# Water Department Capital Investment Projects



University Tank 5 Replacement

### Water (EXISTING)

711- Water & Water System Development Enterprise Fund

#### Advanced Metering infrastructure (AMI)

#### **Project Description:**

Evaluate the use of AMI as replacement to the current (Automatic Meter Reading (AMR)). 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. A business case is underway; implementation to occur in future years.

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701603					Accoun	t # 711-70-9	1-7153-57302
Project Cost Estimate:	5,600	44,400	44,400	-	1	50,000	50,000
Net Project Cost Estimates:	5,600	44,400	44,400	-	-	50,000	50,000

#### Aerators at Loch Lomond

#### **Project Description:**

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

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701706					Accoun	t # 711-70-9	1-7153-57302
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 FY2019 (Phase 2) will include pilot work. Project would potentially provide additional potable water to City and other agency customers, addressing part or all of water supply deficiencies.

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	•		Estimated	FY 2019	FY 2020	FY 2021	Total
	<b>Prior Year</b>	Budgeted	Actuals	Adopted	Estimate	Estimate	2019 - 2021
Project # c701609					Accoun	t # 711-70-9	1-7153-57302
Project Cost Estimate:	184,571	2,304,929	2,304,929	420,000	-	-	420,000
Net Project Cost Estimates:	184,571	2,304,929	2,304,929	420,000	-	-	420,000
Project # c701610					Accoun	t # 715-70-9	1-7153-57302
Project Cost Estimate:	79,102	816,398	816,398	180,000	-	-	180,000
Net Project Cost Estimates:	79,102	816,398	816,398	180,000	-	-	180,000

### Water (EXISTING)

711- Water & Water System Development Enterprise Fund

#### **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. Final project elements include site clean-up, security, and landscaping.

		Fiscal Ye	ear 2018				
	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c700313					Accoun	t # 711-70-9	1-7153-57302
Project Cost Estimate:	19,483,869	1,146,807	1,146,807	-	-	-	-
Net Project Cost Estimates:	19,483,869	1,146,807	1,146,807	-	-	-	_

#### 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, pump test, CEQA and construction efforts. Scheduled for completion in April 2018.

		Fiscal Ye	ear 2018				
	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c700026	11101 1001	Duugeteu					1-7153-57302
Project Cost Estimate:	64,243	445,000	445,000	-	-	-	-
Net Project Cost Estimates:	64,243	445,000	445,000	-	-	-	_

#### **Brackney Landslide Risk Reduction**

#### **Project Description:**

Mitigation project to reduce the risk of a landslide on Brackney Rd in order to protect the Newell Creek Pipeline that is our pipeline bringing raw water from the Loch Lomond Reservoir to the Graham Hill Water Treatment Plant.

		Fiscal Ye	ear 2018				
	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701803		_			Accoun	t # <b>711-70-</b> 91	L-7153-57302
Project Cost Estimate:	-	70,100	70,100	-	-	-	-
Net Project Cost Estimates:	-	70,100	70,100	-	-	-	-

### Water (EXISTING)

711- Water & Water System Development Enterprise Fund

#### Coast Pump Stat. & Tail Well Flood Reduction

#### **Project Description:**

Mitigation projects to reduce the risk of damage to the Coast Pump Station and Tait Wells No. 4 when the San Lorenzo River floods.

		Fiscal Ye	ear 2018				
	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701804					Accoun	t # 711-70-9	1-7151-57302
Project Cost Estimate:	-	67,300	67,300	-	-	-	-
Net Project Cost Estimates:	-	67,300	67,300	-	-	-	

#### **Coast Pump Station Line Repairs**

#### **Project Description:**

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

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701707					Accoun	t # 711-70-9	1-7151-57302
Project Cost Estimate:	-	550,000	550,000	145,120	-	-	145,120
Net Project Cost Estimates:	-	550,000	550,000	145,120	-	-	145,120

#### 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. The bladder dam is being replaced as part of this project and the condition assessment may recommend other improvements.

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701602					Accoun	t # 711-70-9	1-7153-57302
Project Cost Estimate:	92,036	507,964	507,964	511,900	-	-	511,900
Net Project Cost Estimates:	92,036	507,964	507,964	511,900	-	-	511,900

### Water (EXISTING)

711- Water & Water System Development Enterprise Fund

#### **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.

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701301					Accoun	it # 711-70-9	1-7153-57302
Project Cost Estimate:	73,626	311,374	311,374	-	ı	-	-
Net Project Cost Estimates:	73,626	311,374	311,374	-	-	-	_

#### **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

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701507					Accoun	t # 711-70-9	7-7151-57302
Project Cost Estimate:	661,729	613,271	613,271	325,000	325,000	325,000	975,000
Net Project Cost Estimates:	661,729	613,271	613,271	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	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c709833					Accoun	t # 711-70-9	1-7151-57302
Project Cost Estimate:	2,366,445	2,168,992	2,168,992	-	1	-	-
Net Project Cost Estimates:	2,366,445	2,168,992	2,168,992	-	-	-	-

### Water (EXISTING)

711- Water & Water System Development Enterprise Fund

#### **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.

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c700002					Accoun	t # <b>711-70-9</b> 2	L-7151-57302
Project Cost Estimate:	4,261,500	2,111,628	2,111,628	2,025,000	2,025,000	2,025,000	6,075,000
Net Project Cost Estimates:	4,261,500	2,111,628	2,111,628	2,025,000	2,025,000	2,025,000	6,075,000

#### 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 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701802					Accoun	t # 711-70-9	1-7153-57302
Project Cost Estimate:	-	250,000	250,000	320,000	-	1,000,000	1,320,000
Net Project Cost Estimates:	-	250,000	250,000	320,000	-	1,000,000	1,320,000

#### 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.

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701801					Accoun	t # <b>711-70-9</b> 1	L-7153-57302
Project Cost Estimate:	-	250,000	250,000	370,000	-	1,000,000	1,370,000
Net Project Cost Estimates:	_	250.000	250.000	370.000		1.000.000	1.370.000

### Water (EXISTING)

711- Water & Water System Development Enterprise Fund

#### 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.

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701606					Accoun	t # <b>711-70-9</b> 2	L-7153-57302
Project Cost Estimate:	966,872	4,798,872	4,798,872	1,677,000	2,350,000	9,200,000	13,227,000
Net Project Cost Estimates:	966,872	4,798,872	4,798,872	1,677,000	2,350,000	9,200,000	13,227,000

#### Newell Creek Pipeline Rehab/Replacement

#### **Project Description:**

This pipeline was constructed in the 1960s and extends from the toe of the Newell Creek Dam to 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.

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701701					Accoun	t # 711-70-9:	1-7153-57302
Project Cost Estimate:	-	1,782,600	1,782,600	640,000	6,500,000	5,000,000	12,140,000
Net Project Cost Estimates:	-	1,782,600	1,782,600	640,000	6,500,000	5,000,000	12,140,000

#### 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 six phases over the next 15 to 20 years to evaluate, rehabilitate, and replace portions of the existing infrastructure to ensure continued reliability. Phase 4 is budgeted to begin in FY2021.

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c709835					Accoun	t # 711-70-9:	L-7153-57302
Project Cost Estimate:	12,659,246	1,766,013	1,766,013	215,000	-	1,500,000	1,715,000
Net Project Cost Estimates:	12,659,246	1,766,013	1,766,013	215,000	-	1,500,000	1,715,000

### Water (EXISTING)

711- Water & Water System Development Enterprise Fund

#### 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.

Fiscal	Year	2018
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	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701607					Accoun	t # 711-70-9	1-7153-57302
Project Cost Estimate:	807,112	102,888	102,888	-	-	-	-
Net Project Cost Estimates:	807,112	102,888	102,888	-	-	-	_

#### **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, with the oldest being 66 years. This project will evaluate the condition of each PRS and prioritize rehabilitation or replacement over the next 2-4 years.

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701703					Accoun	t # 711-70-9	1-7151-57302
Project Cost Estimate:	41,229	328,771	328,771	60,000	60,000	-	120,000
Net Project Cost Estimates:	41,229	328,771	328,771	60,000	60,000	-	120,000

#### **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.

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701611				·	Accoun	t # 711-70-9:	1-7153-57302
Project Cost Estimate:	265,374	137,126	137,126	70,000	-	-	70,000
Net Project Cost Estimates:	265,374	137,126	137,126	70,000	-	-	70,000
Project # c701612					Accoun	t # <b>715-70-</b> 9:	1-7153-57302
Project Cost Estimate:	126,120	46,380	50,072	30,000	-	-	30,000
Net Project Cost Estimates:	126,120	46,380	50,072	30,000	-	-	30,000

### Water (EXISTING)

711- Water & Water System Development Enterprise Fund

#### **River Bank Filtration**

#### **Project Description:**

This project will assess the feasibility of locating new riverbank filtration wells along the San Lorenzo River near two different existing surface water diversions: Tait Street and Felton Diversion. If found feasible, locations and design parameters for installation of vertical or horizontal wells would be recommended. Construction would be scheduled and budgeted in future years.

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701806					Accoun	t # 711-70-9	1-7153-57302
Project Cost Estimate:	-	100,000	100,000	100,000	-	-	100,000
Net Project Cost Estimates:	-	100,000	100,000	100,000	-	-	100,000

#### San Lorenzo River Diversion and Tait Wells

#### **Project Description:**

Conduct a condition assessment of the existing diversion and wells including consideration of sanding issues, potential dam replacement, alternative diversions such as horizontal collector wells (e.g., Ranney Collector). Project will ensure reliable and efficient diversion of water from the San Lorenzo River at Tait St. Current phase includes condition assessment of existing dam & intake and feasibility of additional wells.

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c709872					Accoun	t # 711-70-9	1-7153-57302
Project Cost Estimate:	1,930,345	124,670	124,670	240,000	-	-	240,000
Net Project Cost Estimates:	1,930,345	124,670	124,670	240,000	-	-	240,000

#### Security Camera & Building Access Upgrades

#### **Project Description:**

Evaluation and implementation of security camera and building access upgrades at various water department 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.

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701704					Accoun	t # 711-70-9	1-7151-57302
Project Cost Estimate:	-	245,000	245,000	200,000	200,000	-	400,000
Net Project Cost Estimates:	-	245,000	245,000	200,000	200,000	-	400,000

### Water (EXISTING)

711- Water & Water System Development Enterprise Fund

#### 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	2018
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	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701608					Accoun	t # 711-70-9	1-7153-57302
Project Cost Estimate:	181,451	668,549	668,549	350,000	-	-	350,000
Net Project Cost Estimates:	181,451	668,549	668,549	350,000	-	_	350,000

#### **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 vactor truck, as well as prevent sediment laden runoff from entering the storm water drainage system.

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701508					Accoun	t # 711-70-9	1-7151-57302
Project Cost Estimate:	176,355	173,645	173,645	-	-	-	-
Net Project Cost Estimates:	176,355	173,645	173,645	-	-	-	_

#### **Tube Settler Replacement**

#### **Project Description:**

Design and replacement of tube settlers and related appurtenances.

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701708					Accoun	t # <b>711-70-</b> 9	1-7152-57302
Project Cost Estimate:	47,264	2,152,736	2,152,736	1,775,200	-	-	1,775,200
Net Project Cost Estimates:	47,264	2,152,736	2,152,736	1,775,200	-	-	1,775,200

### Water (EXISTING)

711- Water & Water System Development Enterprise Fund

#### **Union/Locust Building Remodel**

#### **Project Description:**

Remodel of Union/Locust Building to reduce Library footprint and expand Water space.

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701805					Accoun	t # 711-70-9	1-7159-57203
Project Cost Estimate:	-	50,000	50,000	-	-	-	-
Net Project Cost Estimates:	-	50,000	50,000	-	-	-	_

#### 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. Project includes design of recoat/rehabilitation project, construction easements from UCSC, plans and specifications for recoat/rehabilitation project, and construction.

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701505					Accoun	t # 711-70-9	1-7153-57302
Project Cost Estimate:	-	220,000	220,000	-	-	3,550,000	3,550,000
Net Project Cost Estimates:	-	220,000	220,000	-	-	3,550,000	3,550,000

#### **University Tank No. 5 Replacement**

#### **Project Description:**

Perform engineering analysis and condition assessment of the aging University 5 tank to ensure continued reliable service. Project is currently in design of a replacement tank, installation of a smaller maintenance tank, and replacement of 900 LF of water main.

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701506					Accoun	t # <b>711-70-</b> 9	1-7153-57302
Project Cost Estimate:	189,608	3,838,392	3,838,392	400,000	-	-	400,000
Net Project Cost Estimates:	189,608	3,838,392	3,838,392	400,000	-	-	400,000

### Water (EXISTING)

715- Water & Water System Development Enterprise Fund

#### 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 non-existent or inadequate mains. Funds, to the extent of the appropriation, are disbursed to customers on a first-come, first-served basis.

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c700004					Accoun	t # 715-70-9	1-7151-57302
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.

#### Fiscal Year 2018

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c700003					Accoun	t # 711-70-9	1-7151-57302
Project Cost Estimate:	1,130,709	701,083	701,083	250,000	250,000	250,000	750,000
Net Project Cost Estimates:	1,130,709	701,083	701,083	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. Project is on hold until condition assessment and facilities plan is completed in FY2019.

	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701702					Accoun	t # 711-70-9	L-7153-57302
Project Cost Estimate:	28,007	1,071,993	1,071,993	-	-	-	-
Net Project Cost Estimates:	28.007	1.071.993	1.071.993	-	_	_	_

### Water (EXISTING)

711- Water & Water System Development Enterprise Fund

#### Water Supply Augmentation Strategy Implementation

#### **Project Description:**

This CIP replaces projects c701402 & c701403 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.

		Fiscal Year 2018					
	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701705					Account	t # 711-70-91	-7153-57302
Project Cost Estimate:	13,166	665,186	665,186	980,000	1,670,000	7,320,000	9,970,000
Net Project Cost Estimates:	13,166	665,186	665,186	980,000	1,670,000	7,320,000	9,970,000

#### **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. This project is funded by System Development Charges (100% SDC – Fund 715).

		Fiscal Ye	ear 2018				
	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c700017					Accoun	t # <b>715-70-9</b> 2	L-7151-57 <mark>30</mark> 2
Project Cost Estimate:	509,361	484,169	484,169	225,000	225,000	225,000	675,000
Net Project Cost Estimates:	509,361	484,169	484,169	225,000	225,000	225,000	675,000

#### Water Treatment Plant Filter Rehabilitation and Upgrades

#### **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 rehabilitate and improve the filter performance. Project will be complete in the Fall 2018.

		Fiscal Ye	ear 2018				
	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701303					Accoun	t # <b>711-70-9</b> :	L-7152-57302
Project Cost Estimate:	5,749,366	287,934	287,934	-	-	-	-
Net Project Cost Estimates:	5,749,366	287,934	287,934	-	-	-	-

### Water (EXISTING)

711- Water & Water System Development Enterprise Fund

#### Water Treatment Upgrades

#### **Project Description:**

Upgrades to the Graham Hill Water Treatment Plant (GHWTP) 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. Larger projects at the GHWTP become a new CIP project.

		Fiscal Ye	ear 2018				
	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c700025					Accoun	t # 711-70-9	1-7152-57302
Project Cost Estimate:	367,999	1,194,048	1,206,238	130,000	-	-	130,000
Net Project Cost Estimates:	367,999	1,194,048	1,206,238	130,000	-	-	130,000

#### **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. This project is in design with construction anticipated to begin Spring 2019.

		Fiscal Ye	ar 2018				
	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701501					Accoun	t # <b>711-70-9</b> 1	L-7152-57302
Project Cost Estimate:	420,388	2,707,932	2,707,932	5,710,000	13,500,000	6,500,000	25,710,000
Net Project Cost Estimates:	420,388	2,707,932	2,707,932	5,710,000	13,500,000	6,500,000	25,710,000

#### 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.

		Fiscal Ye	ear 2018				
	Prior Year	Budgeted	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Project # c701502		_			Accoun	t # <b>711-70-9</b> :	1-7152-57302
Project Cost Estimate:	-	60,000	60,000	3,160,000	-	-	3,160,000
Net Project Cost Estimates:	-	60,000	60,000	3,160,000	-	-	3,160,000

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

Fiscal Y	ear 2018			
Budget	Estimated	FY 2019	FY 2020	FY

	Prior Year Totals	Budget	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Total Project Cost Estimate:	53,183,952	35,766,150	35,782,032	20,559,220	27,155,000	37,995,000	85,709,220
Total Project Funding Estimate:	-	-	-	-	-	-	-
Total Net Project Cost Estimate:	53,183,952	35,766,150	35,782,032	20,559,220	27,155,000	37,995,000	85,709,220

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

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	Prior Year Totals	Budget	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Total Project Cost Estimate: Total Project Funding Estimate:	53,183,952	35,766,150 -	35,782,032 -	20,559,220	27,155,000	37,995,000 -	85,709,220 -
Total Net Project Cost Estimate:	53,183,952	35,766,150	35,782,032	20,559,220	27,155,000	37,995,000	85,709,220

### Water Totals

	Prior Year Totals	Budget	Estimated Actuals	FY 2019 Adopted	FY 2020 Estimate	FY 2021 Estimate	Total 2019 - 2021
Total Project Cost Estimate:	53,183,952	35,766,150	35,782,032	20,559,220	27,155,000	37,995,000	85,709,220
Total Project Funding Estimate:	-	-	-	-	-	-	-
Total Net Project Cost Estimate:	53,183,952	35,766,150	35,782,032	20,559,220	27,155,000	37,995,000	85,709,220