000	0	0	0	0	516,780
Project Management/ Design (In-House)	274,384	44,000	0	0	0	0	318,384
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	66,000	0	0	0	0	66,000
Right-of-way/Land Acquisition	121,738	0	0	0	0	0	121,738
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	370	0	0	0	0	0	370
TOTAL	473,272	550,000	0	0	0	0	1,023,272

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	473,272	550,000	0	0	0	0	1,023,272
TOTAL	473,272	550,000	0	0	0	0	1,023,272

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

Land/Easement Purchases – Various Locations

Sacramento County

Project #8

Department: Water Resources (SCWA)

Estimated Project Cost: \$1,868,780

Expected Completion Date: On-going

Funding Sources: SCWA Zones 40 & 41

Project Description:

The purchase of property or an easement is the first phase of projects outside of the public right-of-way. Site improvements will be constructed in the future when demand reaches a level making the facility necessary.

Land/Easement Purchases - Various Locations

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	0	0	0	0	0	0
Project Management/ Design (In-House)	0	1,200	4,255	16,821	1,100	14,000	37,376
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	58,800	208,490	824,214	53,900	686,000	1,831,404
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	0	60,000	212,745	841,035	55,000	700,000	1,868,780

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	0	60,000	212,745	141,035	55,000	0	468,780
SCWA Zone 41	0	0	0	700,000	0	700,000	1,400,000
TOTAL	0	60,000	212,745	841,035	55,000	700,000	1,868,780

Project Analysis:

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

Lakeside Water Treatment Plant – Backwash Tank Expansion & Arsenic Filter Media

Elk Grove, CA 95758

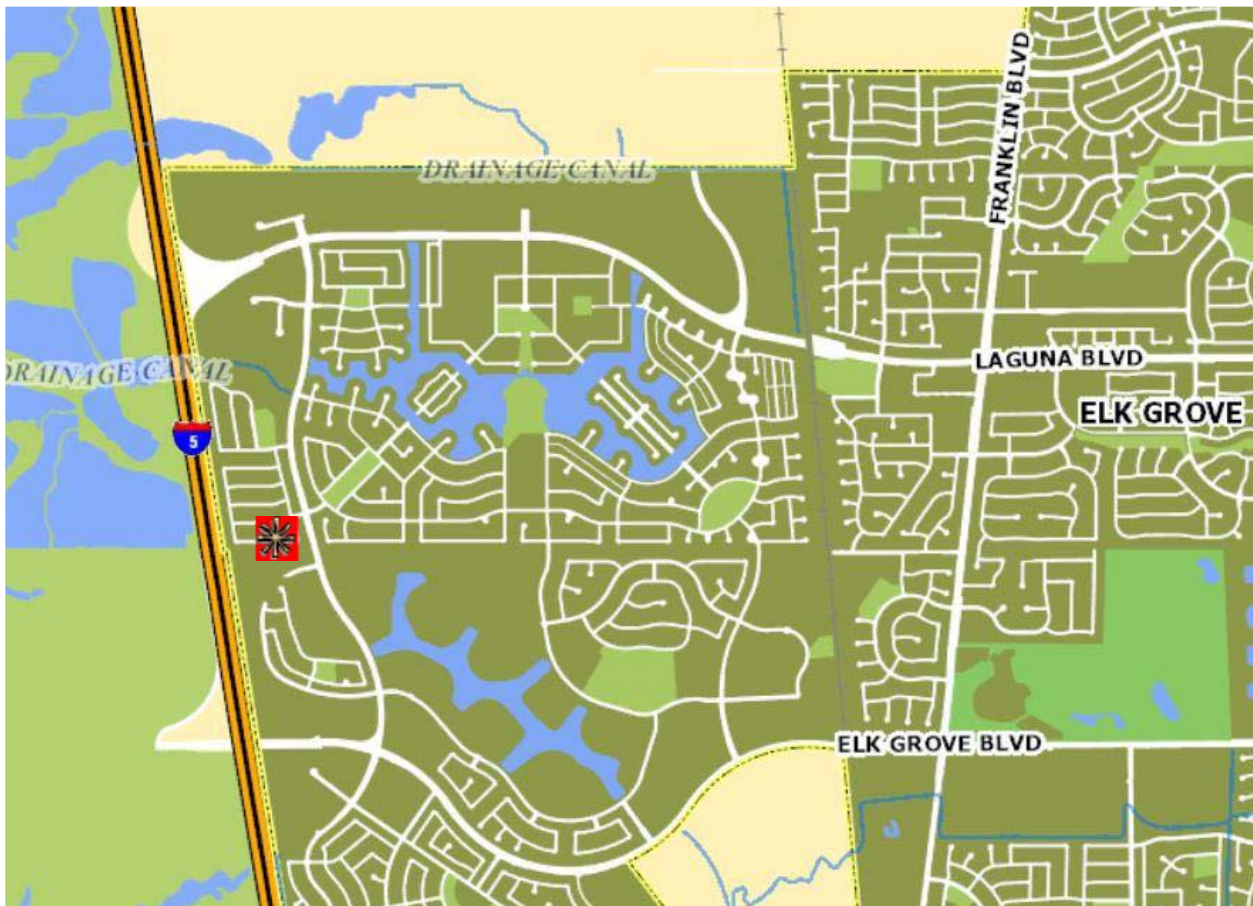
Project #9

Department: Water Resources (SCWA)

Estimated Project Cost: \$660,000

Expected Completion Date: 2018

Funding Sources: SCWA Zone 41



Project Description:

This project provides for the expansion of the backwash tank facilities and changing the arsenic removal media.

WATER RESOURCES - WATER SUPPLY

Lakeside Water Treatment Plant - Backwash Tank Expansion & Arsenic Filter Media

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	240,000	288,000	0	0	0	528,000
Project Management/ Design (In-House)	0	12,000	14,400	0	0	0	26,400
Project Management/ Design (Consultant)	0	18,000	21,600	0	0	0	39,600
Construction Fees and Services	0	30,000	36,000	0	0	0	66,000
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	300,000	360,000	0	0	0	660,000

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	0	300,000	360,000	0	0	0	660,000
TOTAL	0	300,000	360,000	0	0	0	660,000

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

Mather Tanks Seismic Retrofit

Mather, CA 95655

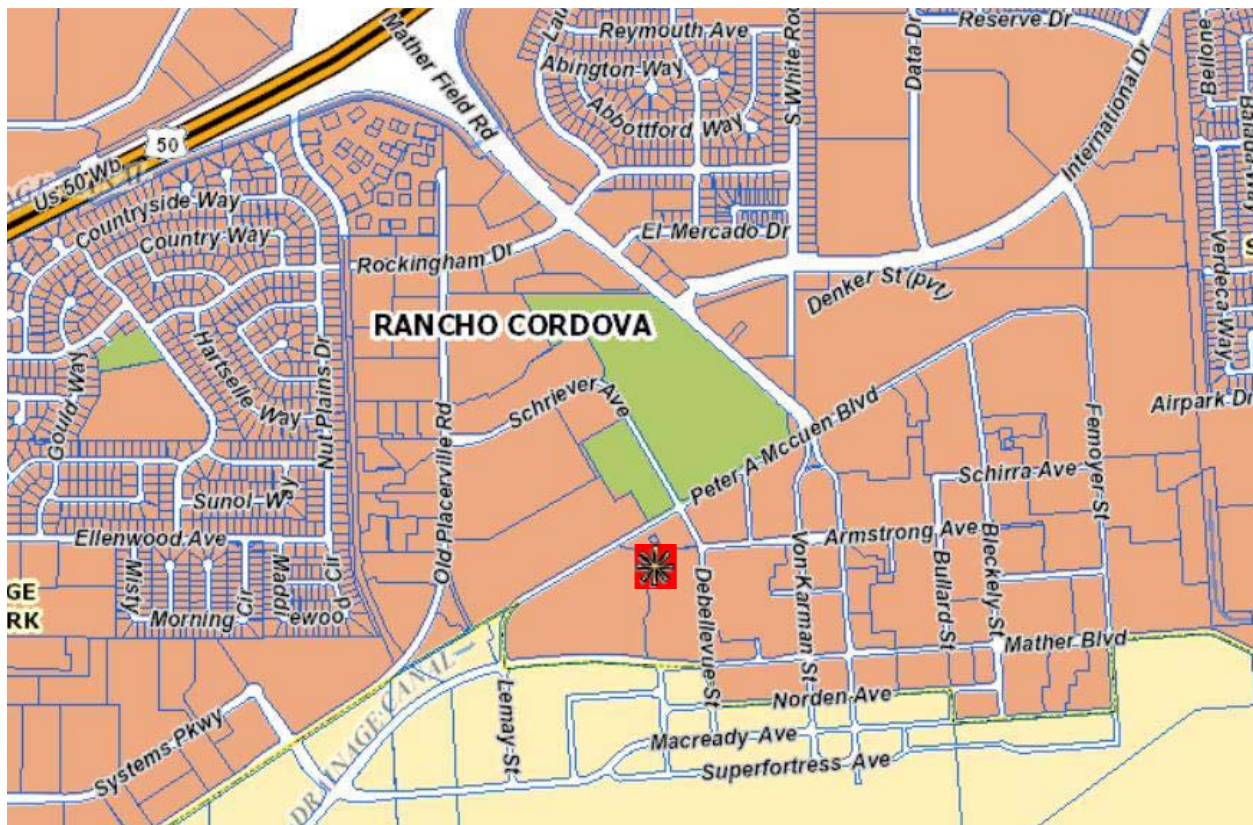
Project #10

Department: Water Resources (SCWA)

Estimated Project Cost: \$650,000

Expected Completion Date: 2018

Funding Sources: SCWA Zone 41



Project Description:

This project provides for seismic retrofit of storage tanks in the Mather Field service area.

WATER RESOURCES - WATER SUPPLY

Mather Tanks Seismic Retrofit

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	40,000	480,000	0	0	0	520,000
Project Management/ Design (In-House)	0	2,000	24,000	0	0	0	26,000
Project Management/ Design (Consultant)	0	3,000	36,000	0	0	0	39,000
Construction Fees and Services	0	5,000	60,000	0	0	0	65,000
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	50,000	600,000	0	0	0	650,000

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	0	50,000	600,000	0	0	0	650,000
TOTAL	0	50,000	600,000	0	0	0	650,000

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

Meter Installation/Inspection Projects – Various Locations

Sacramento County

Project #11

Department: Water Resources (SCWA)

Estimated Project Cost: \$1,625,000

Expected Completion Date: On-going

Funding Sources: SCWA Zone 41

Project Description:

This project provides for routine installation and inspection of water meters throughout the system. Specific project locations are determined based on maintenance and engineering section consultations.

Meter Installation/Inspection Projects - Various Locations

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	292,500	292,500	292,500	292,500	292,500	1,462,500
Project Management/ Design (In-House)	0	32,500	32,500	32,500	32,500	32,500	162,500
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	0	325,000	325,000	325,000	325,000	325,000	1,625,000

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	0	325,000	325,000	325,000	325,000	325,000	1,625,000
TOTAL	0	325,000	325,000	325,000	325,000	325,000	1,625,000

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

Miscellaneous Facilities Maintenance Projects – Various Locations

Sacramento County

Project #12

Department: Water Resources (SCWA)

Estimated Project Cost: \$869,274

Expected Completion Date: On-going

Funding Sources: SCWA Zones 41 & 50

Project Description:

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

Miscellaneous Facilities Maintenance Projects - Various Locations

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	169,151	127,605	131,162	215,827	138,602	782,347
Project Management/ Design (In-House)	0	18,795	14,178	14,574	23,981	15,400	86,927
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	0	187,945	141,783	145,736	239,808	154,002	869,274

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	0	137,945	141,783	145,736	239,808	154,002	819,274
SCWA Zone 50	0	50,000	0	0	0	0	50,000
TOTAL	0	187,945	141,783	145,736	239,808	154,002	869,274

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

NSA Pipeline – Phase 1

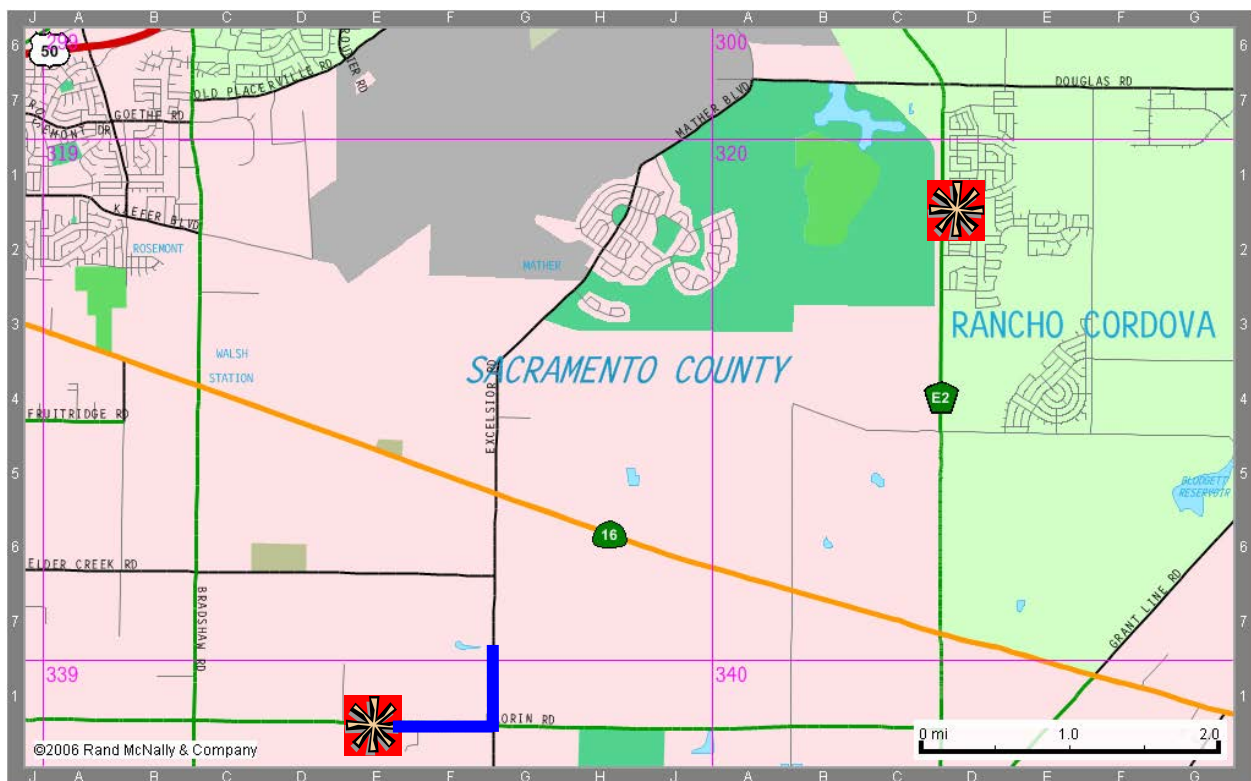
Sacramento, CA 95829, 95830; Rancho Cordova, CA 95742 Project #13

Department: Water Resources (SCWA)

Estimated Total Project Cost: \$10,198,515

Expected Completion Date: 2016

Funding Sources: SCWA Zone 40



Project Description:

This project includes the construction of a large diameter potable water transmission main that will convey treated water from the Vineyard Surface Water Treatment Plant (VSWTP) to an existing Raw Water pipeline in Excelsior Road. A 66-inch pipe will be constructed on Florin Road from the VSWTP to Excelsior Road. A 30-inch pipe will be constructed north on Excelsior Road from Florin Road to the existing 30-inch pipeline. Improvements (additional pumps, electrical and instrumentation upgrades, and site improvements) will be made at both the VSWTP and the Anatolia Water Treatment Plant (AWTP) to convey the treated water. The treated water from the VSWTP will be combined with raw water from three existing offsite wells. This combined water will be treated at the AWTP. The project was formerly titled NSA Pipeline – Interim.

WATER RESOURCES - WATER SUPPLY

NSA Pipeline - Phase 1

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	5,100,000	2,808,300	0	0	0	0	7,908,300
Project Management/ Design (In-House)	578,550	125,000	0	0	0	0	703,550
Project Management/ Design (Consultant)	580,000	0	0	0	0	0	580,000
Construction Fees and Services	181,820	300,000	0	0	0	0	481,820
Right-of-way/Land Acquisition	0	0	0	0	0	0	0
Purchase Cost (Equip/Vehicle)	280,000	0	0	0	0	0	280,000
Other	244,845	0	0	0	0	0	244,845
TOTAL	6,965,215	3,233,300	0	0	0	0	10,198,515

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	6,965,215	3,233,300	0	0	0	0	10,198,515
TOTAL	6,965,215	3,233,300	0	0	0	0	10,198,515

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

NSA Pipeline – Phase 2

Sacramento, CA 95829, 95830, 95655, 95742

Project #14

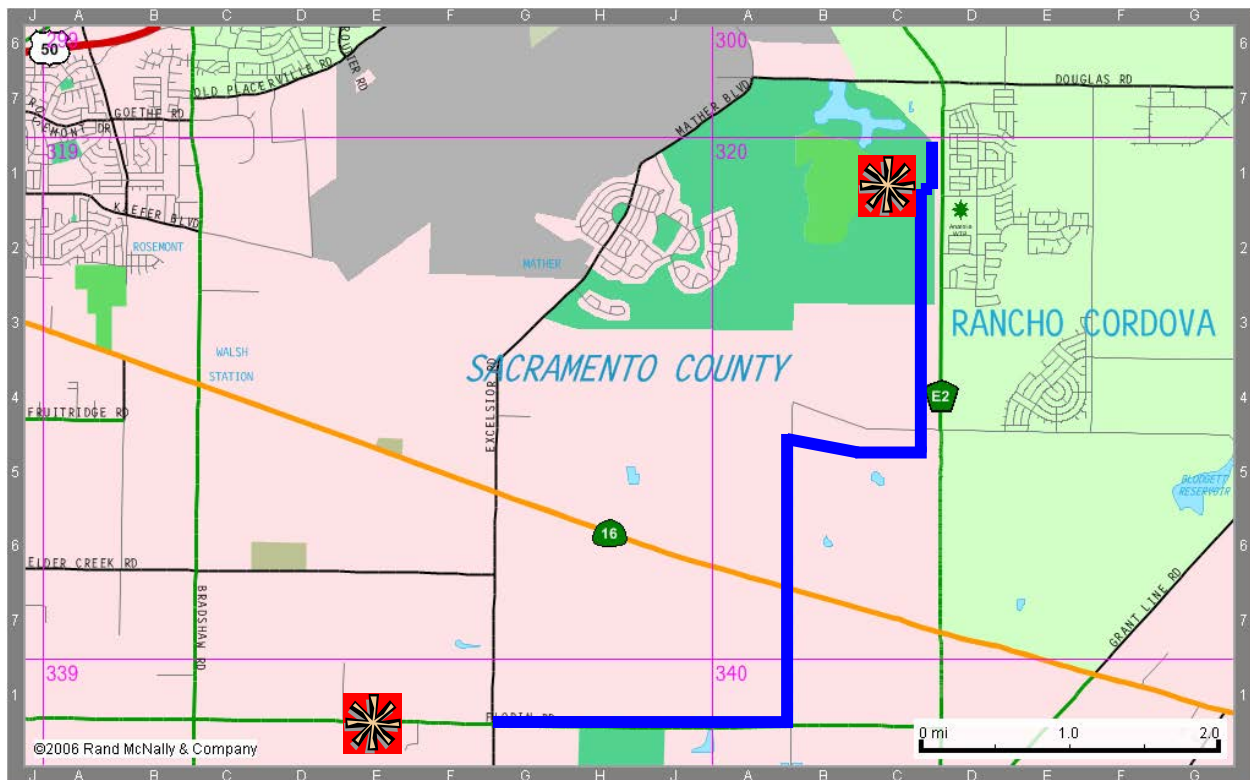
Department: Water Resources (SCWA)

Est. Cost during 5 YR CIP: \$6,826,008

Estimated Total Project Cost: \$86.0 million

Expected Completion Date: 2025

Funding Sources: SCWA Zone 40



Project Description:

This project includes the construction of a large diameter potable water transmission main that will convey water from the Vineyard Surface Water Treatment plant to the North Service Area (NSA) of Zone 40. The pipeline will range in size from 66-inch at the connection to the NSA Pipeline – Phase 1 project to 42-inch at the NSA point of connection at Sunrise Boulevard and Douglas Road. The total length of the pipeline is approximately 8 miles. The project also includes a utility bridge structure that will carry treated water from the booster station across the Folsom South Canal as well as a terminal tank and booster pump station with 10 million gallons of storage. A CEQA document was approved for the project in 2010; however, it is anticipated that the CEQA document will need to be updated due to the long lapse of inactivity.

WATER RESOURCES - WATER SUPPLY

Construction is tentatively scheduled from 2022 to 2025. The project was formerly titled NSA Pipeline – Phase 1.

NSA Pipeline - Phase 2

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	17,316	0	206,522	527,881	1,909,196	1,484,252	4,145,167
Project Management/ Design (In-House)	412,479	0	10,635	26,467	97,034	75,796	622,411
Project Management/ Design (Consultant)	45,108	0	21,684	47,745	187,175	148,974	450,686
Construction Fees and Services	2,236	0	25,358	56,110	218,753	174,588	477,045
Right-of-way/Land Acquisition	0	800,000	0	91,099	157,596	81,305	1,130,000
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	699	0	0	0	0	0	699
TOTAL	477,838	800,000	264,199	749,302	2,569,754	1,964,915	6,826,008

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	477,838	800,000	264,199	749,302	2,569,754	1,964,915	6,826,008
TOTAL	477,838	800,000	264,199	749,302	2,569,754	1,964,915	6,826,008

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

Pipe Replacement Projects – Various Locations

Sacramento County

Project #15

Department: Water Resources (SCWA)

Estimated Project Cost: \$1,334,000

Expected Completion Date: On-going

Funding Sources: SCWA Zone 41

Project Description:

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

Pipe Replacement Projects - Various Locations

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	270,000	229,500	231,300	234,000	235,800	1,200,600
Project Management/ Design (In-House)	0	30,000	25,500	25,700	26,000	26,200	133,400
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	0	300,000	255,000	257,000	260,000	262,000	1,334,000

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	0	300,000	255,000	257,000	260,000	262,000	1,334,000
TOTAL	0	300,000	255,000	257,000	260,000	262,000	1,334,000

Project Analysis:

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

Rio Del Oro Storage Tank Property

Rancho Cordova, CA 95742

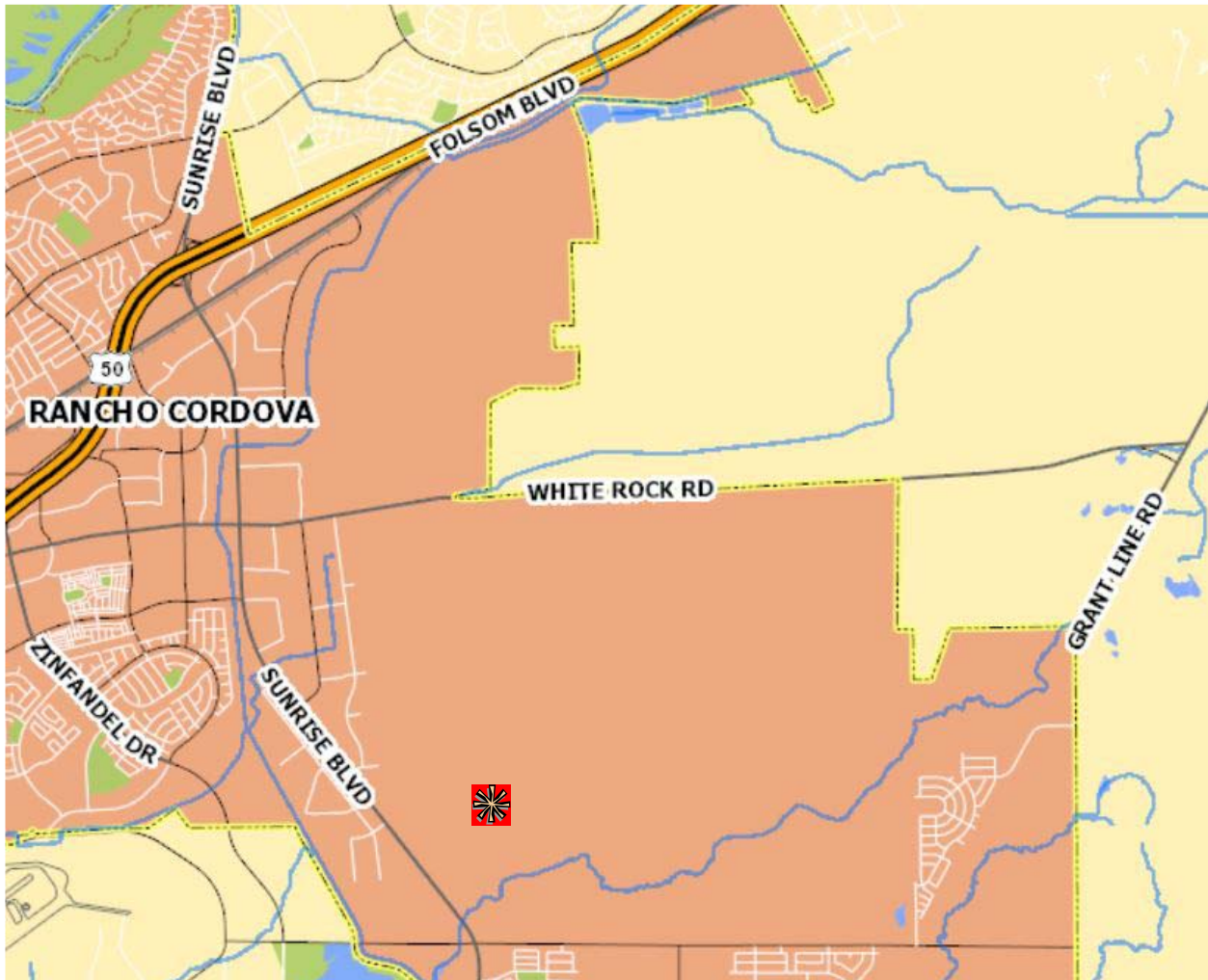
Project #16

Department: Water Resources (SCWA)

Estimated Project Cost: \$763,000

Expected Completion Date: 2022

Funding Sources: SCWA Zone 40



Project Description:

The purchase of the property is the first phase of the Rio Del Oro Storage Tank project. Site improvements will be constructed in the future when demand reaches a level making the storage tank necessary.

WATER RESOURCES - WATER SUPPLY

Rio Del Oro Storage Tank Property

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	0	0	0	0	0	0
Project Management/ Design (In-House)	0	0	0	0	12,220	3,040	15,260
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	598,780	148,960	747,740
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	0	0	0	0	611,000	152,000	763,000

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	0	0	0	0	611,000	152,000	763,000
TOTAL	0	0	0	0	611,000	152,000	763,000

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

SCWA Distribution & Operations Equipment

Sacramento County

Project #17

Department: Water Resources (SCWA)

Estimated Project Cost: \$1,613,100

Expected Completion Date: On-going

Funding Sources: SCWA Zone 41

Project Description:

The Distribution & Operations Section purchases equipment required to maintain and operate the water system. The equipment ranges from generators to utility trucks to construction equipment such as backhoes and cranes.

SCWA Distribution & Operations Equipment

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 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)	0	393,200	500,000	350,000	125,000	244,900	1,613,100
Other	0	0	0	0	0	0	0
TOTAL	0	393,200	500,000	350,000	125,000	244,900	1,613,100

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	0	393,200	500,000	350,000	125,000	244,900	1,613,100
TOTAL	0	393,200	500,000	350,000	125,000	244,900	1,613,100

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

SCWA Guidance Plans

Sacramento County

Project #18

Department: Water Resources (SCWA)

Estimated Project Cost: \$1,220,000

Expected Completion Date: On-going

Funding Sources: SCWA Zones 40 & 41

Project Description:

SCWA has four guidance plans: Recycled Water Master Plan, Urban Water Management Plan, Water Supply Master Plan, and Water System Infrastructure Plan (WSIP). The plans require periodic reviews and updates.

SCWA Guidance Plans

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	0	0	0	0	0	0
Project Management/ Design (In-House)	0	100,000	80,000	0	64,000	0	244,000
Project Management/ Design (Consultant)	0	400,000	320,000	0	256,000	0	976,000
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	0	500,000	400,000	0	320,000	0	1,220,000

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	0	500,000	400,000	0	270,000	0	1,170,000
SCWA Zone 41	0	0	0	0	50,000	0	50,000
TOTAL	0	500,000	400,000	0	320,000	0	1,220,000

Project Analysis:

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

Sheldon Road/East Stockton Boulevard Wholesale Water Meter Station

Elk Grove, CA 95624

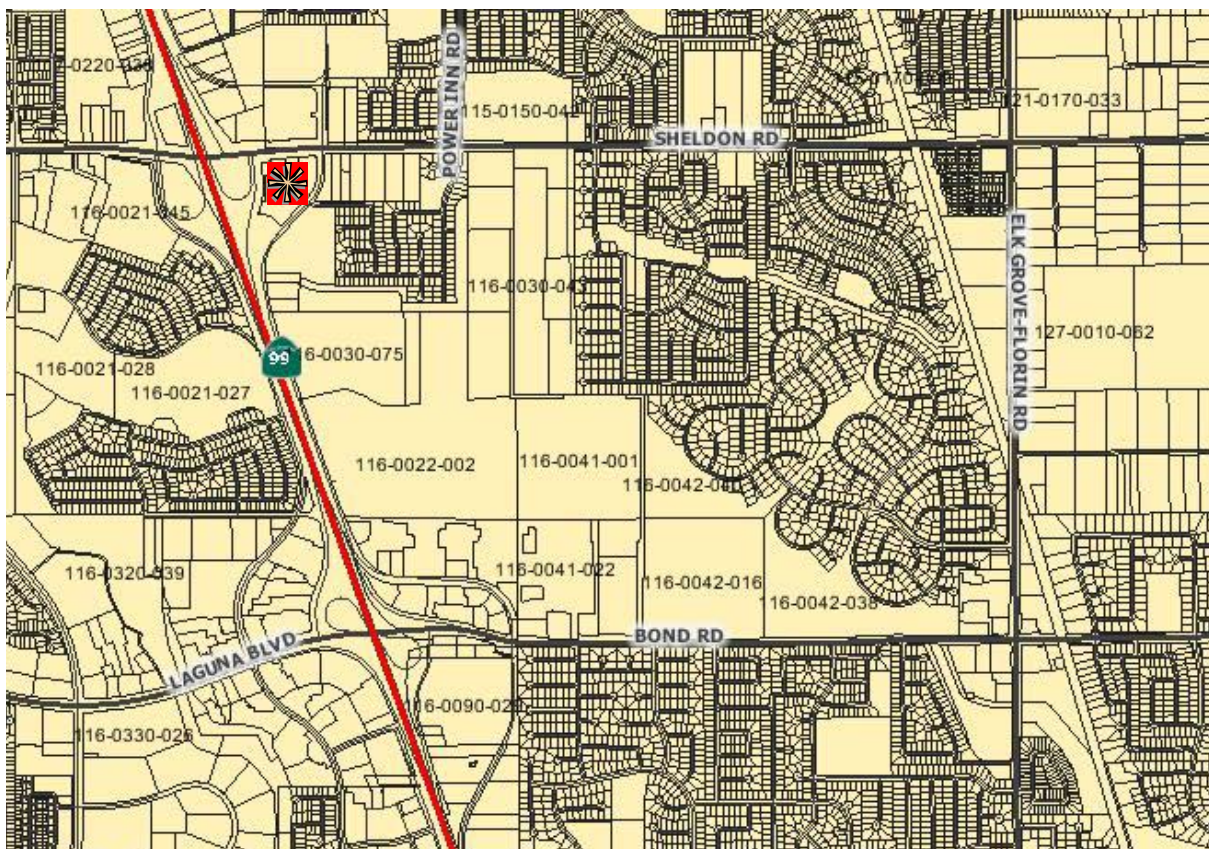
Project #19

Department: Water Resources (SCWA)

Estimated Project Cost: \$250,000

Expected Completion Date: 2016

Funding Sources: SCWA Zone 40



Project Description:

This project involves the construction of one below grade wholesale water meter station at existing points of connection between SCWA and Elk Grove Water Service. This proposed meter is located on East Stockton Boulevard just south of Sheldon Road.

WATER RESOURCES - WATER SUPPLY

Sheldon Road/East Stockton Boulevard Wholesale Water Meter Station

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	200,000	0	0	0	0	200,000
Project Management/ Design (In-House)	0	17,500	0	0	0	0	17,500
Project Management/ Design (Consultant)	0	7,500	0	0	0	0	7,500
Construction Fees and Services	0	25,000	0	0	0	0	25,000
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	250,000	0	0	0	0	250,000

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	0	250,000	0	0	0	0	250,000
TOTAL	0	250,000	0	0	0	0	250,000

Project Analysis:

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

Trihalomethanes (THM) Removal Project – Metro Air Park

Sacramento, CA 95837

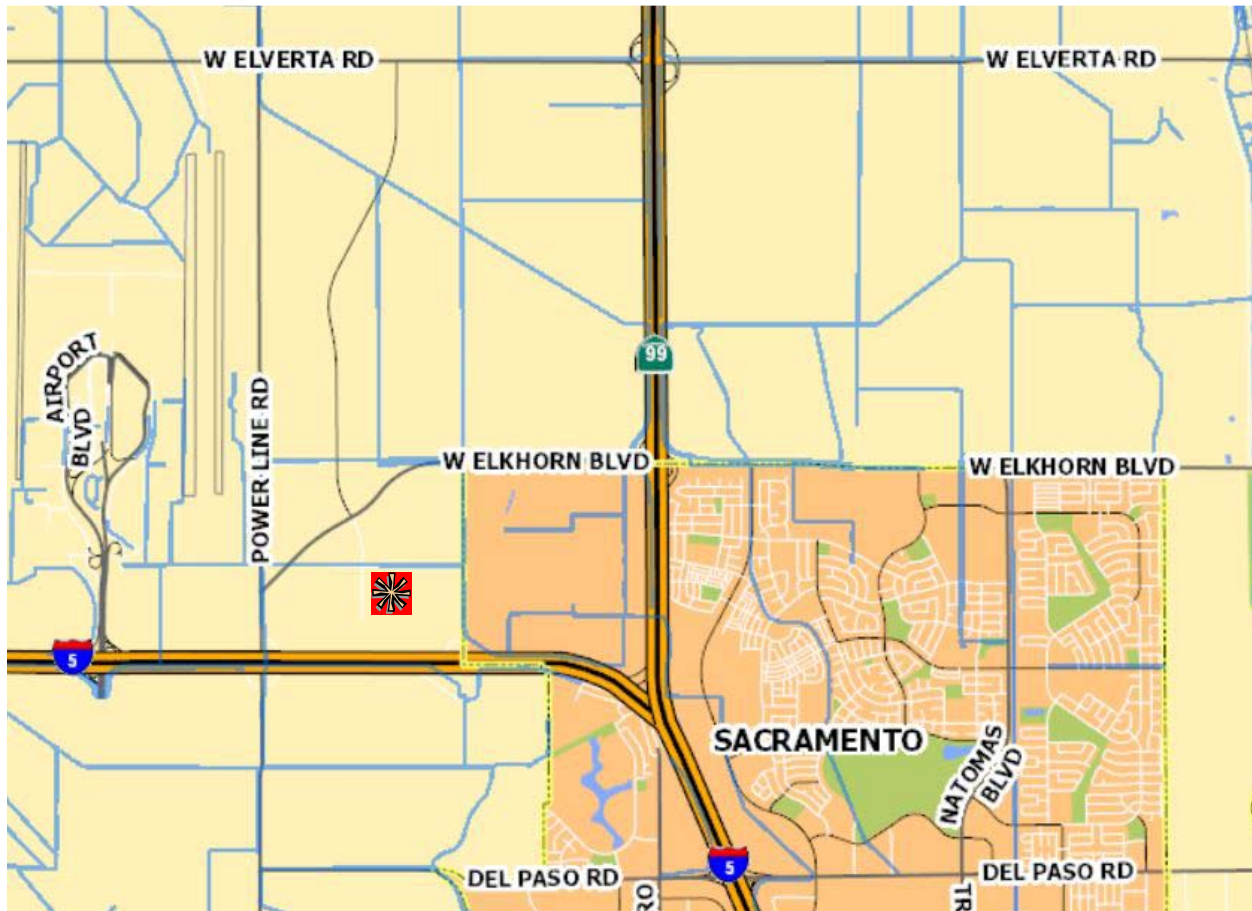
Project #20

Department: Water Resources (SCWA)

Estimated Project Cost: \$672,358

Expected Completion Date: 2017

Funding Sources: SCWA Zones 41 & 50



Project Description:

The project will remove trihalomethanes (THM) from the Metro Air Park water system.

WATER RESOURCES - WATER SUPPLY

Trihalomethanes (THM) Removal Project - Metro Air Park

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	605,122	0	0	0	0	605,122
Project Management/ Design (In-House)	0	67,236	0	0	0	0	67,236
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	0	672,358	0	0	0	0	672,358

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	0	423,227	0	0	0	0	423,227
SCWA Zone 50	0	249,131	0	0	0	0	249,131
TOTAL	0	672,358	0	0	0	0	672,358

Project Analysis:

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

TM – Bradshaw Road/Sheldon Road Intersection

Elk Grove, CA 95624

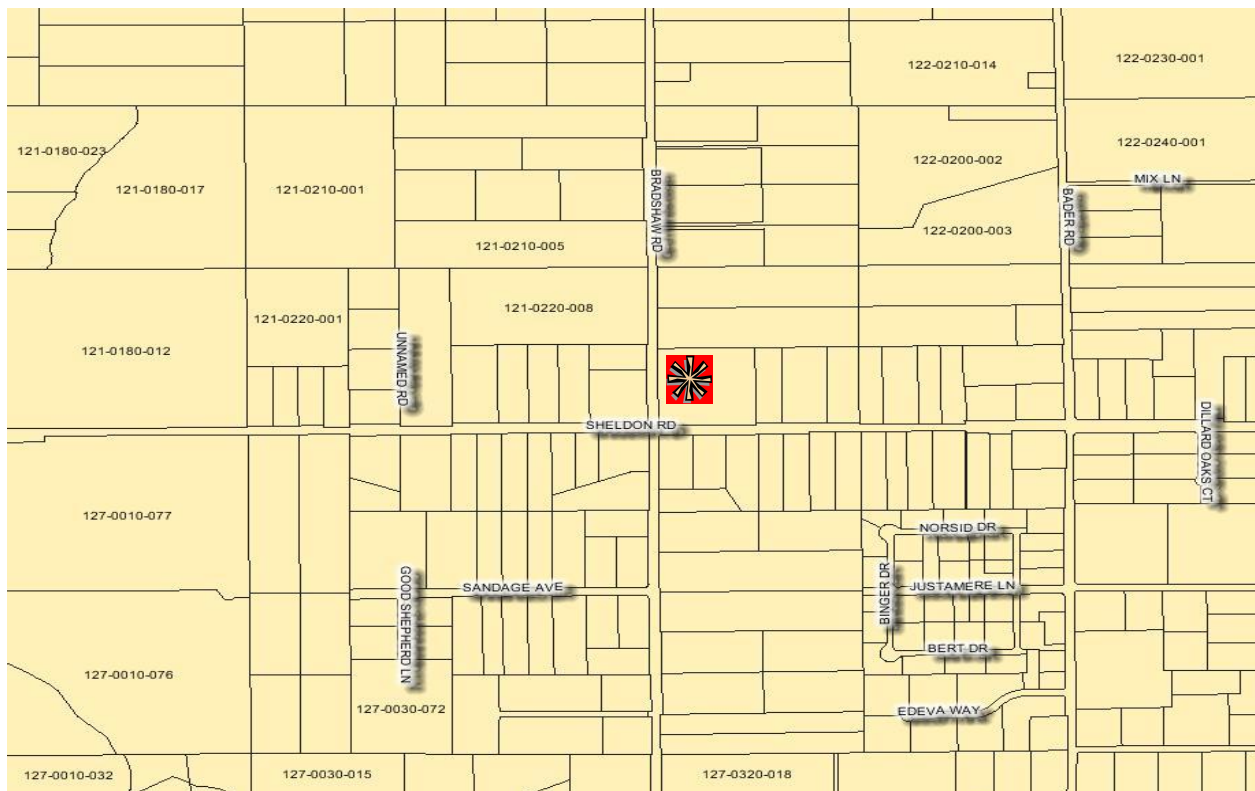
Project #21

Department: Water Resources (SCWA)

Estimated Project Cost: \$999,000

Expected Completion Date: 2017

Funding Sources: SCWA Zone 40



Project Description:

This project includes the installation of transmission main as part of the City of Elk Grove's project at the Bradshaw Road and Sheldon Road intersection. The intersection project includes the removal of a large existing box culvert and the installation of a new structure. In order for SCWA to minimize the need for large easements and environmental permits, it is necessary to team with the City and install the water line concurrent with the construction of the intersection. This project is scheduled to begin construction in spring 2017.

WATER RESOURCES - WATER SUPPLY

TM - Bradshaw Road/Sheldon Road Intersection

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	0	700,000	0	0	0	700,000
Project Management/ Design (In-House)	0	80,000	105,000	0	0	0	185,000
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	10,000	89,000	0	0	0	99,000
Right-of-way/Land Acquisition	0	10,000	5,000	0	0	0	15,000
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	0	100,000	899,000	0	0	0	999,000

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	0	100,000	899,000	0	0	0	999,000
TOTAL	0	100,000	899,000	0	0	0	999,000

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

TM – Development Projects – Various Locations

Sacramento County

Project #22

Department: Water Resources (SCWA)

Estimated Project Cost: \$34,347,990

Expected Completion Date: On-going

Funding Sources: SCWA Zone 40

Project Description:

The majority of transmission mains are constructed as a part of development projects. Specific project locations are determined based on the SCWA Zone 40 Water System Infrastructure Plan (WSIP) and in consultation with SCWA.

TM - Development Projects - Various Locations

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	6,142,554	3,971,214	5,042,272	5,690,293	6,632,060	27,478,392
Project Management/ Design (In-House)	0	1,535,638	992,803	1,260,568	1,422,573	1,658,015	6,869,598
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	0	7,678,192	4,964,017	6,302,840	7,112,866	8,290,075	34,347,990

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	0	7,678,192	4,964,017	6,302,840	7,112,866	8,290,075	34,347,990
TOTAL	0	7,678,192	4,964,017	6,302,840	7,112,866	8,290,075	34,347,990

Project Analysis:

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

TM – Elk Grove-Florin Road – Elder Creek Bridge

Sacramento, CA 95829

Project #23

Department: Water Resources (SCWA)

Estimated Project Cost: \$275,000

Expected Completion Date: 2018

Funding Sources: SCWA Zone 40



Project Description:

This project includes the installation of transmission main as part of Sacramento County Department of Transportation's (SacDOT) project to widen the bridge over Elder Creek on Elk Grove-Florin Road. In order for SCWA to minimize the need for large easements and environmental permits, it is necessary to team with SacDOT and install the water line concurrent with the construction of the bridge. This project is scheduled to begin construction in spring 2018.

WATER RESOURCES - WATER SUPPLY

TM - Elk Grove-Florin Road - Elder Creek Bridge

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	0	0	200,000	0	0	200,000
Project Management/ Design (In-House)	15,000	15,000	5,000	10,000	0	0	45,000
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	0	30,000	0	0	30,000
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	15,000	15,000	5,000	240,000	0	0	275,000

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	15,000	15,000	5,000	240,000	0	0	275,000
TOTAL	15,000	15,000	5,000	240,000	0	0	275,000

Project Analysis:

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

TM – Elk Grove-Florin Road – Florin Road to Elder Creek Bridge

Sacramento, CA 95829

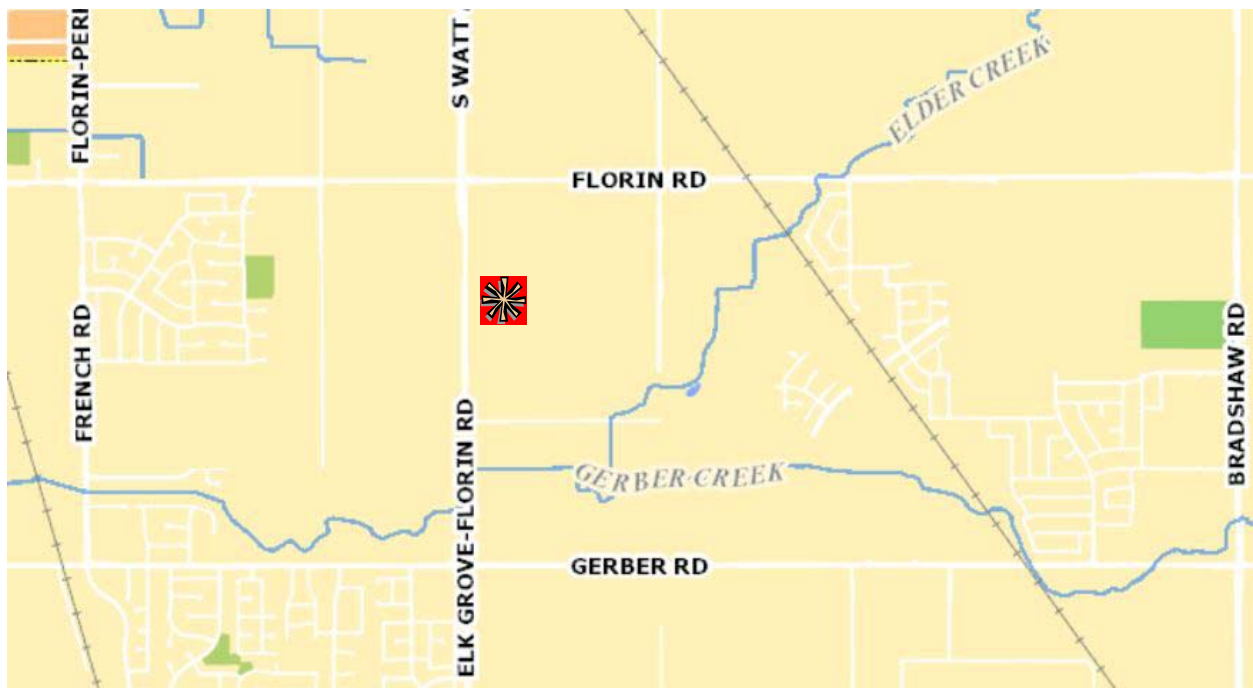
Project #24

Department: Water Resources (SCWA)

Estimated Project Cost: \$1,106,100

Expected Completion Date: 2017

Funding Sources: SCWA Zone 40



Project Description:

This project includes the installation of transmission main as part of Sacramento County Department of Transportation's (SacDOT) project to widen the Elk Grove-Florin Road from Florin Road to the bridge over Elder Creek. By teaming with SacDOT, SCWA can share in the general project costs and help to eliminate the public nuisance of constructing under two separate contracts. This project is scheduled to begin construction in spring 2017.

WATER RESOURCES - WATER SUPPLY

TM - Elk Grove-Florin Road - Florin Road to Elder Creek Bridge

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	0	847,000	0	0	0	847,000
Project Management/ Design (In-House)	55,000	50,000	27,050	0	0	0	132,050
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	127,050	0	0	0	127,050
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	55,000	50,000	1,001,100	0	0	0	1,106,100

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	55,000	50,000	1,001,100	0	0	0	1,106,100
TOTAL	55,000	50,000	1,001,100	0	0	0	1,106,100

Project Analysis:

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

TM – Grant Line Road – New Waterman Road to Mosher Road

Elk Grove, CA 95624

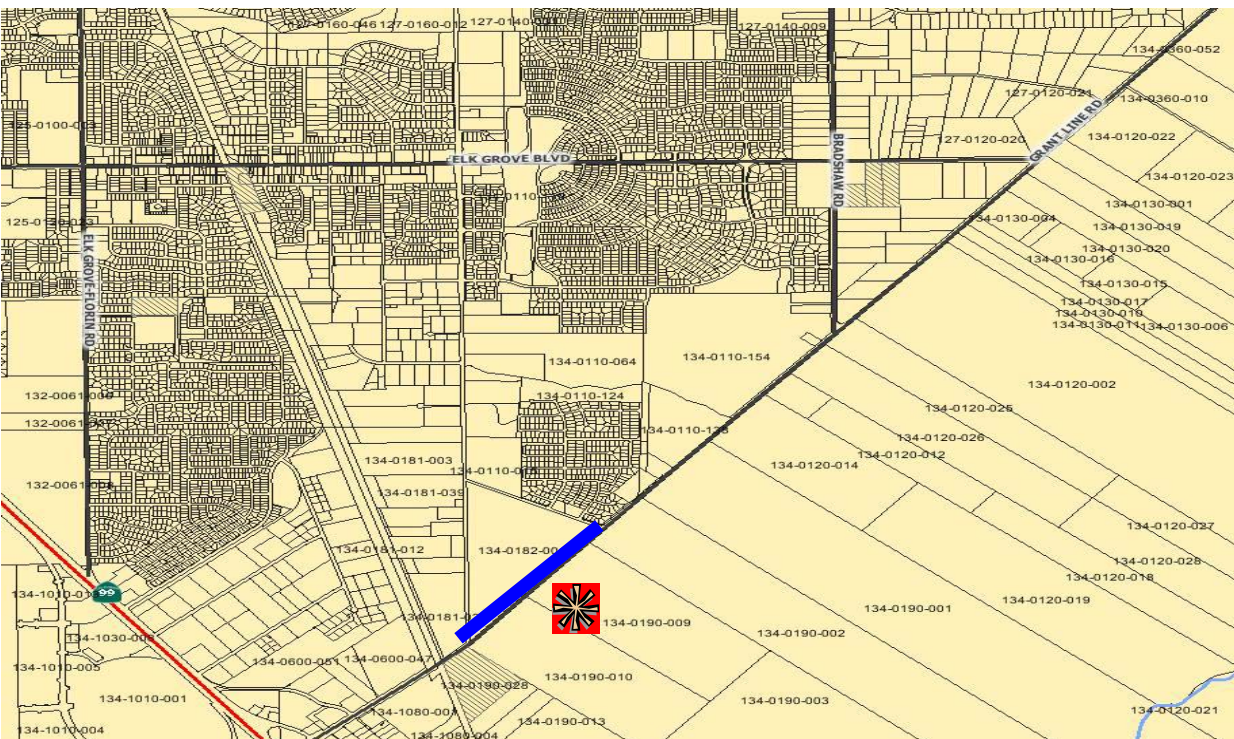
Project #25

Department: Water Resources (SCWA)

Estimated Project Cost: \$470,450

Expected Completion Date: 2017

Funding Sources: SCWA Zone 40



Project Description:

This project includes the installation of a 16-inch transmission main with the City of Elk Grove's project for Grantline Road northeast of the UPRR crossing. This will increase the connectivity along the Grantline Road-Kammerer Road corridor that connects the Central Service Area (CSA) and South Service Area (SSA) of Zone 40. By teaming with the City, SCWA can share in the general project costs and help to eliminate the public nuisance of constructing under two separate contracts.

WATER RESOURCES - WATER SUPPLY

TM - Grant Line Road - New Waterman Road to Mosher Road

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	0	332,200	0	0	0	332,200
Project Management/ Design (In-House)	0	100,000	10,000	0	0	0	110,000
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	28,250	0	0	0	28,250
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	0	100,000	370,450	0	0	0	470,450

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	0	100,000	370,450	0	0	0	470,450
TOTAL	0	100,000	370,450	0	0	0	470,450

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

TM – Kammerer Road – Big Horn Boulevard to Lent Ranch Parkway

Elk Grove, CA 95757

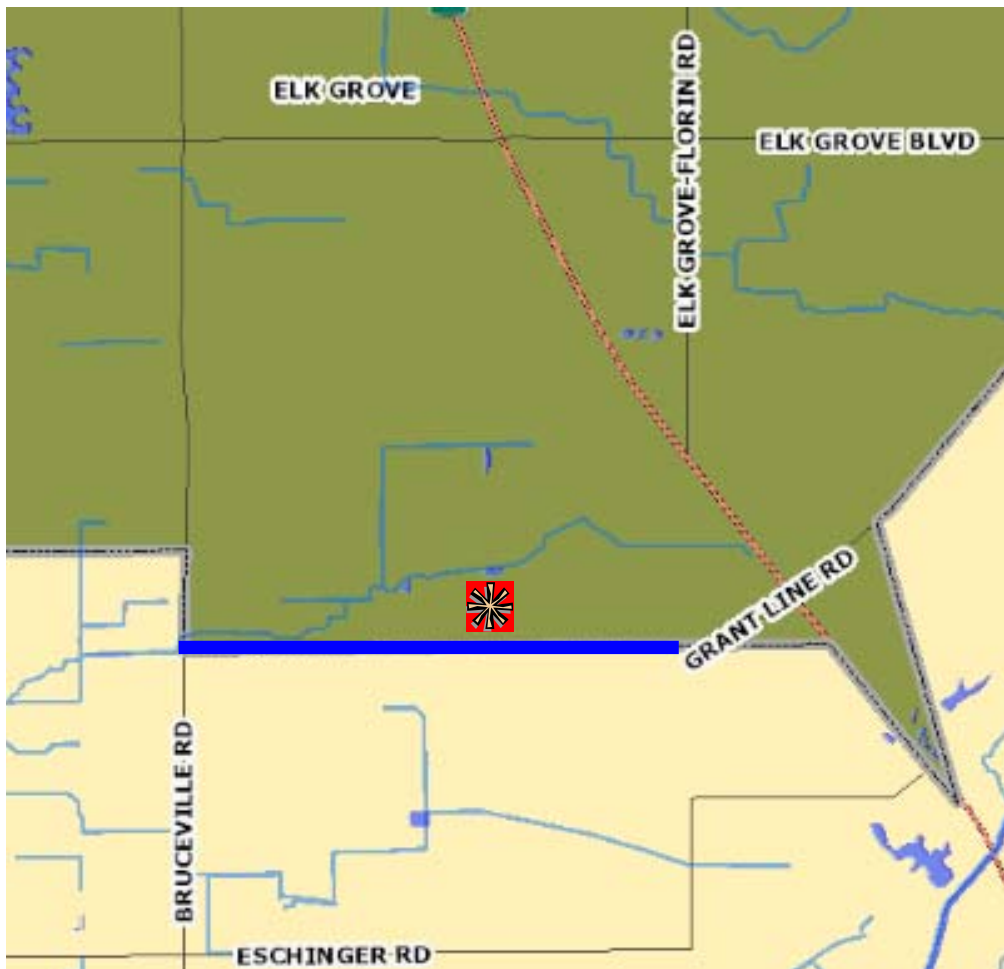
Project #26

Department: Water Resources (SCWA)

Estimated Project Cost: \$1,752,400

Expected Completion Date: 2018

Funding Sources: SCWA Zone 40



Project Description:

This project includes the installation of a transmission main with the City of Elk Grove's two projects to widen Kammerer Road from Bruceville Road to Lent Ranch Parkway. The first project widens Kammerer Road from a generic future street titled Collector 1 to Lent Ranch Parkway in 2017. The second project widens Kammerer Road from Bruceville Road to Collector 1 in 2018. The new transmission main will extend from Big Horn Boulevard to Lent Ranch Parkway. The new main will increase the connectivity along the Kammerer Road corridor along the southern edge of the South Service Area (SSA) of Zone 40. By teaming with the City, SCWA can share in the general project costs and help to eliminate the public nuisance

WATER RESOURCES - WATER SUPPLY

of constructing under two separate contracts. The project was formerly titled Kammerer Road – Bruceville Road to Lent Ranch Parkway.

TM - Kammerer Road - Big Horn Boulevard to Lent Ranch Parkway

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	970,000	490,000	0	0	0	1,460,000
Project Management/ Design (In-House)	29,200	88,000	29,200	0	0	0	146,400
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	97,000	49,000	0	0	0	146,000
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	29,200	1,155,000	568,200	0	0	0	1,752,400

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	29,200	1,155,000	568,200	0	0	0	1,752,400
TOTAL	29,200	1,155,000	568,200	0	0	0	1,752,400

Project Analysis:

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

TM – Walnut Grove Improvements

Sacramento, CA 95837

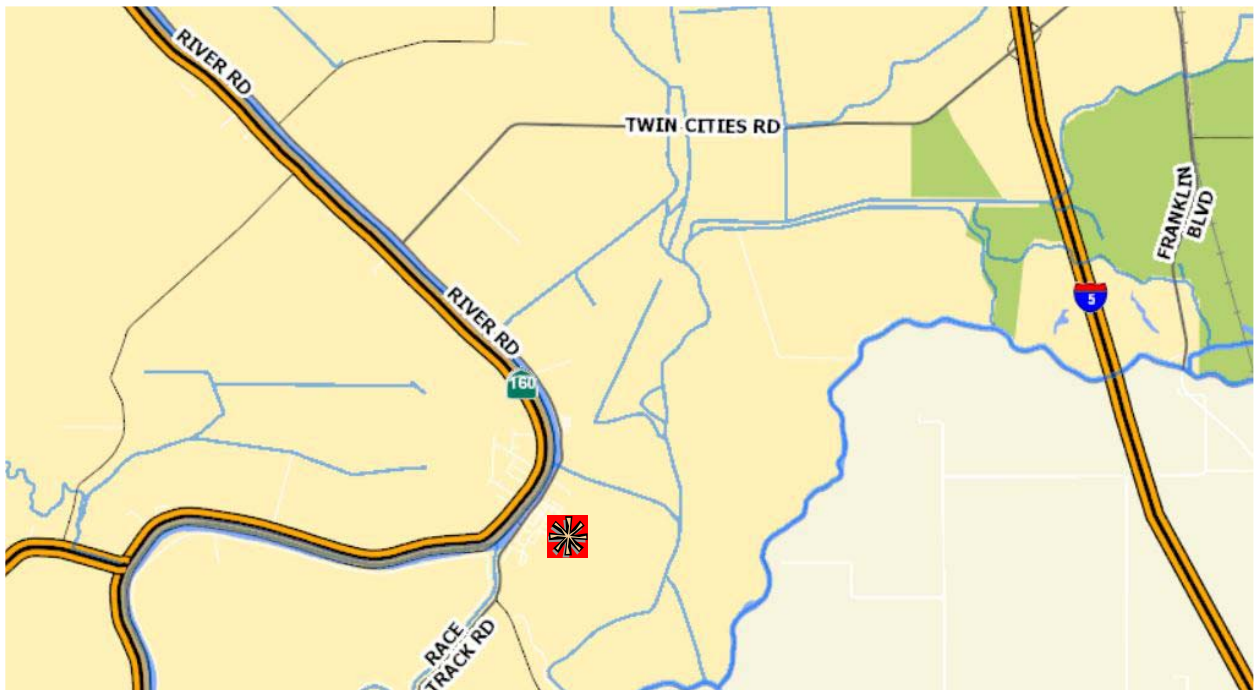
Project #27

Department: Water Resources (SCWA)

Estimated Project Cost: \$550,000

Expected Completion Date: 2018

Funding Sources: SCWA Zone 41



Project Description:

The project will install transmission mains in Walnut Grove.

WATER RESOURCES - WATER SUPPLY

TM - Walnut Grove Improvements

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	0	400,000	0	0	0	400,000
Project Management/ Design (In-House)	0	50,000	25,000	0	0	0	75,000
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	0	75,000	0	0	0	75,000
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	50,000	500,000	0	0	0	550,000

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	0	50,000	500,000	0	0	0	550,000
TOTAL	0	50,000	500,000	0	0	0	550,000

Project Analysis:

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

Walnut Grove Tank & Booster Pump Improvements

Sacramento, CA 95837

Project #28

Department: Water Resources (SCWA)

Estimated Project Cost: \$200,000

Expected Completion Date: 2017

Funding Sources: SCWA Zone 41



Project Description:

The project will install a tank and booster pump in Walnut Grove.

WATER RESOURCES - WATER SUPPLY

Walnut Grove Tank & Booster Pump Improvements

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	160,000	0	0	0	0	160,000
Project Management/ Design (In-House)	0	10,000	0	0	0	0	10,000
Project Management/ Design (Consultant)	0	0	0	0	0	0	0
Construction Fees and Services	0	30,000	0	0	0	0	30,000
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	200,000	0	0	0	0	200,000

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	0	200,000	0	0	0	0	200,000
TOTAL	0	200,000	0	0	0	0	200,000

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

Waterman Road/Grant Line Road Wholesale Water Meter Station

Elk Grove, CA 95624

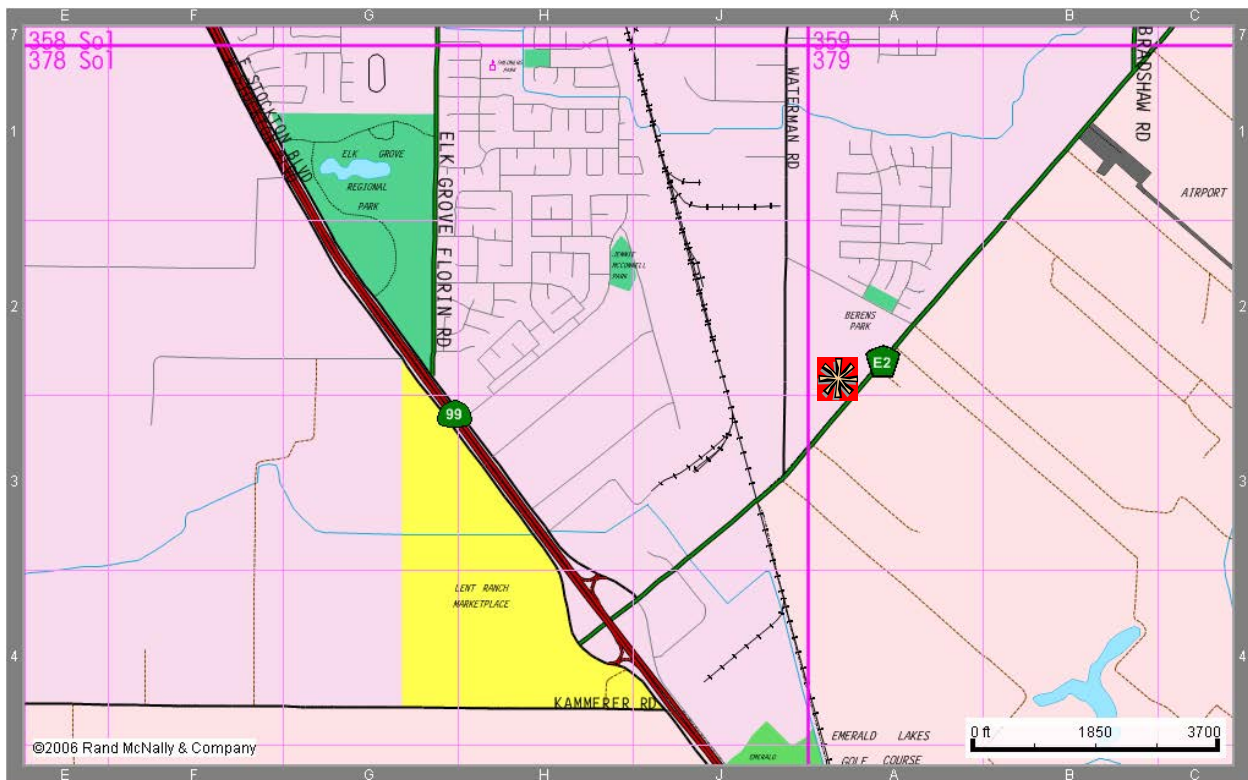
Project #29

Department: Water Resources (SCWA)

Estimated Project Cost: \$441,851

Expected Completion Date: 2017

Funding Sources: SCWA Zone 40



Project Description:

This project involves the construction of a below grade wholesale water meter station at an existing point of connection between SCWA and Elk Grove Water Service. The location of the proposed meter station is on the new Waterman Road alignment, northwest of its intersection with Grant Line Road. Easements are required for the project.

WATER RESOURCES - WATER SUPPLY

Waterman Road/Grant Line Road Wholesale Water Meter Station

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	328,000	0	0	0	0	328,000
Project Management/ Design (In-House)	49,851	6,000	0	0	0	0	55,851
Project Management/ Design (Consultant)	8,000	5,000	0	0	0	0	13,000
Construction Fees and Services	0	35,000	0	0	0	0	35,000
Right-of-way/Land Acquisition	10,000	0	0	0	0	0	10,000
Purchase Cost (Equip/Vehicle)	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	67,851	374,000	0	0	0	0	441,851

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 40	67,851	374,000	0	0	0	0	441,851
TOTAL	67,851	374,000	0	0	0	0	441,851

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

Water Treatment Plant Maintenance Projects – Various Locations

Sacramento County

Project #30

Department: Water Resources (SCWA)

Estimated Project Cost: \$4,784,000

Expected Completion Date: On-going

Funding Sources: SCWA Zone 41

Project Description:

This project provides for routine maintenance improvements at water treatment plants throughout the system. Routine improvements include control system updates, rebuilding filters and tanks, and miscellaneous site improvements. Specific projects are determined based on maintenance and engineering section consultations.

Water Treatment Plant Maintenance Projects - Various Locations

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	859,500	1,213,200	755,100	1,128,600	349,200	4,305,600
Project Management/ Design (In-House)	0	95,500	134,800	83,900	125,400	38,800	478,400
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	0	955,000	1,348,000	839,000	1,254,000	388,000	4,784,000

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	0	955,000	1,348,000	839,000	1,254,000	388,000	4,784,000
TOTAL	0	955,000	1,348,000	839,000	1,254,000	388,000	4,784,000

Project Analysis:

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

WATER RESOURCES - WATER SUPPLY

Water Well Maintenance Projects – Various Locations

Sacramento County

Project #31

Department: Water Resources (SCWA)

Estimated Project Cost: \$3,855,400

Expected Completion Date: On-going

Funding Sources: SCWA Zone 41

Project Description:

This project provides for routine maintenance improvements at water wells throughout the system. Specific projects are determined based on maintenance and engineering section consultations.

Water Well Maintenance Projects - Various Locations

Estimated Project Costs	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
Construction Costs	0	633,690	816,750	639,810	688,230	691,380	3,469,860
Project Management/ Design (In-House)	0	70,410	90,750	71,090	76,470	76,820	385,540
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	0	704,100	907,500	710,900	764,700	768,200	3,855,400

Funding Sources	Prior Years Expenses	Fiscal Year 2016-17 Budget	Fiscal Year 2017-18 Budget	Fiscal Year 2018-19 Budget	Fiscal Year 2019-20 Budget	Fiscal Year 2020-21 Budget	Total
SCWA Zone 41	0	704,100	907,500	710,900	764,700	768,200	3,855,400
TOTAL	0	704,100	907,500	710,900	764,700	768,200	3,855,400

Project Analysis:

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