INTRODUCTION

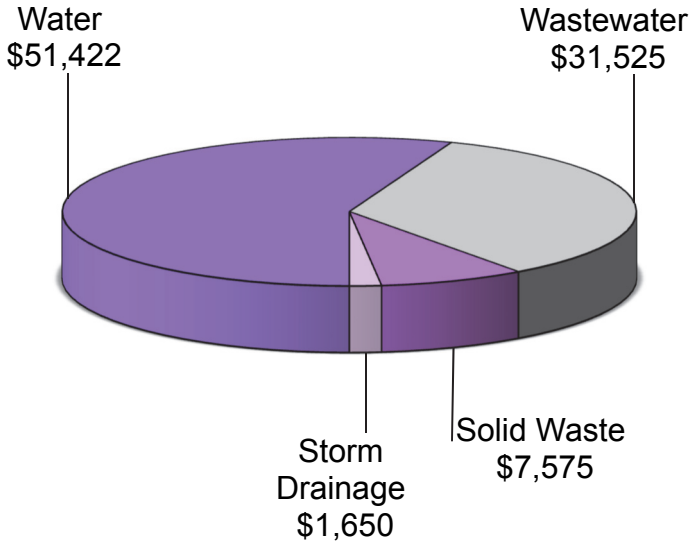
Funded primarily by enterprise funds, the City Utilities Program consists of four subprograms: Water, Wastewater, Solid Waste, and Storm Drainage.

The five-year City Utilities Program budget totals $92.2 million. The projects were selected using an asset management approach to systematically address infrastructure criticality, condition assessment, life cycle costing, and prioritized replacement timetables and are consistent with the City's *2035 General Plan* as well as the *Department of Utilities' Capital Improvement Programming Guide*.

Unlike the water and wastewater utilities, any rate adjustments for the storm drainage utility rates are subject to a citizen vote. Storm drainage user charges have not been increased since 1996 prior to the implementation of Proposition 218. For this reason, revenue collection has not kept pace with storm drainage system costs and the utility has been historically underfunded. The City has delayed repair and replacement of critical infrastructure in order to bridge these funding shortfalls.

The following chart shows the distribution of the five-year plan among the utility funds.

2016-2021 CITY UTILITIES PROGRAM
Programming by Fund (in 000s)
$92,172



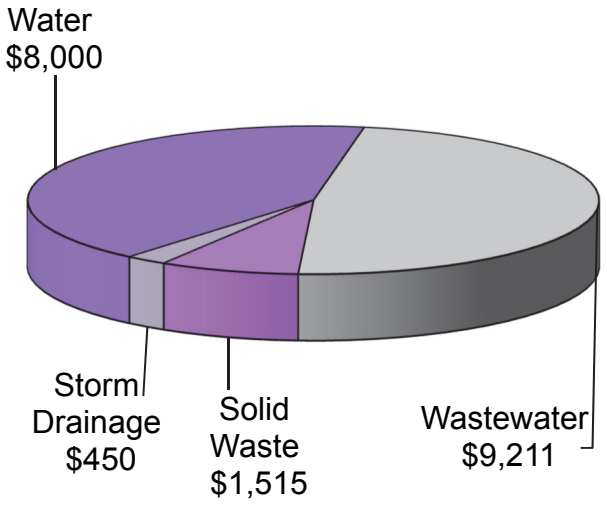
The water subprogram will be devoted to regulatory compliance projects, specifically the Residential Water Meter Program. The bulk of the subprogram for wastewater will be focused on the improvement, rehabilitation, and replacement of the CSS infrastructure as mandated by the NPDES permit and outlined in the CSS Improvement Plan. The solid waste subprogram is primarily for critical work needed at the Meadowview Service Center and for ongoing funding

requirements for City landfills. The majority of storm drainage subprogram is related to regulatory compliance and improvement/development projects.

Two of the major projects include improvement, rehabilitation, and replacement of the CSS infrastructure as mandated by the NPDES permit and outlined in the 1995 CSS Improvement Plan. Per CSS NPDES permit, a Long Term Control Plan (LTCP) is being completed, of which the CSS Improvement Plan is the basis. When approved the LTCP may require increased expenditures for combined system improvements. Another major project includes the Residential Water Meter Program (Z14010000), which promotes water conservation and responds to the recent statewide drought. The City Council adopted resolution 2015-0056 on February 24, 2015, accelerating the meter installation effort four years ahead of the state-mandated schedule. Solid Waste projects include a continuation of funding for City landfills, as required by the State of California, to comply with post-closure monitoring requirements. In addition, funding will be allocated to the Solid Waste Facility Repair and Rehabilitation Program (Y14000900) for the Meadowview City Service Center to design a clear and safe travel path for the liquefied natural gas/compressed natural gas fuel delivery vehicles and to repave and restripe the asphalt.

The FY2016/17 City Utilities Program budget totals $19.2 million. This program budget reflects additional appropriations to existing projects and programs. The program reflects a 30-year evaluation of the infrastructure needs of the water and wastewater systems that include a five-year project specific plan. Critical utility infrastructure projects include replacement or rehabilitation of infrastructure that has already failed and/or is at or near the end of its useful life, and projects to meet regulatory and legislative requirements.

FY2016/17 CITY UTILITIES PROGRAM
Programming by Fund (in 000s)
$19,176



MAJOR FUNDING SOURCES

Funds may be utilized for several program areas and thereby may be found in the other sections of this document; identification of these sections can be found by referring to Index L.

Water (Fund 6005)

Overview

The Water Fund is an enterprise fund that supports both the capital and operating costs of providing potable water throughout the city, including production, treatment, storage, and distribution systems. Revenues are generated primarily from user fees. The user fees were increased in March 2016. The focus over the next year of this portion of the City Utilities Program will be on continuation of the Residential Water Meter Program (Z14010000).

Program Goals

The following goals were established for utilization of the Water Fund resources:

- Provide a reliable supply of high-quality drinking water to residents and businesses
- Ensure that water production and treatment complies with all state and federal regulations
- Promote water conservation by installing water meters on all unmetered water services by December 31, 2020, per Resolution 2015-0056
- Increase reliability and reduce maintenance costs by replacing inadequate or deteriorated systems

Project Selection Criteria

The Water Fund projects selected are prioritized by health, safety, legislative, or regulatory requirements and then by operational efficiency in the water system.

Summary of Project Types and Funding Distribution

The following tables provide a summary of the types of projects requested to receive appropriations in FY2016/17.

Type of Project	Number of Projects	FY2016/17 Funding (in 000s)
Meter	1	8,000
Total	**1**	**$8,000**

2016-2021 Capital Improvement Program (in 000s) Water (Fund 6005)						
Project #	Title	Five-year Programming				
		16/17	17/18	18/19	19/20	20/21
Z14000700	Base CIP Contingency Water Program	-	-	-	-	1,000
Z14006000	Treatment Plant Rehabilitation Design Program	-	-	-	-	9,647
Z14010000	Residential Water Meter Program	8,000	6,776	12,000	8,000	-
Z14130300	Transmission Main Rehabilitation Program	-	-	-	-	3,000
Z14130400	Distribution Main Rehabilitation Program	-	-	-	-	3,000
	Total	**$8,000**	**$6,776**	**$12,000**	**$8,000**	**$16,647**

Major Projects

The only funded water program for FY2016/17 is the Residential Water Meter Program (Z14010000). State Assembly Bill 2572 requires that meters be installed on all residential water services by 2025. Resolution 2015-0056 (adopted on February 24, 2015) accelerated the meter installation effort four years ahead of the state mandated schedule. This project utilizes a phased approach to implement and comply with this continuing program. The Water Fund also provides any necessary matching or supplementary funding for grants that are being actively pursued. To the extent that grants are applied for and received, the costs of the program to the ratepayers will be reduced.

Asset Management

The need to renew areas of the water system due to age and deterioration is of great importance in order to maintain a reliable and high-quality water supply. The infrastructure, including many of the larger water mains located in the downtown area and in the city's oldest neighborhoods, are at or nearing the end of their useful life. The aging water system that includes pipelines, services, reservoirs, wells, and treatment plants is becoming more difficult to maintain as the infrastructure ages. As a result, an asset management process was developed to systematically prioritize and rank its rehabilitation and replacement needs, thereby ensuring long-term sustainability of the water system infrastructure as well as its ability to deliver the required level of service without interruptions. Asset management programs with long-range planning, life-cycle costing, proactive operations and maintenance, long-term funding strategies, and capital replacement plans based on cost-benefit analysis are an efficient method of meeting this challenge.

Master Planning

The master planning goal is to provide a healthy, reliable water system that will meet the needs of a growing community and satisfy all state and federal regulations. Meeting this goal requires improvement of existing facilities and development of new facilities. The improvements and new facilities will be designed according to the following specific criteria:

- During maximum water demand days at peak hours, the operating or "residual" pressure at all water connections will be at least 30 pounds per square inch (psi)
- During a maximum water demand day, considering the maximum day demand plus fire flow, the operating or "residual" pressure available in the area for fire protection will not be less than 20 psi
- All federal and state drinking water regulations will be met
- Within the water system, there will be a minimum storage volume equal to 20 percent of the discharge on a day of maximum water demand

In an attempt to attain these water system goals, a Water Distribution System and Supply Master Plan (Plan) was developed in 2013 to assist in planning, financing, constructing, and operating the water distribution system. The Plan update included an analysis of the distribution system network to identify existing system deficiencies and determine future distribution requirements. The Plan also identified future capital improvements, such as water supply, treatment facilities, transmission mains, and storage reservoirs.

The City is actively involved in the Water Forum Successor Effort, which includes the Regional Water Authority, Sacramento Groundwater Authority, Sacramento Central Groundwater Authority, and Water Forum. The City has participated for more than eighteen years in the Water Forum Successor Effort to develop a plan to provide a reliable and safe water supply for the region's economic health and planned development through the year 2030, and to preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River. This effort resulted in the adoption of the Water Forum Agreement by the Mayor and City Council in November 1999. The City Utilities Program reflects elements necessary to support the Water Forum Agreement.

Water Issues
It is important to continue to expand the water diversion and treatment capacity to replace antiquated treatment facilities, meet regulatory requirements, and increased future demands projected to occur within the City's sphere of influence and authorized place of use. Additional demand for treated water outside the City's authorized place of use will also be generated as a result of existing and future wholesale and wheeling agreements.

Wastewater (Fund 6006)

Overview
The Wastewater Fund is an enterprise fund that provides for the operations, maintenance, repair, and replacement of facilities for collecting, conveying, and pumping sanitary and combined sewage to the interceptor sewers of the Sacramento Regional County Sanitation District. User fees finance both operating costs and capital improvements.

The increasing age of the wastewater infrastructure, especially in the combined system, and complying with state and federal regulatory requirements remains an important focus of the City Utilities Program. A key factor that increases the pressure on the Wastewater Fund is Proposition 218 that restricts raising drainage rates. In the past, combined system projects were partially funded by the Storm Drainage Fund. Since most of the combined system infrastructure is original, some more than 100 years old, its performance and reliability have been reduced due to wear and tear, thereby increasing the amount of required maintenance.

Other portions of wastewater system, particularly areas of North Sacramento, also require increasing amounts of rehabilitation due to age. In the Pocket Area and other low lying regions, infiltration and inflow of rainfall and groundwater into the wastewater pipes cause excess flows in the pipes and is another focus of concern. Furthermore, there are regulations, imposed by the California Water Resources Control Board, which require implementation of a sanitary sewer management program that requires system capacity analysis, greater closed circuit television inspection, elimination of sanitary wastewater overflows, and rehabilitation of the separated wastewater system. The City is required to comply with the terms of a consent decree imposed as a result of a lawsuit filed by the California Sports Fishing Protection Alliance (CSPA).

Program Goals
The following goals were established for utilization of the Wastewater Fund resources:

- Provide for the safe and reliable collection and conveyance of wastewater
- Ensure that the wastewater collection and conveyance systems comply with all state and federal regulations
- Ensure that the separated wastewater collection and conveyance system complies with the CSPA consent decree
- Ensure that expansion and extension of the wastewater collection and pumping systems conform to the *2035 General Plan*
- Upgrade or replace existing wastewater collection and pumping systems in conformance with wastewater system master plans
- Increase reliability and reduce maintenance costs by upgrading or replacing inadequate or deteriorated systems

Project Selection Criteria
The Wastewater Fund projects selected for the five-year program are required by health, safety, legislative, or regulatory requirements.

Summary of Project Types and Funding Distribution
The following tables provide a summary of the types of projects that received appropriations in FY2016/17.

Type of Project	Number of Projects	FY2016/17 Funding (in 000s)
Regulatory	1	9,211
Total	**1**	**$9,211**

2016-2021 Capital Improvement Program (in 000s) Wastewater (Fund 6006)						
Project #	Title	Five-year Programming				
		16/17	17/18	18/19	19/20	20/21
X14000500	Base CIP Program – Wastewater	-	1,000	-	-	1,000
X14010000	Wastewater CSS Capital Program	9,211	-	3,938	7,376	9,000
	Total	**$9,211**	**$1,000**	**$3,938**	**$7,376**	**$10,000**

Major Projects
Major wastewater projects funded are primarily driven by compliance with the CSS NPDES permit and are contained in the Wastewater CSS Capital Program (X14010000). They include a feasibility study and design of more than a million cubic feet of underground storage in the McKinley area.

Asset Management
As infrastructure assets continue to age and deteriorate, the need to restore parts of the wastewater system is very important. Much of the city, especially in the combined system, is served by a wastewater infrastructure that is at or beyond its useful life. Aging wastewater system components such as pipelines, pump stations, and electrical equipment are more difficult to maintain than newer infrastructure, and the level of service provided by these components becomes less reliable. As a result, an asset management process is being utilized to systematically prioritize and rank rehabilitation and replacement needs to ensure long-term sustainability of the wastewater system infrastructure and continuously deliver the required level of service. Asset management programs with long-range planning, life-cycle costing, proactive operations and maintenance, long-term funding strategies, and capital replacement plans based on cost-benefit analysis are an efficient method of meeting this challenge.

Master Planning
Master planning studies are typically done for individual wastewater basins in order to:

- Identify hydraulic deficiencies
- Prioritize rehabilitation and replacement needs
- Address pressures on the system from proposed development

Master planning typically includes a computerized hydraulic model, field surveys, and flow monitoring. Master planning also identifies new facilities and mitigation required by development projects that add flows to the system. The master planning goal is to provide a reliable

wastewater collection system that will meet the needs of the community, prevent sanitary wastewater overflows, and meet adopted standards of keeping wastewater pipes from surcharging and keeping combined system flows from surcharging above the curb for a 10-year storm. Meeting this goal will require rehabilitation and improvements to existing facilities, and development of new facilities that will be designed to handle both the peak sewage flows as well as infiltration flows. Flow monitoring is done to measure flows at critical locations in pipes and to establish rainfall to infiltration/inflow relationships. Observation of the system by closed circuit television of the pipes and direct visual inspection of manholes is also used to identify defects and relative quantity of non-sewage water in the pipes.

Wastewater Issues

CSS Projects

The CSS is the portion of the wastewater system that conveys both sanitary sewage and storm water in the same pipelines. The CSS encompasses approximately 7,500 acres of the Downtown, East Sacramento, and Land Park areas. An additional area of approximately 3,700 acres encompassing portions of Downtown, the River Park, California State University, and far eastern Sacramento areas contribute only sanitary sewage flows to the CSS. In 1946, the practice of building combined sewers was discontinued except for infill development within the existing combined system.

A comprehensive CSS Improvement Plan was initiated in July 1995 after extensive studies, which were instigated subsequent to a cease and desist order issued in June 1990. The order required the City to eliminate outflows to the city streets and non-permitted combined sewer overflows to the Sacramento River from the CSS. To satisfy the order, a CSS Improvement Plan was submitted in July 1995 to the Regional Water Quality Control Board. The plan would reduce outflows and flooding throughout the CSS service area and reduce sewer overflows to the Sacramento River.

The initial phase of the CSS Improvement Plan is substantially complete and approximately $147 million has been invested in this phase. Most of the large projects have been completed, including: Sump 2 Improvement, Sump 1/1A and Pioneer Reservoir Improvements, 42nd Street Storage, U.C. Davis Medical Center, Tahoe Broadway Parallel Sewer, Land Park Relief, Oak Park Regional Storage, and others. Additionally, the following improvement and rehabilitation projects are in planning, design, or construction:

- Underground storage in the McKinley area
- Rehabilitation of various segments of the collection system
- Completion of a network of CSS interceptors in the downtown area, in 7th Street from P to K and in L Street from 7th to 9th Streets and in 9th Street from L to G Streets

Recently upgrades were completed to the hydraulic model of the combined system, allowing for a closer simulation of the actual performance of the system. This model was instrumental for completing an update of the CSS Improvement Plan. This update identifies prioritized improvement projects over the next 25 years that will help progress to permit-required interim goals of achieving five- and ten-year levels of protection from outflows and street flooding in our combined system.

Infiltration and Inflow
More focused planning and design efforts continue in an ongoing effort to reduce infiltration and inflow, especially in low-lying areas close to the Sacramento River. These planning efforts include flow monitoring during the rainy season as well as summer and fall, and visual inspection of manholes. As a member of the Sacramento County Regional Sanitation District, the City is cooperating in a regional effort to reduce infrastructure and inflow in order to reduce the need for the district to construct more interceptors and treatment capacity.

Solid Waste (Fund 6007)

Overview
The Solid Waste Fund is an enterprise fund that is financially responsible for garbage, recycling, and yard waste collection, street sweeping, removing illegal dumping, mandated post closure monitoring of landfills, and related capital improvements.

Program Goals
The following goals were established for utilization of the Solid Waste Fund resources:

- Provide for safe and environmentally sound landfill closure and maintenance including groundwater remediation, landfill gas control, and landfill maintenance, as required by California law
- Provide funding for the rehabilitation and repair of City-owned solid waste facilities

Project Selection Criteria
The following criteria were created for guidance in initiating a project with Solid Waste Funds:

- Activity required by state and federal law
- Activity to reduce ongoing facility operations and maintenance costs
- Offset by user fees

Summary of Project Types and Funding Distribution
The following tables provide a summary of the types of projects requested to receive appropriations in FY2016/17 and the programming for the five-year plan.

Type of Project	Number of Projects	FY2016/17 Funding (in 000s)
Facilities	1	1,275
Landfill	2	240
Total	**3**	**$1,515**

2016-2021 Capital Improvement Program (in 000s) Solid Waste (Fund 6007)						
Project #	Title	Five-year Programming				
		16/17	17/18	18/19	19/20	20/21
Y14000100	Landfill Site Closure Program	217	217	217	217	217
Y14000400	Groundwater Remediation Program	23	23	23	23	23
Y14000900	Solid Waste Facility Repair & Rehabilitation Program	1,275	1,275	1,275	1,275	1,275
	Total	**$1,515**	**$1,515**	**$1,515**	**$1,515**	**$1,515**

Major Projects
Major projects funded in FY2016/17 are the Solid Waste Facility Repair & Rehabilitation Program (Y14000900) (for the continued improvement of the facility traffic flow pattern) and various projects related to building maintenance, site safety, and security.

Storm Drainage (Fund 6011)

Overview
The Storm Drainage Fund is an enterprise fund that supports the operations, maintenance, repair, and rehabilitation of the storm drainage system. This system consists of more than 100 pumping stations, pipes, ditches, channels, and secondary levees. Revenues are generated primarily from user rate fees.

Since the passage of Proposition 218 in 1996, which requires that drainage rate increases be approved by a vote of the property owners, drainage rates have not increased and as a result the storm drainage system has seen a significant drop in its capital funding. Rising operation, maintenance, and regulatory compliance costs now consume almost all storm drainage fund revenues.

Meanwhile, the storm drainage infrastructure continues to age, and many areas are served by storm drainage infrastructure that does not meet level of service goals.

Program Goals
The following goals were established for utilization of the Storm Drainage Fund resources:

- Provide for the safe and reliable collection and conveyance of storm water runoff

- Provide approved levels of service by preventing streets from flooding higher than the top of the curb during 10-year return storms, and preventing flooding of structures during 100-year return storms at complete build out in each drainage basin
- Ensure the storm drainage collection system complies with all government regulations
- Ensure that expansion of the storm drainage collection and pumping systems conforms to the *2035 General Plan*
- Upgrade or replace existing storm drainage collection and pumping systems in conformance with storm drainage master plans
- Increase reliability and reduce maintenance costs by upgrading or replacing inadequate or deteriorated systems

Project Selection Criteria
The following criteria were created for guidance in initiating a project with Storm Drainage Funds:

- Required by health, safety, or regulatory requirement
- Reduce maintenance costs
- Maintain existing facilities
- Replace existing facilities
- Meet demands of increased growth
- Costs offset by grants or other revenue

Resources are directed to those projects most cost-beneficial to the residents and businesses by measuring any approved project against these criteria.

Summary of Project Types and Funding Distribution
The following tables provide a summary of the types of projects requested to receive appropriations in FY2016/17 and the programming for the five-year plan.

Type of Project	Number of Projects	FY2016/17 Funding (in 000s)
Operations and Maintenance Support	1	100
Other	1	250
Replacement/Rehabilitation	1	100
Total	**3**	**$450**

2016-2021 Capital Improvement Program (in 000s) Storm Drainage (Fund 6011)						
Project #	Title	Five-year Programming				
		16/17	17/18	18/19	19/20	20/21
W14000200	Base CIP Contingency Drainage Program	-	250	250	250	250
W14130100	Drainage Unplanned Repairs Program	100	-	-	-	-
W14130400	Drainage Channel Improvements Program	250	200	-	-	-
W14130600	Drainage Sump Replacement/Rehabilitation Program	100	-	-	-	-
	Total	**$450**	**$450**	**$250**	**$250**	**$250**

The Storm Drainage Fund is supporting a condition assessment of Sump 151 discharge mains and a preliminary design to replace/rehab pipes that have a high risk of failure for the Drainage Sump Replacement/Rehabilitation Program (W14130600). The Storm Drainage Fund will also support the Wastewater CSS Capital Program (X14010000), which is the parent project for the improvements to the CSS. As described in detail in the Wastewater (Fund 6006) section, CSS is the portion of the wastewater system that conveys both sanitary wastewater and storm water in the same pipelines.

Asset Management

The aging drainage system that includes pipelines, pump stations, ditches, and channels is becoming more difficult to maintain as the infrastructure ages. To effectively and efficiently allocate potential drainage funding and to better understand the specific rehabilitation and replacement needs, an asset management process is being utilized to systematically prioritize and rank its rehabilitation and replacement needs ensuring long-term sustainability of the drainage system infrastructure and its ability to deliver the required level of service continuously. While many challenges are ahead, asset management programs with long-range planning, life-cycle costing, proactive operations and maintenance, long-term funding strategies, and capital replacement plans based on cost-benefit analysis are an efficient method of meeting this challenge.

Master Planning

As mentioned above, one of the goals of the City Utilities Program is to improve the system so that it will provide the 10-year and 100-year storm event levels of service adopted by City Council. This includes keeping the 10-year water surface below the top of the curb and the 100-year water surface below the first floor of any structure for existing developments, and all new development drainage facilities are designed so that the 10-year water surface will be 6 inches below the drainage inlets and the 100-year water surface will be 12 inches below the first floor of any structure.

Existing areas with inadequate drainage systems are subject to inundated streets, homes, or garages. In some cases, homes have been flooded due to loss of electrical power, resulting in pump stations shutting down. Master planning identifies critical improvements to respond to these system deficiencies in a cohesive, cost effective, organized manner. Past planning efforts have prioritized needed improvements, including detention facilities, increased pump station capabilities, and larger pipes. However, due to lack of funding these prioritized improvements will be postponed until funding for design and construction becomes available.

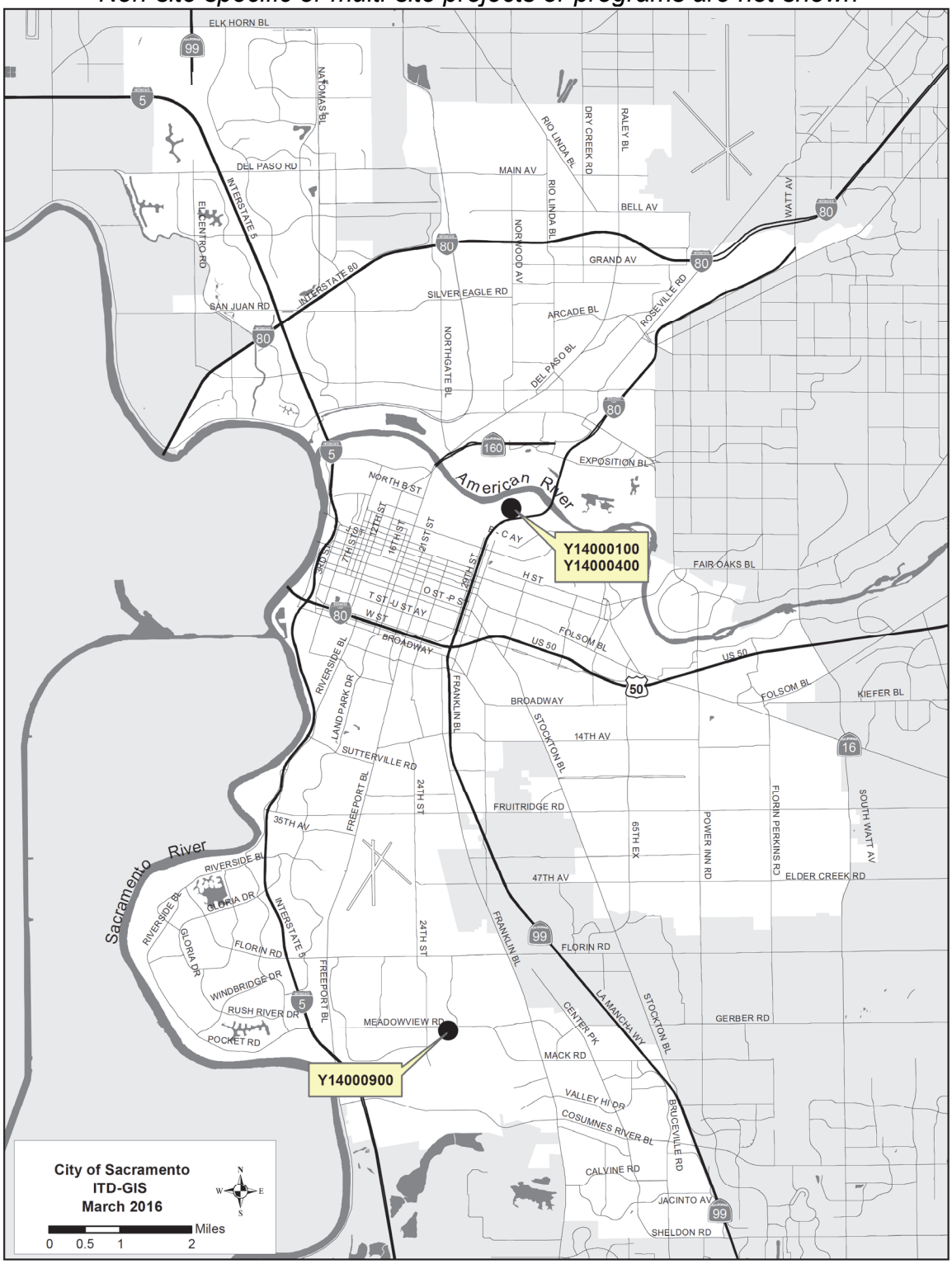
Drainage System Capital Improvement Backlog

Storm drainage rates have not been increased since 1996, prior to the implementation of Proposition 218. For this reason, revenue collection has not kept pace with storm drainage system costs, and the utility has been historically underfunded. Drainage basin master planning has identified the need for a significant expenditure on drainage system capital improvements in the coming years. A 30-year program has been developed that proposes to spend almost $650 million on the system over the next 30 years to rehabilitate aging infrastructure and to improve the system to meet the 10- and 100-year levels of service.

To begin the process of addressing the backlog the City is working closely with the community, the Utilities Rate Advisory Commission, and the City Council to develop a Storm Drainage Infrastructure Program and Financing Plan. Unlike the water and wastewater utilities, any rate adjustments for the storm drainage utility are subject to a citizen vote. The City Council would need to approve an election to adjust the storm drainage rate. If the Council authorizes such an election, citizens will be asked to approve a storm drainage rate increase to address the capital improvement backlog.

FY2016/17 Capital Projects or Programs

Non-site specific or multi-site projects or programs are not shown



Note: Details for the project numbers listed on the map above are provided in alphabetical project order on the following pages.

City of Sacramento

Capital Improvement Program

W14000200

Project Name **BASE CIP CONTINGENCY DRAINAGE PROGRAM**

Project Description Reserve for unforeseen capital needs.

Project Objectives Facilitate completion of capital projects by reserving appropriations for minor overruns and provide a source of funds for small projects that could not be anticipated before the start of the fiscal year.

Existing Situation It is prudent to maintain a capital program reserve, renewed annually as needed, as a source of funding should the need arise to provide additional funding for an existing project due to previously unforeseen conditions.

Operating Budget Impact None.

		As of 2/2016						
Fund	**Fund Description**	**Budget**	**Unobligated**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
6011	STORM DRAINAGE	$695,712	$681,661	$0	$250,000	$250,000	$250,000	$250,000
	Total	$695,712	$681,661	$0	$250,000	$250,000	$250,000	$250,000

2016 - 2021 Funding $1,000,000
Est. Project Cost $1,695,712
FY2016/17 Funding $0
Prior Year Expenditures $14,051

Council District All
Plan Area
Project Location Citywide

Project Manager Utilities, Brett Grant

Project Name DRAINAGE UNPLANNED REPAIRS PROGRAM

Project Description Provide funds for unforeseen needs for drainage additions or replacements in various locations citywide. The scope of work will not exceed $50,000 per location.

Project Objectives Ensure public health and safety by providing resources to promptly respond to the need for small CIPs in the drainage collection system.

Existing Situation During the year, it may become necessary to resolve an unanticipated failure in the storm drainage collection system in this project with a cost that does not exceed $50,000. Any unobligated funding at the end of the fiscal year will be defunded.

Operating Budget Impact None.

		As of 2/2016						
Fund	**Fund Description**	**Budget**	**Unobligated**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
6011	STORM DRAINAGE	$80,839	$17,849	$100,000	$0	$0	$0	$0
	Total	$80,839	$17,849	$100,000	$0	$0	$0	$0

2016 - 2021 Funding	$100,000
Est. Project Cost	$180,839
FY2016/17 Funding	$100,000
Prior Year Expenditures	$62,990

Council District All
Plan Area
Project Location Citywide

Project Manager Utilities, Brett Grant

Project Name DRAINAGE CHANNEL IMPROVEMENTS PROGRAM

Project Description Provide channel improvements for the drainage system.

Project Objectives Provide flood control protection through channel improvements to the drainage system.

Existing Situation Many of the City's channels require improvements due to sloughing and liner failure.

Operating Budget Impact None.

Fund	Fund Description	As of 2/2016 Budget	As of 2/2016 Unobligated	2016/17	2017/18	2018/19	2019/20	2020/21
6011	STORM DRAINAGE	$8,634	$8,336	$250,000	$200,000	$0	$0	$0
	Total	$8,634	$8,336	$250,000	$200,000	$0	$0	$0

2016 - 2021 Funding $450,000
Est. Project Cost $458,634
FY2016/17 Funding $250,000
Prior Year Expenditures $298

Council District All
Plan Area
Project Location Citywide

Project Manager Utilities, Brett Grant

Project Name DRAINAGE SUMP REPLACEMENT/REHABILITATION PROGRAM

Project Description This program funds plant electrical, mechanical and civil rehabilitation/replacement projects at more than 100 drainage pump stations citywide.

Project Objectives To protect health and safety by improving reliability of drainage pump stations.

Existing Situation More than a hundred drainage pump stations citywide are exhibiting varying degrees of life-cycle degradation/obsolescence.

Operating Budget Impact None.

		As of 2/2016						
Fund	**Fund Description**	**Budget**	**Unobligated**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
2235	FLORIN RD STORM & SAN	$308	$308	$0	$0	$0	$0	$0
6011	STORM DRAINAGE	$30,740	$30,740	$100,000	$0	$0	$0	$0
	Total	$31,048	$31,048	$100,000	$0	$0	$0	$0

2016 - 2021 Funding $100,000
Est. Project Cost $131,048
FY2016/17 Funding $100,000
Prior Year Expenditures $0

Council District All
Plan Area
Project Location Citywide

Project Manager Utilities, Brett Grant

Project Name BASE CIP CONTINGENCY PROGRAM - WASTEWATER

Project Description Contingency wastewater funds for unforeseen capital program needs.

Project Objectives Facilitate the completion of capital projects by reserving appropriations for minor overruns and provide a source of funds for small projects that could not be anticipated before the start of the fiscal year.

Existing Situation It is prudent to maintain a capital program reserve, renewed annually as needed, as a source of funding should the need arise to provide additional funding for an existing project due to unforeseen conditions.

Operating Budget Impact None.

		As of 2/2016						
Fund	**Fund Description**	**Budget**	**Unobligated**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
6006	WASTEWATER	$1,422,259	$1,422,259	$0	$1,000,000	$0	$0	$1,000,000
6011	STORM DRAINAGE	$0	$0	$0	$0	$0	$0	$0
6320	WASTEWATER REV. BONDS	$965,007	$965,007	$0	$0	$0	$0	$0
	Total	$2,387,266	$2,387,266	$0	$1,000,000	$0	$0	$1,000,000

2016 - 2021 Funding $2,000,000
Est. Project Cost $4,387,266
FY2016/17 Funding $0
Prior Year Expenditures $0

Council District All
Plan Area
Project Location Citywide

Project Manager Utilities, Brett Grant

Project Name WASTEWATER COMBINED SEWER SYSTEM (CSS) CAPITAL PROGRAM

Project Description This project acts as the reserve fund for the Utilities' Clean Water State Revolving Fund (CWSRF) loans and consists of improvement projects; replacing and rehabilitating defective pipe, pumps, and infrastructure; and improving the CSS.

Project Objectives Improve reliability, reduce CSS overflows to the river, reduce surcharging of wastewater to streets and properties during storms, and comply with NPDES permit by the U.S. Environmental Protection Agency.

Existing Situation This project provides funding required for the CWSRF loans (Resolution 98-023) as follows: (1) U.C. Medical Center Regulation Storage Project, Loan C-06-4652-110; (2) Land Park Sewer Relief Project, Loan C-06-4685-110; (3) Sump 1/1A Project, Loan C-06-4441-110; (4) Sump 2/2A Improvement Project, Loan C-06-4441-120; and (5) Tahoe Park/Broadway Parallel Sewer Project, Loan C-06-4653-110.

Operating Budget Impact None.

		As of 2/2016						
Fund	**Fund Description**	**Budget**	**Unobligated**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
6002	WASTEWATER IMPACT FEE	$64,148	$64,148	$0	$0	$0	$0	$0
6005	WATER	$60,000	$60,000	$0	$0	$0	$0	$0
6006	WASTEWATER	$7,399,155	$7,394,680	$9,211,063	$0	$3,937,653	$7,376,060	$9,000,000
6011	STORM DRAINAGE	$316,681	$316,621	$0	$0	$0	$0	$0
6320	WASTEWATER REV. BONDS	$370,813	$370,659	$0	$0	$0	$0	$0
	Total	$8,210,797	$8,206,109	$9,211,063	$0	$3,937,653	$7,376,060	$9,000,000

2016 - 2021 Funding $29,524,776
Est. Project Cost $37,735,573
FY2016/17 Funding $9,211,063
Prior Year Expenditures $4,688

Council District 3, 4, 5, 6
Plan Area
Project Location Combined Sewer System

Project Manager Utilities, Brett Grant

Project Name LANDFILL SITE CLOSURE PROGRAM

Project Description California law requires that funding be set aside each year to ensure that there will be sufficient resources to cover future closure activities.

Project Objectives Keep the closed City landfill in compliance with the approved final closure/post-closure plan.

Existing Situation Landfill closure has been completed; however, as part of the annual 30-year post-closure care, annual funds must be provided.

Operating Budget Impact None.

		As of 2/2016						
Fund	**Fund Description**	**Budget**	**Unobligated**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
6007	SOLID WASTE	$3,738,873	$2,468,083	$217,000	$217,000	$217,000	$217,000	$217,000
6008	LANDFILL CLOSURE	$5,195,273	$0	$0	$0	$0	$0	$0
	Total	$8,934,146	$2,468,083	$217,000	$217,000	$217,000	$217,000	$217,000

2016 - 2021 Funding $1,085,000
Est. Project Cost $10,019,146
FY2016/17 Funding $217,000
Prior Year Expenditures $6,466,063

Council District 3
Plan Area
Project Location 20 28th Street

Project Manager Public Works , David Levine

Project Name GROUNDWATER REMEDIATION PROGRAM

Project Description State-mandated financial obligations for the landfill's groundwater corrective action program require owners of solid waste facilities to establish financial assurance to cover a "reasonably foreseeable release" into the groundwater.

Project Objectives Satisfy state-mandated financial assurance requirements for California Health and Safety Code Title 23, Articles 5 and 10. Control/Mitigate groundwater contamination beneath the City landfill.

Existing Situation The existing landfill has affected the shallow groundwater aquifer directly under the site. Documented releases were described in the June 1987 Solid Waste Assessment Test Report.

Operating Budget Impact None.

		As of 2/2016						
Fund	Fund Description	Budget	Unobligated	2016/17	2017/18	2018/19	2019/20	2020/21
6007	SOLID WASTE	$414,875	$167,001	$23,000	$23,000	$23,000	$23,000	$23,000
	Total	$414,875	$167,001	$23,000	$23,000	$23,000	$23,000	$23,000

2016 - 2021 Funding	$115,000
Est. Project Cost	$529,875
FY2016/17 Funding	$23,000
Prior Year Expenditures	$247,874

Council District 3
Plan Area
Project Location 28th Street Landfill

Project Manager Public Works , David Levine

Project Name SOLID WASTE FACILITY REPAIR & REHABILITATION PROGRAM

Project Description Provides sufficient resources to address facility related issues at the Meadowview City Service Center including the repair or rehabilitation of the building interior and exteriors, electrical, and parking lot paving.

Project Objectives Provide funding to maintain City facilities.

Existing Situation Ongoing facility safety/security improvements.

Operating Budget Impact None.

Fund	Fund Description	As of 2/2016 Budget	As of 2/2016 Unobligated	2016/17	2017/18	2018/19	2019/20	2020/21
6007	SOLID WASTE	$3,537,850	$2,655,361	$1,275,000	$1,275,000	$1,275,000	$1,275,000	$1,275,000
	Total	$3,537,850	$2,655,361	$1,275,000	$1,275,000	$1,275,000	$1,275,000	$1,275,000

2016 - 2021 Funding $6,375,000
Est. Project Cost $9,912,850
FY2016/17 Funding $1,275,000
Prior Year Expenditures $882,489

Council District 8
Plan Area
Project Location 2812 Meadowview Road

Project Manager Public Works , David Levine

Project Name BASE CIP CONTINGENCY WATER PROGRAM

Project Description Reserve funds for unforeseen capital program needs.

Project Objectives Facilitate completion of capital projects by reserving appropriations for minor overruns. Provide a source of funds for small projects that could not be anticipated before the start of the fiscal year.

Existing Situation It is prudent to maintain a capital program reserve, renewed annually as needed, as a source of funding should the need arise to provide additional funding for an existing project due to unforeseen conditions.

Operating Budget Impact None.

		As of 2/2016						
Fund	**Fund Description**	**Budget**	**Unobligated**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
6001	WATER IMPACT FEE	$28,752	$28,752	$0	$0	$0	$0	$0
6005	WATER	$1,512,437	$1,512,437	$0	$0	$0	$0	$1,000,000
6006	WASTEWATER	$0	$0	$0	$0	$0	$0	$0
6011	STORM DRAINAGE	$0	$0	$0	$0	$0	$0	$0
6310	WATER REV. BONDS	$61,650	$61,650	$0	$0	$0	$0	$0
	Total	$1,602,839	$1,602,839	$0	$0	$0	$0	$1,000,000

2016 - 2021 Funding $1,000,000
Est. Project Cost $2,602,839
FY2016/17 Funding $0
Prior Year Expenditures $0

Council District All
Plan Area
Project Location Citywide

Project Manager Utilities, Michelle Carrey

Project Name TREATMENT PLANT REHABILITATION DESIGN PROGRAM

Project Description Prepare plans and specifications for necessary improvements and rehabilitation work at both E.A. Fairbairn Water Treatment Plant (FWTP) and Sacramento River Water Treatment Plant (SRWTP).

Project Objectives Improve water treatment reliability and provide treatment capacity to meet future water demands within the City's "place of use."

Existing Situation The SRWTP was constructed in the 1920s and 1930s and FWTP in the early 1960s. The City completed the first phase of work at the treatment plants by expanding treatment capacity. The second phase is to rehab/replace the older components at the plants.

Operating Budget Impact None.

		As of 2/2016						
Fund	**Fund Description**	**Budget**	**Unobligated**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
6001	WATER IMPACT FEE	$1,500,000	$0	$0	$0	$0	$0	$0
6005	WATER	$8,348,914	$7,403,935	$0	$0	$0	$0	$9,646,710
6205	WATER GRANT REIMB	$0	$0	$0	$0	$0	$0	$0
6310	WATER REV. BONDS	$155,175,000	$1,538,334	$0	$0	$0	$0	$0
	Total	$165,023,914	$8,942,269	$0	$0	$0	$0	$9,646,710

2016 - 2021 Funding $9,646,710
Est. Project Cost $174,670,624
FY2016/17 Funding $0
Prior Year Expenditures $156,081,645

Council District 3
Plan Area
Project Location Sacramento River Water Treatment Plant & E. A. Fairbairn Water Treatment Plant

Project Manager Utilities, Michelle Carrey

Project Name RESIDENTIAL WATER METER PROGRAM

Project Description Install water meters at residential homes that do not currently have meters. Assembly Bill 2572 requires water meters be installed on existing water service connections by 2025.

Project Objectives Comply with AB 2572, promote conservation, and bill customers for the amount of water they use. The goal is to complete installation by December 2020.

Existing Situation Meters are installed at 65% of all customers' locations.

Operating Budget Impact None.

		As of 2/2016						
Fund	**Fund Description**	**Budget**	**Unobligated**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
6005	WATER	$3,885,271	$3,130,052	$8,000,000	$6,775,744	$12,000,000	$8,000,000	$0
6310	WATER REV. BONDS	$5,537,031	$5,537,031	$0	$0	$0	$0	$0
	Total	$9,422,302	$8,667,083	$8,000,000	$6,775,744	$12,000,000	$8,000,000	$0

2016 - 2021 Funding $34,775,744
Est. Project Cost $44,198,046
FY2016/17 Funding $8,000,000
Prior Year Expenditures $755,219

Council District All
Plan Area
Project Location Citywide

Project Manager Utilities, Michelle Carrey

Project Name TRANSMISSION MAIN REHABILITATION PROGRAM

Project Description Replace existing water transmission mains (pipes larger than 12-inch diameter) that have a record of maintenance issues or are over 100 years old with new reliable mains that meet City standards.

Project Objectives Ensure the reliability of the water distribution system and reduce potential damage from transmission main breaks.

Existing Situation This pipeline replacement program replaces water transmission mains that have exceeded their useful lives. Older mains require additional maintenance, reduce system reliability and no longer meet current City standards.

Operating Budget Impact None.

		As of 2/2016						
Fund	**Fund Description**	**Budget**	**Unobligated**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**
6005	WATER	$0	$0	$0	$0	$0	$0	$3,000,000
6310	WATER REV. BONDS	$0	$0	$0	$0	$0	$0	$0
	Total	$0	$0	$0	$0	$0	$0	$3,000,000

2016 - 2021 Funding $3,000,000
Est. Project Cost $3,000,000
FY2016/17 Funding $0
Prior Year Expenditures $0

Council District All
Plan Area
Project Location Citywide

Project Manager Utilities, Michelle Carrey

Project Name DISTRIBUTION MAIN REHABILITATION PROGRAM

Project Description Replace water distribution mains (pipes 12-inch in diameter or smaller) that have maintenance issues or have exceeded 100-year life.

Project Objectives Improve water distribution system reliability including increased pressures and fire suppression capabilities.

Existing Situation Approximately 119 miles or 8% of the distribution pipe is over 100 years old.

Operating Budget Impact Reduce operations maintenance costs on main repairs.

		As of 2/2016						
Fund	Fund Description	Budget	Unobligated	2016/17	2017/18	2018/19	2019/20	2020/21
6005	WATER	$0	$0	$0	$0	$0	$0	$3,000,000
6310	WATER REV. BONDS	$0	$0	$0	$0	$0	$0	$0
	Total	$0	$0	$0	$0	$0	$0	$3,000,000

2016 - 2021 Funding $3,000,000
Est. Project Cost $3,000,000
FY2016/17 Funding $0
Prior Year Expenditures $0

Council District All
Plan Area
Project Location Citywide

Project Manager Utilities, Michelle Carrey