

Water Department Capital Improvement Projects



Capital Improvement Projects
FY 2015 – FY 2017
Water Department
City of Santa Cruz



c701301
Loch Lomond Facilities Improvements

c701504
Gravity Trunk Main Valve Replacement

c701503
WTP UV System - Pasatiempo

c701501
WTP Filter Water Tank

c701303
WTP Filter Rehabilitation and Upgrades

c701505
Recoat University Reservoir No. 4

c701506
Recoat University Reservoir No. 5

c709835
North Coast System Rehabilitation

c700027
Bay Street Reservoir Reconstruction

c700313
Bay Street Reservoir Reconstruction

Unmapped Projects

c700002, c700004, c701507 - Main Replacements
c700017, c709833 Transmission System Improvements

N. Coast System Rehab - Majors Diversion**Project Description:**

The City diverts water from Laguna and Majors Creeks. These sources are passively diverted into pipelines that carry the water to the North Coast Pipeline. The North Coast System Rehab project (c. 2002) included the evaluation of the diversions to determine if they are sound and if modifications could be made to improve the efficiency and reduce the potential environmental impacts associated with City operations. This project will update the findings of the 2002 analysis, and design and construct needed improvements.

Fiscal Year 2017							
	Prior Year	Budgeted	Estimated Actuals	FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
Project # c701802	Account # 711-70-91-7153-57302						
Project Cost Estimate:	-	-	-	250,000	500,000	1,000,000	1,750,000
Net Project Cost Estimates:	-	-	-	250,000	500,000	1,000,000	1,750,000

N. Coast System Rehab- Laguna Diversion**Project Description:**

The City diverts water from Laguna and Majors Creeks. These sources are passively diverted into pipelines that carry the water to the North Coast Pipeline. The North Coast System Rehab project (c. 2002) included the evaluation of the diversions to determine if they are sound and if modifications could be made to improve the efficiency and reduce the potential environmental impacts associated with City operations. This project will update the findings of the 2002 analysis, and design and construct needed improvements.

Fiscal Year 2017							
	Prior Year	Budgeted	Estimated Actuals	FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
Project # c701801	Account # 711-70-91-7153-57302						
Project Cost Estimate:	-	-	-	250,000	500,000	1,000,000	1,750,000
Net Project Cost Estimates:	-	-	-	250,000	500,000	1,000,000	1,750,000

New Capital Projects for Water & Water System Development Enterprise Fund (711 & 715) Totals

	Prior Year Totals	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budget	Estimated Actuals				
Total Project Cost Estimate:	-	-	-	500,000	1,000,000	2,000,000	3,500,000
Total Project Funding Estimate:	-	-	-	-	-	-	-
Total Net Project Cost Estimate:	-	-	-	500,000	1,000,000	2,000,000	3,500,000

Advanced Metering infrastructure (AMI)

Project Description:

Evaluate the use of AMI as replacement to the current AMR metering (Automatic Meter Reading). AMR provides 1-way communication between a meter and the City and AMI provides two-way communication between a meter and the City as well as between a meter and the customer. Benefits include early leak detection, customer conservation affect, and workflow management. Implementation to occur in future years.

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c701603	Account # 711-70-91-7153-57302						
Project Cost Estimate:	-	50,000	50,000	-	-	-	-
Net Project Cost Estimates:	-	50,000	50,000	-	-	-	-

Aerators at Loch Lomond

Project Description:

Condition assessment followed by rehabilitation or replacement of the aerators for Loch Lomond Reservoir.

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c701706	Account # 711-70-91-7153-57302						
Project Cost Estimate:	-	350,000	350,000	-	-	-	-
Net Project Cost Estimates:	-	350,000	350,000	-	-	-	-

Aquifer Storage and Recovery

Project Description:

Evaluate the feasibility of Aquifer Storage and Recovery as per the recommendations of the Water Supply Advisory Committee. Funds in FY 2016 and 2017 will be used for Phase 1 of the proposed study. Phase 2 will include pilot work and be funded in FY 2018. Project would potentially provide additional potable water to City and other agency customers, addressing part or all of water supply deficiencies.

		Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Prior Year	Budgeted				
Project # c701609	Account # 711-70-91-7153-57302						
Project Cost Estimate:	17,570	356,930	356,930	1,715,000	175,000	-	1,890,000
Net Project Cost Estimates:	17,570	356,930	356,930	1,715,000	175,000	-	1,890,000
Project # c701610	Account # 715-70-91-7153-57302						
Project Cost Estimate:	7,530	152,970	152,970	735,000	75,000	-	810,000
Net Project Cost Estimates:	7,530	152,970	152,970	735,000	75,000	-	810,000

Bay Street Reservoir Reconstruction

Project Description:

The Bay Street Reservoir reached the end of its useful life and was replaced with two 6 MG tanks. Construction of Tank 1 was completed in FY 2014; construction of Tank 2 was completed in FY 2016. Final project elements include site clean-up, security, and landscaping. A portion of the project is funded by System Development Charges (20% SDC-Fund 715).

Fiscal Year 2017							
	Prior Year	Budgeted	Estimated Actuals	FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
Project # c700313	Account # 711-70-91-7153-57302						
Project Cost Estimate:	19,442,010	1,058,666	1,058,666	200,000	-	-	200,000
Net Project Cost Estimates:	19,442,010	1,058,666	1,058,666	200,000	-	-	200,000
Project # c700027	Account # 715-70-91-7153-57302						
Project Cost Estimate:	4,934,451	349,045	349,045	-	-	-	-
Net Project Cost Estimates:	4,934,451	349,045	349,045	-	-	-	-

Beltz 10 and 11 Rehab & Development

Project Description:

This project would convert an existing monitoring well to a production well, renamed Beltz 11, and will rehabilitate Beltz 10. Beltz 10 and 11 will pump from the Santa Margarita aquifer. The project would reduce pumping from the Purisima Formation which is impacted by pumping by the City and other users. Project includes feasibility study (that will include feasibility of wells to function as ASR wells), pump test, CEQA and construction efforts.

Fiscal Year 2017							
	Prior Year	Budgeted	Estimated Actuals	FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
Project # c700026	Account # 711-70-91-7153-57302						
Project Cost Estimate:	64,243	145,000	145,000	300,000	-	-	300,000
Net Project Cost Estimates:	64,243	145,000	145,000	300,000	-	-	300,000

Coast Pump Station Line Repairs

Project Description:

Condition assessment followed by rehabilitation or replacement of the Coast Pump Station discharge pipeline.

Fiscal Year 2017							
	Prior Year	Budgeted	Estimated Actuals	FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
Project # c701707	Account # 711-70-91-7151-57302						
Project Cost Estimate:	-	50,000	50,000	500,000	-	-	500,000
Net Project Cost Estimates:	-	50,000	50,000	500,000	-	-	500,000

Felton Diversion Replacement and Pump Station Rehabilitation

Project Description:

This project consists of evaluation of the existing dam and pump station with recommendations to rehabilitate or replace existing facilities. Alternate diversions to be considered will include horizontal collector wells (e.g., Ranney Collector) and other subsurface intake(s). This project will replace aging facilities and evaluate potentially more efficient ways to divert water from the San Lorenzo River at Felton. Additional funding for construction in FY2019.

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c701602							Account # 711-70-91-7153-57302
Project Cost Estimate:	73,636	226,364	226,364	400,000	500,000	-	900,000
Net Project Cost Estimates:	73,636	226,364	226,364	400,000	500,000	-	900,000

Loch Lomond Facilities Improvements

Project Description:

Complete facilities assessment and improvement program at Loch Lomond. A Use study was completed in FY 2013 which resulted in a number of planned projects to enhance the recreation area usability for its visitors. Several ADA and other recreational improvements are being pursued over the next 5 years.

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c701301							Account # 711-70-91-7153-57302
Project Cost Estimate:	49,676	235,324	235,324	100,000	-	-	100,000
Net Project Cost Estimates:	49,676	235,324	235,324	100,000	-	-	100,000

Main Replacements- Distribution Section

Project Description:

Recurring program to replace deteriorated or undersized water mains, as identified and prioritized by the Department and implemented by the Distribution Section. Projects are typically based on leak history, but also address water quality and fire flow issues

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c701507							Account # 711-70-97-7151-57302
Project Cost Estimate:	468,136	481,864	481,864	325,000	325,000	325,000	975,000
Net Project Cost Estimates:	468,136	481,864	481,864	325,000	325,000	325,000	975,000

Main Replacements- Eng Section- Transmission

Project Description:

Project was originally established for water main replacement for pipes 10" or larger. Beginning FY2018, such projects will be budgeted in project c700002, Main Replacements - Engineering Section, and project c700017, Water Transmission System Improvements.

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c709833							Account # 711-70-91-7151-57302
Project Cost Estimate:	2,348,760	736,677	736,677	-	-	-	-
Net Project Cost Estimates:	2,348,760	736,677	736,677	-	-	-	-

Main Replacements- Engineering Section

Project Description:

Recurring program to replace deteriorated or undersized mains as identified and prioritized by the Department. Priorities are based on the need to maintain water system reliability, deliver adequate fire flows, improve circulation and water quality, and reduce maintenance costs. These projects are typically large in terms of linear feet and are installed by contractors according to bid plans and specifications.

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c700002							Account # 711-70-91-7151-57302
Project Cost Estimate:	3,182,963	1,140,164	1,140,164	4,050,000	2,250,000	2,250,000	8,550,000
Net Project Cost Estimates:	3,182,963	1,140,164	1,140,164	4,050,000	2,250,000	2,250,000	8,550,000

Newell Creek Dam Inlet/Outlet Pipeline

Project Description:

The Newell Creek Dam was installed in the 1960's. A pipeline runs through the base of the dam to deliver water to the reservoir from Felton Diversion and from the reservoir to the Graham Hill Water Treatment Plant. The pipeline rehabilitation includes inspection of the pipeline and its appurtenances which will result in rehabilitation or replacement of all or parts of the inlet/outlet. This project is being implemented with oversight by the Division of Safety of Dams and, having demonstrated compliance with existing seismic regulations, is strictly addressing rehabilitation and replacement issues.

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c701606							Account # 711-70-91-7153-57302
Project Cost Estimate:	300,951	1,589,793	1,589,793	2,975,000	475,000	32,380,000	35,830,000
Net Project Cost Estimates:	300,951	1,589,793	1,589,793	2,975,000	475,000	32,380,000	35,830,000

Newell Creek Pipeline Rehab/Replacement

Project Description:

This pipeline was constructed in the 1960s and extends from the toe of the Newell Creek Dam and the Graham Hill Water Treatment Plant. This project will conduct a condition assessment and program level environmental review followed by rehab and/or replacement of all or parts of the pipeline. This project is intended to ensure continued reliability of this water supply transmission main.

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c701701							Account # 711-70-91-7153-57302
Project Cost Estimate:	-	420,000	420,000	1,500,000	6,500,000	5,000,000	13,000,000
Net Project Cost Estimates:	-	420,000	420,000	1,500,000	6,500,000	5,000,000	13,000,000

North Coast System Rehabilitation

Project Description:

Springs and streams along the coast north of the City limits supply approximately 25% of the City's raw water. Some of the facilities related to these water supplies are reaching the end of their useful life. This program consists of multiple projects over the next 15 to 20 years to evaluate, rehabilitate, and replace portions of the existing infrastructure to ensure continued reliability. Engineering, environmental review, and permitting for the coast segment (Phase 3) began in FY 2013 and continues through FY 2017.

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c709835							Account # 711-70-91-7153-57302
Project Cost Estimate:	7,698,905	6,487,854	6,487,854	1,500,000	-	-	1,500,000
Net Project Cost Estimates:	7,698,905	6,487,854	6,487,854	1,500,000	-	-	1,500,000

Photovoltaic Systems Evaluations/Construction

Project Description:

Ongoing project to evaluate, design and construct PV systems on various water department facilities. The current project is at the Bay Street Tank Site. Once installed, each project will add to the departments and City's green energy portfolio and work towards meeting and exceeding our climate action goals.

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c701607							Account # 711-70-91-7153-57302
Project Cost Estimate:	-	910,000	910,000	-	-	-	-
Net Project Cost Estimates:	-	910,000	910,000	-	-	-	-

Pressure Regulating Stations

Project Description:

Evaluation and replacement of pressure regulating stations (PRS). A PRS maintains (sustains or reduces) downstream pressure in order to deliver sufficient water pressure. The water distribution system contains 15 PRS and they vary in age from 66 years old to 8 years old. This project will evaluate the condition of each PRS and prioritize rehabilitation or replacement.

Fiscal Year 2017							
	Prior Year	Budgeted	Estimated Actuals	FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
Project # c701703	Account # 711-70-92-7151-57302						
Project Cost Estimate:	-	310,000	310,000	60,000	60,000	60,000	180,000
Net Project Cost Estimates:	-	310,000	310,000	60,000	60,000	60,000	180,000

Recycled Water

Project Description:

Evaluate the feasibility of using advanced treated wastewater for beneficial uses as per the recommendations of the Water Supply Advisory Committee. The project will be collaboration amongst the Water and Public Works Departments. The project would potentially provide additional water to City and other agency customers, addressing all or part of water supply deficiencies.

Fiscal Year 2017							
	Prior Year	Budgeted	Estimated Actuals	FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
Project # c701611	Account # 711-70-91-7153-57302						
Project Cost Estimate:	36,234	366,266	366,266	-	-	-	-
Net Project Cost Estimates:	36,234	366,266	366,266	-	-	-	-
Project # c701612	Account # 715-70-91-7153-57302						
Project Cost Estimate:	17,405	155,095	158,787	-	-	-	-
Net Project Cost Estimates:	17,405	155,095	158,787	-	-	-	-

Security Camera & Building Access Upgrades

Project Description:

Evaluation and implementation of security camera and building access upgrades at various Water facilities. Current security equipment is proprietary and could be improved. A transition to a new system will require camera replacement and additional video storage equipment.

Fiscal Year 2017							
	Prior Year	Budgeted	Estimated Actuals	FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
Project # c701704	Account # 711-70-92-7151-57302						
Project Cost Estimate:	-	95,000	95,000	150,000	200,000	200,000	550,000
Net Project Cost Estimates:	-	95,000	95,000	150,000	200,000	200,000	550,000

Source Water Evaluation

Project Description:

Evaluate source water quality, operational and infrastructure alternatives to maximize use of surface water. This project was prompted in part by the recommendations of the Water Supply Advisory Committee, accepted by Council in Nov 2015, to evaluate use of additional winter flows in the San Lorenzo River for various purposes to solve the regional water supply issues.

	Fiscal Year 2017						
	Prior Year	Budgeted	Estimated Actuals	FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
Project # c701608	Account # 711-70-91-7153-57302						
Project Cost Estimate:	33,079	566,921	566,921	250,000	250,000	-	500,000
Net Project Cost Estimates:	33,079	566,921	566,921	250,000	250,000	-	500,000

Spoils and Stockpile Handling Facilities Impro

Project Description:

Suitable storage for materials (sand, base rock, cold mix and spoils) is needed at the City's Corporation yard. Improvements will allow for better handling of wet spoils generated by the vector truck, as well as prevent sediment laden runoff from entering the storm water drainage system. (Project title modified from Bunker Roof Project.)

	Fiscal Year 2017						
	Prior Year	Budgeted	Estimated Actuals	FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
Project # c701508	Account # 711-70-97-7151-57302						
Project Cost Estimate:	51,000	344,900	344,900	-	-	-	-
Net Project Cost Estimates:	51,000	344,900	344,900	-	-	-	-

Tube Settler Replacement

Project Description:

Design and replacement of tube settlers and related appurtenances.

	Fiscal Year 2017						
	Prior Year	Budgeted	Estimated Actuals	FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
Project # c701708	Account # 711-70-91-7152-57302						
Project Cost Estimate:	-	200,000	200,000	2,000,000	-	-	2,000,000
Net Project Cost Estimates:	-	200,000	200,000	2,000,000	-	-	2,000,000

University Tank No. 4 Rehab/Replace

Project Description:

Perform engineering analysis and condition assessment of the aging University 4 tank to ensure continued reliable service. Establish scope of work for recoating/rehabilitation project. Acquire construction easements from UCSC and perform environmental analysis to install temporary tank for use during construction. Create plans and specifications for recoating/rehabilitation project.

Fiscal Year 2017							
	Prior Year	Budgeted	Estimated Actuals	FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
Project # c701505	Account # 711-70-91-7153-57302						
Project Cost Estimate:	-	270,000	270,000	100,000	3,550,000	-	3,650,000
Net Project Cost Estimates:	-	270,000	270,000	100,000	3,550,000	-	3,650,000

University Tank No. 5 Replacement

Project Description:

Perform engineering analysis and condition assessment of the aging University 5 tank to ensure continued reliable service. Establish scope of work for recoating/rehabilitation project. Create plans and specifications for recoating/rehabilitation project. Install temporary tank and variable speed pumps for use during construction. Construct recoating/rehabilitation project.

Fiscal Year 2017							
	Prior Year	Budgeted	Estimated Actuals	FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
Project # c701506	Account # 711-70-91-7153-57302						
Project Cost Estimate:	91,747	386,253	389,253	3,500,000	-	-	3,500,000
Net Project Cost Estimates:	91,747	386,253	389,253	3,500,000	-	-	3,500,000

Water Main Replacements -Customer Initiated

Project Description:

Recurring program similar to the other Main Replacement Projects; however, these projects are initiated on an as-needed basis to accommodate customer-requested service connections to undersized or inadequate mains. Funds, to the extent of the appropriation, are disbursed to customers on a first-come, first-served basis. This project is funded by System Development Charges (100% SDC – Fund 715).

Fiscal Year 2017							
	Prior Year	Budgeted	Estimated Actuals	FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
Project # c700004	Account # 715-70-91-7151-57302						
Project Cost Estimate:	301,259	50,000	50,000	50,000	50,000	50,000	150,000
Net Project Cost Estimates:	301,259	50,000	50,000	50,000	50,000	50,000	150,000

Water Main Replacements -Outside Agency

Project Description:

Water main, service line, valve, or water meter relocation necessitated by County or other Agency road improvement, storm drain improvement projects, and/or other projects that conflict with existing water infrastructure.

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c700003							Account # 711-70-91-7151-57302
Project Cost Estimate:	1,103,581	478,211	478,211	250,000	250,000	250,000	750,000
Net Project Cost Estimates:	1,103,581	478,211	478,211	250,000	250,000	250,000	750,000

Water Resources Building

Project Description:

The Watershed Resources Division is currently housed in temporary trailers. This project consists of a needs assessment, design, and construction. The needs assessment portion of the project has been completed; FY 2016/17 will focus on site selection and design; FY 2017/18 will be construction.

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c701702							Account # 711-70-91-7153-57302
Project Cost Estimate:	-	1,100,000	1,100,000	-	-	-	-
Net Project Cost Estimates:	-	1,100,000	1,100,000	-	-	-	-

Water Supply Augmentation Strategy Implementation

Project Description:

This CIP replaces the Water Supply Advisory Committee (WSAC) to capture various studies and analyses to further the WSAC recommendations. The work conducted in other CIP projects relate to this one; e.g., ASR, Recycled Water.

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c701705							Account # 711-70-91-7153-57302
Project Cost Estimate:	-	78,352	78,352	300,000	-	1,200,000	1,500,000
Net Project Cost Estimates:	-	78,352	78,352	300,000	-	1,200,000	1,500,000

Water Transmission System Improvements

Project Description:

To be used in combination with project c700002, Main Replacements - Engineering Section to provide partial funding for water main replacements for pipes 10" or larger.

	Prior Year	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budgeted	Estimated Actuals				
Project # c700017							Account # 715-70-91-7151-57302
Project Cost Estimate:	509,361	184,169	184,169	-	-	-	-
Net Project Cost Estimates:	509,361	184,169	184,169	-	-	-	-

Water Treatment Plant Hypochlorite Generation

Project Description:

As part of an overall plan to ensure compliance with changing water quality regulations, improvements are needed at the Graham Hill Water Treatment Plant. This project will consider the replacement of the existing chlorine gas system with a new hypochlorite generation system.

		Fiscal Year 2017			FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Prior Year	Budgeted	Estimated Actuals				
Project # c701401	Account # 711-70-91-7152-57302							
Project Cost Estimate:	43,834	31,166	31,166	-	-	-	-	
Net Project Cost Estimates:	43,834	31,166	31,166	-	-	-	-	

Water Treatment Upgrades

Project Description:

Upgrades to the Graham Hill Water Treatment Plant are necessary to meet new and planned regulatory requirements, and increase overall system reliability. This is a recurring project to prioritize needs and make smaller improvements. The current project includes upgrades to the bulk chemical storage area.

		Fiscal Year 2017			FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Prior Year	Budgeted	Estimated Actuals				
Project # c700025	Account # 711-70-91-7152-57302							
Project Cost Estimate:	313,986	126,561	126,561	300,000	-	-	300,000	
Net Project Cost Estimates:	313,986	126,561	126,561	300,000	-	-	300,000	

WTP Concrete Tanks Replace.- Solids

Project Description:

As of FY2018, replacement of the disposal tank for solids produced at the Graham Hill Water Treatment is included in project c701501, WTP Concrete Tanks Replacement.

		Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Prior Year	Budgeted				
Project # c701605	Account # 711-70-91-7153-57302						
Project Cost Estimate:	-	225,000	225,000	-	-	-	-
Net Project Cost Estimates:	-	225,000	225,000	-	-	-	-

WTP Concrete Tanks Replace.- UV System

Project Description:

As of FY2018, ultra violet disinfection is now included in project c701501, WTP Concrete Tanks Replacement.

		Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
	Prior Year	Budgeted	Estimated Actuals				
Project # c701503		Account # 711-70-91-7152-57302					
Project Cost Estimate:		-	40,000	40,000	-	-	-
Net Project Cost Estimates:		-	40,000	40,000	-	-	-

WTP Concrete Tanks Replacement

Project Description:

As part of an overall plan to ensure compliance with changing water quality regulations, improvements are needed at the Graham Hill Water Treatment Plant. This project will evaluate the condition of four concrete tanks located at the site (as well as an off-site concrete tank), make improvement recommendation, and construction.

		Fiscal Year 2017			FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Prior Year	Budgeted	Estimated Actuals				
Project #	c701501							Account # 711-70-91-7152-57302
Project Cost Estimate:		201,732	761,588	761,588	1,900,000	7,700,000	-	9,600,000
Net Project Cost Estimates:		201,732	761,588	761,588	1,900,000	7,700,000	-	9,600,000

WTP Flocculator Improvements

Project Description:

As part of an overall plan to ensure compliance with changing water quality regulations, improvements are needed at the Graham Hill Water Treatment Plant. This project will replace aging paddle wheel flocculators and improve sedimentation processes. Project includes seismic evaluation as well as consideration for covering all basins (project c701601).

		Fiscal Year 2017			FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Prior Year	Budgeted	Estimated Actuals				
Project #	c701502							Account # 711-70-91-7152-57302
Project Cost Estimate:		-	60,000	60,000	-	2,300,000	-	2,300,000
Net Project Cost Estimates:		-	60,000	60,000	-	2,300,000	-	2,300,000

Existing Capital Projects for Water & Water System Development Enterprise Fund (711 & 715) Totals

	Prior Year Totals	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budget	Estimated Actuals				
Total Project Cost Estimate:	41,292,049	20,570,133	20,576,825	23,160,000	24,660,000	41,715,000	89,535,000
Total Project Funding Estimate:	-	-	-	-	-	-	-
Total Net Project Cost Estimate:	41,292,049	20,570,133	20,576,825	23,160,000	24,660,000	41,715,000	89,535,000

Water Totals for Water & Water System Development Enterprise Fund (711 & 715)

	Prior Year Totals	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budget	Estimated Actuals				
Total Project Cost Estimate:	41,292,049	20,570,133	20,576,825	23,660,000	25,660,000	43,715,000	93,035,000
Total Project Funding Estimate:	-	-	-	-	-	-	-
Total Net Project Cost Estimate:	41,292,049	20,570,133	20,576,825	23,660,000	25,660,000	43,715,000	93,035,000

Water Totals

	Prior Year Totals	Fiscal Year 2017		FY 2018 Adopted	FY 2019 Estimate	FY 2020 Estimate	Total 2018 - 2020
		Budget	Estimated Actuals				
Total Project Cost Estimate:	41,292,049	20,570,133	20,576,825	23,660,000	25,660,000	43,715,000	93,035,000
Total Project Funding Estimate:	-	-	-	-	-	-	-
Total Net Project Cost Estimate:	41,292,049	20,570,133	20,576,825	23,660,000	25,660,000	43,715,000	93,035,000