

# Water Commission Agenda Regular Meeting 7:00 p.m. – Monday, May 4, 2015 Council Chambers 809 Center Street, Santa Cruz

## Agenda

#### Call to Order

#### **Roll Call**

**Presentation** Organized groups may make presentations to the Water Commission. Presentations that require more than three minutes should be scheduled in advance with Water Department staff.

**Statements of Disqualification** Section 607 of the City Charter states that "...All members present at any meeting must vote unless disqualified, in which case the disqualification shall be publicly declared and a record thereof made."

The City of Santa Cruz has adopted a Conflict of Interest Code, and Section 8 of that Code states that no person shall make or participate in a governmental decision which he or she knows or has reason to know will have a reasonably foreseeable material financial effect distinguishable from its effect on the public generally.

**Oral Communications** No action shall be taken on this item.

**Announcements** No action shall be taken on this item.

#### Consent Agenda (Pages 1-20)

Items on the consent agenda are considered to be routine in nature and will be acted upon in one motion. Specific items may be removed by members of the advisory body or public for separate consideration and discussion. Routine items that will be found on the consent agenda are City Council Items Affecting Water, Water Commission Minutes, Information Items, Documents for Future Meetings, and Items initiated by members for Future Agendas. If one of these categories is not listed on the Consent Agenda then those items are not available for action.

- 1. City Council Items Affecting Water ★ (accept info) (Pages 1-2)
- 2. Approve the April 6, 2015 Water Commission Minutes ★ (Pages 3-7)
- 3. Information Item: State of the Water System, Item Presented to WSAC☆ (Pages 8-20)

#### **Items Removed from the Consent Agenda**

#### **General Business** (Pages 21-63)

Any document related to an agenda item for the General Business of this meeting distributed to the Water Commission less than 72 hours before this meeting is available for inspection at the

Water Administration Office, 212 Locust Street, Suite A, Santa Cruz, California. These documents will also be available for review at the Water Commission meeting with the display copy at the rear of the Council Chambers.

1. Water Commission Action/Recommendation on Revised System Development Charges ☆ (Pages 21-29)

#### Recommendation:

- 1. Receive report on proposed System Development Charges revisions.
- 2. Recommend to the City Council a resolution adjusting the System Development Charges.
- 3. Recommend to the City Council an ordinance amending chapter 16.04.041 of the Santa Cruz Municipal Code pertaining to connection of new water services.
- 2. FY 2016-18 CIP Financing & Operating Budget Overview ☆ (Pages 30-63) Recommendation:
  - 1. Receive information related to the financing of the proposed Water Department's FY 2016 Operating Budget and the FY 2016-2018 CIP; and,
  - 2. Recommend approval of the Water Department's FY 2016 Operating Budget and FY 2016-2018 Capital Improvement Program budget to the City Council.

#### **Subcommittee/Advisory Body Oral Reports** No items.

1. WSAC Update (Oral Report)

**Director's Oral Report** No action shall be taken on this item.

**Adjournment** The next meeting of the Water Commission is scheduled for June 1, 2015 at 7:00 p.m. in Council Chambers.

**☆**Denotes written materials included in packet

<u>APPEALS</u> - Any person who believes that a final action of this advisory body has been taken in error may appeal that decision to the City Council. Appeals must be in writing, setting forth the nature of the action and the basis upon which the action is considered to be in error, and addressed to the City Council in care of the City Clerk.

Other - Appeals must be received by the City Clerk within ten (10) calendar days following the date of the action from which such appeal is being taken. An appeal must be accompanied by a fifty dollar (\$50) filing fee.

The City of Santa Cruz does not discriminate against persons with disabilities. Out of consideration for people with chemical sensitivities, please attend the meeting fragrance free. Upon request, the agenda can be provided in a format to accommodate special needs. Additionally, if you wish to attend this meeting and will require assistance such as an interpreter for American Sign Language, Spanish, or other special equipment, please call Water Administration at 831-420-5200 at least five days in advance so that arrangement can be made. The Cal-Relay system number: 1-800-735-2922.



#### WATER COMMISSION REPORT

DATE: April 27, 2015

TO: Water Commission

FROM: Rosemary Menard

Water Director

SUBJECT: City Council Items Affecting Water

#### **City Council Meeting of April 7, 2015:**

#### Cooperative Groundwater Management Agreement (WT)

**Motion to authorize** the City Manager to execute the City of Santa Cruz/Soquel Creek Water District Cooperative Monitoring/Adaptive Groundwater Management Agreement, in a form approved by the City Attorney.

### Beltz Well No. 12 Construction Project – Notice of Completion (WT)

**Motion to accept** the work of Anderson Pacific Construction Engineering Inc. (Santa Clara, CA) as complete per the plans and specifications and authorizing the filing of a Notice of Completion for the Beltz Well No. 12 Project.

Approval of Amendment to Join the Soquel Aptos Groundwater Management Committee (WT) Resolution authorizing and directing the City Manager to execute an amendment to the Basin Implementation Group's Joint Exercise of Powers Agreement for the Soquel-Aptos Groundwater Management area in a form approved by the City Attorney to allow the City to become a permanent member of the Soquel-Aptos Groundwater Management Committee.

#### 2015 Water Supply Outlook and Declaration of a Water Shortage Emergency (WT)

**Resolution Declaring** a Stage 3 Water Shortage Emergency within the City of Santa Cruz Water Service Area.

Ordinance Amendments to Chapter 16.01 of the Santa Cruz Municipal Code Pertaining to Water Shortage Regulations and Restrictions (WT)

**Introduce for publication** an ordinance amending Chapter 16.01 of the Santa Cruz Municipal Code pertaining to water shortage regulations and restrictions.

# **City Council Meeting of April 28, 2015:**

Ordinance No. 2015-07 Amending Chapter 16.01 of the Santa Cruz Municipal Code Pertaining to Water Shortage Regulations and Restrictions (WT)

Final adoption of Ordinance No. 2015-07.



# Water Commission 7:00 p.m. - Monday, April 6, 2015 Council Chambers 809 Center Street, Santa Cruz

## **Minutes of a Water Commission Meeting**

**Call to Order** – Chair **D. Baskin** called the meeting to order at 7:06 p.m. in the City Council Chambers.

Roll Call

**Present:** D. Baskin, G. Mead, D. Schwarm, A. Schiffrin, D. Stearns and L.

Wilshusen.

**Absent:** W. Wadlow, (with notification)

**Staff:** R. Menard, Water Director; T. Goddard Administrative Services Manager;

G. Rudometkin, Administrative Assistant III; and N. Dennis, Principal

Management Analyst.

**Others**: Approximately 5 members of the public.

**Presentation** –There were no presentations.

**Statements of Disqualification** –There were no statements of disqualification.

**Oral Communications** – There were no oral communications.

**Announcements** –There were no announcements.

#### **Consent Agenda**

- 1. City Council Items Affecting Water
- 2. Approve the March 2, 2015 Water Commission Minutes
- 3. Approve the March 3, 2015 Joint City Council / Water Commission Study Session Minutes

### Items Removed from the Consent Agenda

Commissioner A. Schiffrin moved the Consent Agenda as amended. Commissioner G. Mead seconded.

**VOICE VOTE: MOTION CARRIED** 

AYES: All.
NOES: None
ABSTAINED: NONE
ABSENT: W. Wadlow

Commissioner A. Schiffrin moved the consent agenda. G. Mead seconded.

**VOICE VOTE: MOTION CARRIED** 

AYES: All. NOES: None

#### **General Business**

#### 1. Martha Lennihan - Water Rights 101 Presentation

R. Menard, Water Director introduced M. Lennihan, Water Rights Counsel who provided the presentation and responded to Commission questions.

#### Commission Questions/Comments:

- Historically the County, not state has jurisdiction on groundwater; small
  private domestic wells were left out of the new legislation passed last
  September, the Groundwater Sustainability Act.
- Does the Governors proclamation give him the authority to suspend CEQUA; does the governor have the authority to suspend state law? Answer: Yes.
- What is the TUCP? Answer: The city has a temporary urgency change petition approved which reduces but does not eliminate the bypass and release flow requirements at Newell creek reservoir because of the drought.
- As far as the HCP and water rights it seems like NOA and Fish & Wildlife are able to set limits on our ability to take from the streams that may compromise our ability on what we could otherwise take out due to our water rights, is this correct. Answer: Yes, they have the authority to implement the state and federal endangered species act it's always a question of what the biological analysis is, of what the fish need and there are some variations on that within those acts but they are very strong laws.

#### **Public Comment**

• No Comment.

## 2. <u>2015 Water Supply Outlook</u>

T. Goddard, Administrative Services Manager who provided the presentation and responded to Commission questions.

#### Commission Questions/Comments:

- How do the north coast streams currently compare to 2014 and what is going on in terms of negotiations with the regulatory as in the amount of water that we will be able to divert. Will the amount of water be the same, higher or lower? Answer: The same amount of water from the North Coast, more from Loch Lomond, less from San Lorenzo and the same amount from Beltz well.
- In order to implement Stage 3 will the department need the same major ramp up time and money as last year or is there a differential in there to help in

terms of the budget? Answer: Certainly the policy and procedure work done last year put the department in good shape to make a more smooth transition for implementation, which we are recommending would start on the May 1' 2015. The staffing impacts, to work with customers, for water school, exceptions, etc. we are expecting going in that we will have the same amount of impact as we did last year. We will be staffing with temporary employees so we can adjust as we go along.

- Was staff going to recommend the stage 3 restrictions regardless of what the state did? Answer: Staff came together and came to this decision. As said before our current condition is a little better than last year but the circumstances are still very uncertain and we need to take a conservative view on our storage, especially thinking about next year.
- Can you explain how we were able to pump up our water supply using Felton Diversion? Answer: It was the perfect conditions for operating the Felton Diversion after it stopped raining around Christmas, the river settled down, the flow was enough so that we can meet the bypass requirement that we had, plus operate the Felton Diversion and we were able to operate it for about 60 days this year, which is an unprecedented number according to a recent chart viewed we have only used this diversion for one other year as much as this year. We were able to put in 250 million gallons of water into Loch Lomond.

#### **Public Comment**

• No Comment

Commissioner A. Schiffrin moved the staff recommendation. Commissioner G. Mead seconded.

**VOICE VOTE: MOTION CARRIED** 

AYES: All. NOES: None

3. Ordinance Amendments to Chapter 16.01of the Santa Cruz Municipal Code Pertaining to Water Shortage Regulations and Restrictions

T. Goddard, Administrative Services Manager who provided the presentation and responded to Commission questions.

#### Commission Questions/Comments:

- If there are penalties, as the Water Director don't you have the ability to waive it or give an exception for special circumstances? Answer: Last year, procedurally we set it up so that you would get a one-time free pass to go to water school and then have your penalty waived. The structure of the process is that the procedure gets set and then we stick to it.
- Where in the ordinance is water school? Answer: Water School is not in the ordinance because it is not a regulation. We don't need authorization or authority to do water school, what you are suggesting is that we codify it because it is a good idea.

- Is there somewhere in the statute where you can put in a section on waivers and have it say that the department can establish an administrative procedure for waivers of penalty? Answer: Yes.
- How do we determine residency for vacation rentals? Answer: We don't, the standard allotment under stage 3 is ten units of water because during one week a rental home could have 20 people in the home and the following week they could have none, the following week 3 people, we cannot operate at that time scale. If you had 20 people in your home for an entire month then you can ask for additional units.

#### Public Comment

• Member of the public expressed concern over multi-family mixed meters/master meters because last year people were told you that if you do not turn off your irrigation meters or you are going to pay penalties because the baseline allocation allotment for multi-family units was lower than for single family residents and I was wondering if that was going to be addressed in the allocations for this year.

Commissioner A. Schiffrin approved the staff recommendation with the additional direction to add a section in 16.01.040 that would allow the department to develop administrative procedures for the waiver of penalties plus the changes the chair has proposed. Commissioner L. Wilshusen seconded.

**VOICE VOTE: MOTION CARRIED** 

AYES: All. NOES: None

#### **Subcommittee/Advisory Body Oral Reports** No items.

- 1. WSAC Update (Oral Report)
  - Discussed editorial in Santa Cruz Sentinel
  - Lessons are being learned about water supply planning and the issues involved in doing water supply planning. To no one's surprise people are learning the limitations of our system in meeting peak season demand during dry years and particularly if there are numerous dry years. Add to that the things that we are learning about climate change, it is telling us that we are likely to have more dry years and that they will be drier and of greater frequency, that combined with HCP is going to provide greater challenges. At present we don't have a solution for that challenging sequence but the information on the alternatives is being developed and I expect we will have a solution in the next few months.
  - Discussed various working groups, symposium, and enrichment sessions during the month of April concerning water issues.

#### **Director's Oral Report** No action shall be taken on this item.

1. Monthly Status of Water Supply (to be distributed at meeting)

• Discussed creating a subcommittee with members of WSAC and Water Commission to discuss financial analysis and the operating budget.

**Adjournment** Meeting adjourned at 9:00pm. The next regular meeting of the Water Commission is scheduled for May 4, 2015 at 7:00 p.m. in Council Chambers.

Respectfully submitted,

Gloria Rudometkin	Digitally signed by Gloria Rudometkin DN. LireGloria Rudometkin, v=Gly of Santa Gruz, ov—Water, email=grudometkin@cityofsantacruz.c om, c=US Date: 2014.02.10.09:12:05-08'00'
Staff	

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# WATER COMMISSION INFORMATION REPORT

DATE: April 28, 2015

AGENDA OF: May 4, 2015

TO: Water Commission

FROM: Rosemary Menard

SUBJECT: Item Submitted to Water Supply Advisory Committee, April 20, 2015:

Status of the City of Santa Cruz Water System & Integration of

Consolidated Alternatives

RECOMMENDATION: Receive Information.

The attached item was provided to the Water Supply Advisory Committee (WSAC) and discussed at their April 30, 2015 meeting. As described in the document, the purpose for doing so was to develop an understanding of 1) the Water Department's current view of the rehabilitation and replacement needs and costs associated with the water system's backbone infrastructure; and 2) the potential future infrastructure investments that might link with, change the priority of, or otherwise be leveraged by the selection and pursuit of some of the Consolidated Alternatives (supplemental supply or operational flexibility options) currently being analyzed by the WSAC.

Attachments
5a State of the Water System.pdf
5b 10 year CIP.pdf

TO: WATER SUPPLY ADVISORY COMMITTEE

FROM: HEIDI LUCKENBACH & BILL FAISST

SUBJECT: STATUS OF THE CITY OF SANTA CRUZ WATER SYSTEM & INTEGRATION OF

CONSOLIDATED ALTERNATIVES

**DATE:** APRIL 23, 2015

#### **BACKGROUND**

This memo and subsequent presentation outlines to the Water Supply Advisory Committee (WSAC) the status of existing water supply infrastructure including intakes, dams, pipelines, and pump stations. Additionally, the 10-year Capital Improvement Program (CIP) is attached and will be discussed. Both these items will be used to facilitate the thinking about the future water supply options and the opportunity to combine and/or prioritize projects to improve cost effectiveness or leverage needed investments.

Portions of the existing system date back to the early 1900s. While some significant investments have been made over the last century (replacement of portions of the North Coast Pipeline, upgrades to the Graham Hill Water Treatment Plant, and installation of new groundwater wells) along with routine operations and maintenance, a large capital improvement program remains and includes the majority of the system's components. The following list includes the dates of initial construction of the various raw water components. Further below is a description of most of these components, their current condition, and scope/schedule/budget for improvements.

The presentation to the WSAC at their April 30<sup>th</sup> meeting will include a discussion of the various water supply alternatives (the Consolidated Alternatives, or CAs) and how they may coincide with improvements within the CIP.

#### North Coast System

Laguna Creek Diversion – 1890

Liddell Spring – 1913

Majors Creek – 1884

Reggiardo Creek – 1912

North Coast Pipeline – early 1900s - 1950s

# Loch Lomond Reservoir

Newell Creek Dam - 1960

Newell Creek Pipeline - 1960

#### Intakes

Tait Street Wells and SLR Diversion – 1960s

Felton Diversion – 1970s

#### Water Treatment

Graham Hill Water Treatment Plant – 1960s

Beltz Water Treatment Plant - 1964

#### **DISCUSSION**

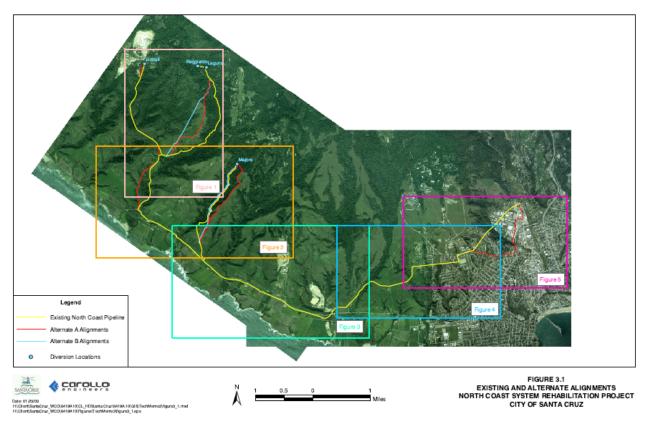
Generally speaking, each major component of the raw water system is contained in the 10-year CIP in some form, and as can be seen in the attached table, the finished water system also requires a lot of capital investment. Some components require minimal repair or rehabilitation, some require full replacement, and the condition of some is still unknown and requires a condition assessment. The department is aware of the potential synergy between existing system components and the process currently being undertaken by the Water

Supply Advisory Committee (WSAC). In other words there may be potential to combine future water supply projects with the CIP to be efficient as possible with resources.

The major components are shown below with a preliminary budget estimate and implementation schedule. These planning-level numbers likely will change as more is learned about the project need, funding opportunities, staffing resources, project delivery method, and outcome(s) of the WSAC process.

#### North Coast System

The Santa Cruz Water Department (SCWD) operates and maintains an 18-mile long pipe network and stream diversion structures, called the North Coast System (NCS). Diversion structures ranging in age from approximately 80 years to over 120 years direct flows from Liddell Spring, Reggiardo, Laguna and Majors creeks into a pipe system, which conveys water, by gravity, to the Coast Pump Station adjacent to the City's San Lorenzo River intake. The Coast Pump Station lifts water up to the Graham Hill Water Treatment Plant (GHWTP) where it is treated and then delivered to SCWD customers. The NCS relies entirely on rainfall runoff and emergent groundwater to furnish up to 30% of the City's water supply.



While much of the 18-miles of transmission pipeline was replaced in the 1950s, a significant portion is approaching, or has exceeded its design life, and must be replaced. The diversion and pipeline facilities have historically provided adequate service for the SCWD, however the aging facilities are increasingly prone to leakage and failure, and now require increased routine maintenance and emergency repairs.

Existing Deficiencies and Limitations include:

- Age/Condition Due to age of the pipelines, deterioration of pipe materials has resulted in increased frequency of leaks and need of emergency repairs.
- Access Constraints Limited access to many of the pipeline in their current alignments has resulted in
  increased maintenance requirements, potential damage to the environment, and in some cases, more
  costly and complicated repairs.

• Hydraulic Constraints: The current configuration of the system limits the diversion capacity during certain operating conditions.



**Section Of Phase 3 North Coast Pipeline Project** 

Key Findings and Recommendations for rehabilitation/replacement of the pipeline are:

- A majority of the piping system needs to be replaced or rehabilitated in the next ~15 years.
- In select locations, the existing pipeline alignment encroaches on environmentally and culturally sensitive areas.
- Certain segments could be replaced in alternate alignments; however easement/access issues, environmental impacts, may limit the viability of the alternate alignments.
- In difficult to access, environmentally sensitive, and geologically active areas, new pipe may need to installed above ground.
- To preserve system capacity, in most locations, existing piping should be replaced with a similar pipe size.
- System pressure and capacity requirements will reduce the number of choices for pipe material, and the feasibility of trenchless rehabilitation methods such as pipebursting, sleeving, and lining.

Two portions of the NC pipeline were completed between 2006 and 2012, and replaced a majority of the raw water system within the City limits. Sequencing of the six phases takes into consideration the following criteria: Environmental/Jurisdictional Setting, Project Cost, Construction Method, Permitting Synergies,

System Importance, and Leak History. For practical purposes, each phase has been capped at \$10 million total budget, and projects of a similar construction type or with similar permitting needs were grouped into the same phase, where possible. The current project, Phase 3, experiences the highest pressure making it most prone to leakage, is located almost entirely in two jurisdictions: State Parks or Caltrans right of way (ROW), and will be constructed predominantly by a single construction type-open-trench construction.

Construction of Phase 3 is schedule to start summer 2015 with a duration of two years and engineers estimate of approximately \$8,000,000. The remaining phases of the North Coast pipeline project is scheduled in fiscal years 2019 - 2032 for an additional  $\sim \$30M$ .

#### North Coast Diversions

The City maintains diversions on four coastal sources (Liddell Spring, Reggiardo, Laguna and Majors creeks) which range in age from approximately 80 years to over 120 years. Like the pipeline, the diversion structures have historically provided adequate service for the City, but have been increasingly prone to leakage and failure in recent years and have increased routine maintenance and emergency repairs owing to their age and condition.



**Creek Diversion Structure** 

Limitations of the existing diversion structures include:

- Sediment Accumulation The original design of the diversion structures does not provide sufficient sediment flushing/transport capabilities, resulting in a buildup of rock, sand, and debris, reduction of the upstream pool size, and restrictions to the flow of water into the inlet pipe.
- Lack of Remote Operating and Monitoring Capability The original design and current configuration of
  the diversion structures do not provide remote operation and monitoring capability at Reggiardo,
  Laguna, and Majors creek diversions. Hence, operating these diversions requires considerable staff time
  and travel.
- Structural Integrity Despite their age, the main structural elements of the diversion structures are in generally good condition, except for minimal damage at the end wall abutments. However, modifications are necessary for the structures to remain viable into the future.
- Improper Sizing of Inlet Screens Majors and Laguna creeks support native populations of rainbow trout. The intake screens at Majors and Laguna creeks are too large to eliminate the potential for

- entrainment of juvenile fish and other aquatic organisms, potentially causing adverse environmental effects and allowing undesirable material to enter the pipeline.
- Fish Passage The Majors, Laguna and Reggiardo diversions prevent upstream passage of resident fish.
  Downstream movement of fish may occur through the slide gate or over the crest of the dam of Laguna
  and Majors diversions when the water is spilling over it. Downstream flow through the slide gate and
  from most areas over the dam crest falls into shallow pools, potentially causing stress or injury to fish
  migrating downstream.

In June 2004, the City undertook the preparation of a program EIR (PEIR) for the project. The City Council certified the PEIR at a Public Hearing held on November 8, 2005.

The CIP now includes two projects, one for Laguna Dam and another Majors Dam. They are separate from the North Coast pipeline replacement for ease of budget tracking; they may be included with a pipeline phase as future phases are developed. Evaluation of each diversion's condition and development of a rehabilitation plan is scheduled to start in fiscal year 2019. Construction work is currently in fiscal year 2021.

#### Loch Lomond Reservoir

In the early 1960s, the City completed the construction of Newell Creek Dam. The City monitors the dam on a routine basis for overall structural and performance stability and also carries out special monitoring based on various triggers such as earthquakes and high rain events. The dam remains in excellent condition. The California Division of Safety of Dams (DSOD) adopted new seismic stability requirements several years ago requiring dam owners to demonstrate to DSOD that their dams were in compliance with these more stringent requirements. The City collected additional data on the construction materials used and demonstrated that Newell Creek Dam met the new seismic requirements.



Downstream Face of Newell Creek Dam (view from crest)



**Downstream Face of Newell Creek Dam (view from toe)** 

The inlet/outlet pipe that fills and draws from the reservoir is located within the dam, at the bottom of the structural section. This pipeline is a steel-lined concrete encasement structure. At the toe of the dam a large diameter valve called a deluge valve allows the City to dewater the reservoir at a rapid rate under emergency conditions. Several years ago this valve became inoperable and in contemplating a repair the City also discovered that the pipeline within the dam is in questionable condition. The City has worked with DSOD and, while there is no immediate danger or concern with safety (dewatering is met with other valves), the City plans to evaluate the pipeline and valve further and make repairs or fully replace this pipeline.

Based on the experience of other dam owners, budget numbers in the CIP are for full replacement as follows: \$1,500,000 starting in fiscal year 2017 for the design, environmental and regulatory work associated with a repair, and \$50,000,000 in fiscal year 2019 for the repair. As the City learns more about the condition of the pipeline, it will update these numbers and timeframe.



Outlet vault including deluge valve at Newell Creek Dam. (Continuous flow of water from reservoir is maintained for downstream environment.)

#### Newell Creek Pipeline

The pipeline from Loch Lomond Reservoir to the Graham Hill Treatment Plant dates back to 1960s, coincident with the construction of these two facilities. There is approximately 12 miles of large diameter pipe of varying physical condition. While performance issues related to age are an issue (i.e., some sections have required multiple repairs), the primary issue with this pipeline is its physical location. The pipeline is within some existing paved right of way such as Graham Hill Road, but also covers a significant amount of distance in unpaved and/or otherwise undisturbed areas such as Henry Cowell State Park. Similar to the North Coast Pipeline, the pipeline encroaches in some locations on environmentally sensitive areas, and areas that are difficult to access and geologically active.

This project requires further definition and either a program or project level Environmental Impact Report prior to any construction efforts. This work is schedule to begin in fiscal year 2017, with placeholders for construction (either rehabilitation of existing pipeline or replacement) starting in fiscal year 2019. An estimated budget is ~\$12,000,000.



Landslide along Newell Creek Pipeline

#### Graham Hill Water Treatment Plant

The GHWTP is a conventional treatment plant that was commissioned in 1960 as a 12 million gallon per day (mgd) plant and has undergone an expansion to 24 mgd and numerous plant improvements over that last 51 years.

The most recent improvements to the GHWTP were initially identified in the 2007 Water Quality & System Improvements Study (WQ&SIS). The WQ&SIS developed water quality and system reliability goals to meet the City's concerns regarding anticipated water quality regulations, and WTP reliability related to complex water demand and supply issues, along with aging equipment and infrastructure.

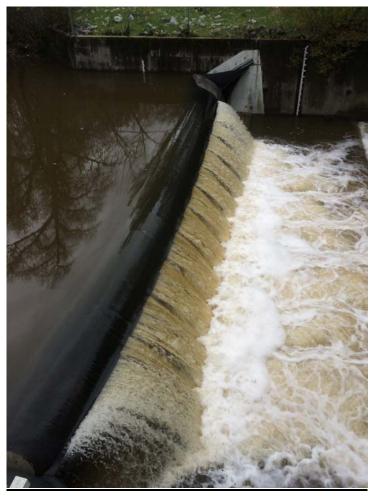
Several required improvements include:

- Rehabilitation of existing granular media filters
- Rehabilitation/replacement of existing concrete tanks
- Upgrades to the flocculation/sedimentation basins
- Upgrades or replacement of the existing chemical dosing systems; replacement of the existing chlorine gas system with an onsite sodium hypochlorite generation system
- Replacement of the existing sludge discharge line with a larger diameter pipeline.

The filter rehabilitation project is currently underway and will be completed this calendar year. Subsequent projects as bulleted above are schedule between the current fiscal year and fiscal year 2019. The City has budgeted approximately \$14,000,000 for these projects.

#### Felton Diversion

The City constructed the Felton Diversion structure and pump station in the 1970s. Studies prior to the 1970s, in the vein of continuing development of sources of water supply, opined that the diversion could divert water to Loch Lomond Reservoir, to a yet to be constructed Zayante Dam, a yet to be constructed Doyle Gulch Reservoir, and a pipeline for direct diversion from Felton Diversion to the GHWTP via Scotts Valley. Subsequent decisions resulted in no further consideration of Doyle Gulch Reservoir or the direct diversion pipeline and the ultimate project at Felton Diversion was sized to pump San Lorenzo River water to either Loch Lomond or Zayante, although pumps for the later were never completed.



Felton Diversion, Inflatable Dam

The project currently in the CIP will evaluate the condition of the inflatable dam and the possibility of installing a different type of intake structure to minimize operation and maintenance issues and maximizing total yield from this facility.

Evaluation of the facility is scheduled to start in fiscal year 2016 with construction in 2019. Until the evaluation is complete, it is difficult to put a value to the construction. As a placeholder, \$1,200,000 has been put into the CIP.

#### **Summary**

As can be seen on the attached table, the projects described above are the major components embedded in a larger list of projects. There are over \$200M of projects including placeholders of \$45M for a potential new water supply project.

The work of the WSAC will undoubtedly have an impact on the CIP and to the extent contemplated at this time; the CAs relating to each CIP project is included in the attached table. As the CAs are further vetted, the relationship between CAs and the CIP will be better understood and decisions will be made in a more informed way.

		T	1	Estimated	1															I	
				Year-End																	
				Exp or Carry over	Budget	new appropri	ations											Ag	enda Iter	n 5b	
																				Funding	
Projects by Category	Project #	Description	EV2014	FY2015	FY2016	FY2017	EV2019	FY2019	EV2020	FY2021	FY2022	FY2023	FY2024	FY2025	EV2026	FY2027	EV2029	FY2029	FY2030	Totals, FY16-30	Relevant Consolidated Alternatives
WATER SOURCES	110ject #	Description	FY2014	F12013	F12010	F12017	FY2018	F12019	FY2020	F12021	F12022	F12023	F12024	F12023	FY2026	F12027	FY2028	F1 2029	F I 2030	1.110-20	Relevant Consolidated Alternatives
Coast Pump Station Rehab	c70xxxx	Replace/Rehab Motor Control Center Evaluate existing dam and pumps and							\$ 300,000		\$1,200,000			\$2,000,000						\$ 3,500,000	
Felton Diversion Evaluation & Updgrade		rehabilitate as needed. Includes evaluation																			
of Dam and Pump Station	c701602	of subsurface intake(s).  Evaluate condition of dam and make			\$ 300,000	)		\$ 1,200,000	<u> </u>											\$ 1,500,000	
Y Davis	7016	recommended modifications. Project will																			
Laguna Dam	c/016xx	follow completion of anadromous HCP. Evaluate condition of and repair/replace the					\$ -	\$ 300,000		\$ 1,500,000										\$ 1,800,000	
Loch Lomond Slide Gates	c700309	five existing slide gates located on the upstream face of the Newell Creek Dam.																		\$ -	
		Evaluate condition of dam and make																		-	
Majors Creek Diversion	c70xxxx	recommended modifications.  Evaluate condition of dam, intake and wells;					\$ 300,000	\$ 300,000		\$ 1,500,000										\$ 2,100,000	
San Lorenzo River Diversion and Tait Wells	o700972	construct new wells, and potentially modify dam/intake.	¢ 16.566	r	e 200.000	\$1,600,000														¢ 1,000,000	
YY CIIS	C709872	Following the adoption of the Integrated	\$ 10,300	5 \$ 253,434	\$ 500,000	\$1,000,000														\$ 1,900,000	
		Water Plan, the investigative phase of the desalination project spanned 8 years and																			
	c700305/	funded the SWRO pilot project, intake																			
Water Supply Project	c700016	studies, preliminary design, DEIR and various other studies.	\$ 376,005	\$1,658,735		\$1,000,000	\$2,000,000	\$ 2,000,000	\$20,000,000	\$20,000,000										\$ 45,000,000	
	c701402/	Support the Water Supply Advisory Committee to explore the City of Santa																			
Water Supply Reliability		Cruz's water situation and potential supply	¢ 121.700		A 500.000															¢ 500,000	
Subtotal Water Sources		options.		9 \$1,078,211 0 \$2,990,380	\$ 500,000 \$ 1,100,000	\$2,600.000	\$2,300,000	\$ 3,800,000	\$20,300,000	\$23,000,000	\$1,200,000	\$ -	\$ -	\$2,000,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 500,000 \$ 56,300,000	
TREATMENT OF WATER				_		,		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	7 , ,		-			*	-	, ,	,		, , , , , , , , , , , , , , , , , , , ,	
		Construct inland monitoring well network to																			
Beltz Monitoring Wells		monitor groundwater elevations and water quality in the inland portion of the Purisma.	\$ 80,900																	¢	
		Convert existing monitoring well at site of	\$ 80,900	)																\$ -	
Beltz 11	c700026	Beltz 7 and 10 to a production well.  Add groundwater well and wellhead				\$ 70,000	\$ 300,000													\$ 370,000	
D-14 14	-701002	treatment inland to distribute pumping away																			
Beltz 12 Beltz Treatment Plant Reclaim Tank	c/01003	from the coast.	\$ 1,693,864	\$1,755,427																\$ -	
Replacement	c701101	Replace existing tank with steel bolt-up tank	\$ 179,763	3																\$ -	
		repair/rehab plan, implement plan. Includes																			
WTP Concrete Tank Assessment & Rehabilitation	c701501	\$145,000 endowment for MHJB HCP mitigation.		\$ 258.320	\$ 250,000	\$2,000,000	\$2,000,000	\$ 2,000,000												\$ 6.250,000	CA-17 Expanded Treatment
Kenabination	C701301	Evaluate treatment and disposal of solids		\$ 238,320	\$ 230,000	\$2,000,000	\$2,000,000	\$ 2,000,000												\$ 0,230,000	CA-17 Expanded Treatment
WTP Solids Handling	c70xxxx	produced at the GHWTP. Evaluation will occur with project c701501.			\$ 250,000	\$ 500,000														\$ 750,000	CA-17 Expanded Treatment
		First project to the current phasing of			ψ 250,000	Ψ 300,000														Ψ 750,000	Crt 17 Expanded Treatment
WTP Filter Rehabilitation and Upgrades	c701303	improvements at GHWTP. See project "Water Treatment Upgrades."	\$ 461,197	\$4,723,994																\$ -	CA-17 Expanded Treatment
		Replace aging paddle wheel flocculators and																			
WTP Flocculator/Sedimentation		improve sedimentation processes. Project																			
Improvements	c701502	c701601 combined with this project.  Consider replacing existing gas chlorine			\$ 60,000	\$ 600,000	\$6,000,000													\$ 6,660,000	CA-17 Expanded Treatment
WTP Hypochlorite Generation	c701401	system to sodium hypochlorite system		\$ 75,000																\$ -	CA-17 Expanded Treatment
WTP UV System - Pasatiempo	c701503	Consider upgrading the Pasatiempo pump station with ultra violet disinfection.		\$ 40,000																\$ -	CA-17 Expanded Treatment
		Opgrades to Granam Hill water Treatment Plant to enhance water quality, meet new and																			
		planned regulations, increase reliability.																			
Water Treatment Upgrades		(Power Mgmt and Filter Rehab are offshoots of this project.)		\$ 91,561	\$ 200,000	)														\$ 200,000	CA-17 Expanded Treatment
Subtotal Water Treatment	1		\$2,415,72	4 \$6,944,302			\$8,300,000	\$2,000,000	\$0	0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$(	\$0	\$ 14,230,000	•
DISTRIBUTION OF WATER		Funds are allocated in the CIP each year to																			
Water Main Replacements - City	~700002	replace underground water mains < 10" in	¢ 70000	7 6 740 401	¢ 1,000,000	¢1.000.000	¢1 000 000	¢ 1.000.000	¢ 1,000,000	¢ 1,000,000	¢1,000,000	¢ 1 000 000	¢ 1 000 000	¢ 1 000 000	¢ 1 000 000	¢1 000 000	¢1,000,000	¢1 000 000	¢1,000,000	¢ 15 000 000	
Engineering	C/00002	diameter.	\$ 726,647	3 742,481	\$ 1,000,000	\$1,000,000	\$1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$ 15,000,000	
Water Main Replacements - Outside		Funds are allocated in the CIP each year to replace underground water works to coincide																			
Agency	c700003	with projects initiated by other agencies.	\$ 11,261	\$ 374,620	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 3,000,000	
		Projects initiated on an as-needed basis to accommodate customer-requested		1																	
Water Main Replacements - Customer Initiated	c700004	connections to undersized or inadequate		\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 750,000	
. ,	2,00004	mains. Funds are allocated in the CIP each year to		φ 50,000	φ 50,000	φ 50,000	φ 50,000	Ψ 50,000	φ 50,000	Ψ 50,000	ψ <i>5</i> 0,000	<i>φ</i> 50,000	Ψ 50,000	φ 50,000	φ 50,000	Ψ 50,000	Ψ 50,000	φ 50,000	Ψ 50,000	Ψ /30,000	
		replace underground water mains (transmission, distribution and service lines)																			
Water Main Replacements - Distribution	c701507			\$ 300,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 325,000	\$ 4,875,000	

			I F-4:41	Ī							T T	1		ı		T	1	1	
			Year-End Exp or Carry over	Budget i	new appropria	tions													
																			Funding
<b>Projects by Category</b>	Project # Description	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	Totals, FY16-30 Relevant Consolidated Alternatives
Gravity Trunk Main Valve Replacemen	Replace isolation valves on trunk main		\$ 150.000	\$ 200,000															\$ 200,000
	Full/partial replacement of the pipeline btv		Ψ 120,000	Ψ 200,000															200,000
Newell Creek Pipeline Rehabilitation	the base of Loch Lomond Reservoir and the c701701 GHWTP.				\$ 700,000		\$ 4,000,000		\$ 4,000,000		\$4,000,000								\$ 12,700,000 All enhanced diversion CAs
Newell Creek Dam Inlet/Outlet Pipeline	Inspect and develop a rehabilitation plan to the inlet/outlet pipe within Newell Creek Dam.	or		\$ 125,000	\$1,500,000		\$50,000,000												All enhanced diversion CAs; CA-12 Wate \$ 51,625,000 Reuse for indirect potable reuse
	Replace approximately 16miles of raw wat	er		,															
North Coart Senton Dahah	pipeline. Pipelines deliver water from the North Coast sources to the GHWTP and de c709835 back to 1889.									*					*		*		CA-13 Water Reuse for Non-potable (this project extends several more years for the North Action of the Nor
North Coast System Rehab	C709855 Back to 1889.	\$ 242,548	\$1,267,876	\$ 4,235,000	\$4,000,000		\$ 1,500,000		\$ 4,000,000	\$4,000,000		\$1,500,000		\$4,000,000	\$4,000,000		\$1,500,000		\$ 28,735,000 construction, with additional \$8M.
	Funds are allocated in the CIP each year to																		
Water Transmission System Improvements (10" and larger)	c709833/ replace underground water mains c700017 (transmission, distribution and service line	->	610 510	<b>500.000</b>	<b>5</b> 00 000	500.000	<b>500 000</b>	500.000	500.000	<b>500.000</b>	500.000	<b>500.000</b>	<b>500.000</b>						4.5000000
Subtotal Distribution of Water	(transmission, distribution and service line	980.450	613,510 6 3,498,486	500,000 6.635,000	500,000 8.275.000	500,000	500,000 57,575,000	500,000 2.075,000	500,000	500,000	500,000 6.075,000	500,000 3,575,000	500,000 2.075,000	5 575 000	5 575 000	1 575 000	2.075.000	1 575 000	\$ 5,000,000 ##############################
FACILITIES		980,430	5,498,480	0,035,000	8,275,000	2,075,000	57,575,000	2,075,000	10,075,000	6,075,000	6,075,000	3,575,000	2,075,000	5,575,000	5,575,000	1,575,000	3,075,000	1,575,000	***************************************
Advance Metering Infrastructure (AM	c70xxxx			50,000	4,000,000	4,000,000													8,050,000
Bunker Roof Project	c701508 Install roof over existing material storage area at the City's Corporation Yard. Evaluatinstall of solar panels.	ite	200,000	150,000															150,000
Hydroturbines	c700901 Creek Dam																		0
Loch Lomond Facilities Improvements	c709837/ Conduct assessment of current and potenti c701301 future uses, develop master plan.  Ongoing project to evaluate, design and	4,670	6 180,324	100,000															100,000
Photovoltaic Systems	construct PV systems on water department facilities. Current project is at the Bay Stro																		
Evaluation/Construction	c70xxxx Tank Site.			40,000	500,000														540,000
Water Resources Building	c701702 Design and construct a new facility			100,000	1,000,000				I										1,100,000
Subtotal Facilities		4,670	6 380,324	440,000	5,500,000	4,000,000	0	0	0	0	0	0	0	0	0	0	0	0	9,940,000
STORAGE OF WATER	Replace the existing reservoir that has															1		1	
	reached the end of its useful life (build c700313/ ~1926), and to downsize to meet current																		
<b>Bay Street Reservoir Reconstruction</b>	c700027 water quality regulations.	4,855,42	8 6,782,561																0
Recoat University Reservoir No. 4	c701505 Condition assessment and recoating/rehabilitation project		95,000	100,000	75,000	1,300,000													1,475,000
Recoat University Reservoir No. 5	Condition assessment and c701506 recoating/rehabilitation project		110,000	75,000	1,750,000														1,825,000
Subtotal Storage of Water	2. 2. 2. 200 Personal Francisco Project	4 855 429	6,987,561	175,000		1,300,000	0	0	0	0	0	0	0	0		0	0	0	
Total Projects			3 20,801,054			, ,	0	v	33,075,000	7,275,000	6,075,000	3,575,000	4,075,000	5,575,000	5,575,000	1,575,000	v		
LEGEN	ID																		
Evaluation Pha															-				
Design Pha																			
Construction Pha																			
		- 1	-1																

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# WATER COMMISSION INFORMATION REPORT

DATE: 4/28/15

AGENDA OF: May 4, 2015

TO: Water Commission

FROM: Rosemary Menard, Water Director

SUBJECT: System Development Charge Report and Rate Adjustment

#### **RECOMMENDATION:**

1. Receive report on proposed System Development Charges revisions.

- 2. Recommend to the City Council a resolution adjusting the System Development Charges.
- 3. Recommend to the City Council an ordinance amending chapter 16.04.041 of the Santa Cruz Municipal Code pertaining to connection of new water services.

BACKGROUND: On 9/23/14, Council approved a work plan for 1) reviewing and revising the System Development Charges, 2) conducting a cost of service analysis, 3) and reviewing and redesigning water rate structures. Work for the System Development Charges (SDC) study began in October 2014 with a policy discussion between Sanjay Gaur of Raftelis Financial Consultants (Raftelis) and the Commission. An additional workshop was held on December 1, 2014 which allowed the Commission to provide direct input into the documentation and analysis being conducted by Raftelis regarding the System Development Charges.

DISCUSSION: The SDC report provides a detailed summary of Raftelis' analysis and basis for the recommendation for updated System Development Charges. This report serves not only as formal technical documentation for compliance with American Water Works Association (AWWA) best practices, Santa Cruz Municipal Code (SCMC) 16.04, and California Government Code Sections 66013, 66016, 66022 and 66023 but also explains the methodology used to calculate the updated SDC.

Implementing the report recommendations will require a City Council resolution to update the current SDC. Staff also took this opportunity to review SCMC 16.04.041 pertaining to the SDC and is recommending amendments which include allowing for periodic reviews of the SDC and cost of living increases by resolution.

At the time that the Commission's May agenda was due to be posted for public notice, the SDC report was being finalized based upon additional staff input. The finalized report will be

provided to Commissioners and the public after the public posting of the agenda but prior to the Commission meeting.

The SDC report does not address establishing a new Demand Offset Fee which would require new developments in the service area to offset the amount of new water demand the project is projected to use thus resulting in a net-neutral water impact. Establishing such a fee generated additional policy considerations that could not be addressed during the existing SDC update timeline.

FISCAL IMPACT: The increased charges will result in increased funding to the Water System Development Fees fund (Fund 715). The proposed System Development Charges are similar to the amount the fee would be if it was adjusted each year due to inflation. Such funds will continue to be spent, as directed by SCMC 16.04.041, for water conservation programs which have the net effect of increasing the amount of water supply available and on construction of system expansion and improvements.

PROPOSED MOTION: Motion recommending to the City Council a resolution adjusting the System Development Charges and an ordinance amending chapter 16.04.041 of the Santa Cruz Municipal Code pertaining to connection of new water services.

#### Attached:

SCMC 16.04.041 Update in Redline Ordinance to amend Muni Code 16.04.041 – Final Resolution to amend System Development Charges System Development Charges Final Report

# System Development Charges 2015 Update SCMC Redline Revisions

#### 16.04.041 CONNECTION OF NEW WATER SERVICES.

(a) Purpose. In order tTo mitigate the water supply impacts caused by new development in the city of Santa Cruz water service area, certain public water system improvements must be or have been constructed in order to accommodate system expansion. A system development charge shall be assessed to pay the proportional share of the costs of new and existing water facilities necessary to meet the demand resulting from new or enlarged water services.

The city council has determined that a development impact fee for the connection of new services to the water system, the "water connection fee" shall be charged to pay for development's fair share of the construction costs of such improvements. Additionally, services that have been found to be abandoned, in accordance with Section 16.04.360 of this chapter, are hereby deemed to place the same demands and present the same conditions of water supply impacts as new services.

(b) System Development-Charges. A system development charge is hereby established and is payable subsequent toupon the issuance of any permit, or similar grant of authority, for any of the following activities: installation of a new service connection, the addition of a new or additional residential dwelling unit onto an existing service, the upsizing of an existing service connection, or any other increased demand on the water system. resulting in a new connection to the water system. Such fee is necessary to pay a new service connection's, or additional demand's, proportional share of the system expansion costs essential to provide water to the new or additional service. Additional demand shall be interpreted to mean use on an existing service which would require a meter upsize.

System development charges shall be reviewed periodically to determine whether the charge amounts are reasonably related to the impacts created by new or additional demand and whether the listing of system expansion improvements to be financed by system development charge revenues is accurate. System development charges shall be as adopted by resolution of the City Council The city council shall adopt a resolution containing the following:

- (1) The specific amount of the fee charge, including the fee its development methodology, and;
- (2) A list of the specific improvements to be financed by the fee charges, including the estimated cost of such improvements, and

- (3) A description of the correlation between the <u>fees\_charges</u> and new development and the benefits from the improvements enabled by the <u>fee, and charge</u>.
- \_(4) The time system development charges are due for payment. The water connection fee shall be reviewed on an annual basis to determine whether the fee amounts are reasonably related to the impacts created by new connections and whether the listing of system expansion public improvements to be financed by system development charge revenues is accurate.
- (c) Use of Fee-Charge Revenues. System development charge revenues shall be placed in a separate and special account and such revenues, along with any interest earnings on that account, shall be used exclusively for the following purposes:
  - (1) To pay for the city's future construction of <u>system expansion and improvements to</u> <u>be financed by system development charge revenues; facilities described in the</u> <u>resolution enacted pursuant to subsection (b) hereinabove, or to reimburse the water fund for those described or listed facilities constructed by the water fund with funds advanced to the water fund from other sources, or</u>
  - (2) To reimburse developers who have <u>installed system development financed water</u> facilities which are larger than needed for the certain development and are subject to the terms of a reimbursement agreement; or been required or permitted to install such listed facilities which are oversized with supplemental size, length, or capacity beyond that needed for the certain development and are subject to the terms of a reimbursement agreement with the city,
  - (3) To pay for water conservation programs approved by the city council which have the net effect of increasing the amount of water supply available for allocation to new connections or additional demand.

#### ORDINANCE NO. 2015-

## AN ORDINANCE OF THE CITY OF SANTA CRUZ AMENDING CHAPTER 16.04.041 OF THE SANTA CRUZ MUNICIPAL CODE PERTAINING TO CONNECTION OF NEW WATER SERVICES

BE IT ORDAINED By the City of Santa Cruz as follows:

Section 1: Section 16.04.041 is hereby amended to read as follows:

#### "16.04.041 CONNECTION OF NEW WATER SERVICES.

- (a) Purpose. To mitigate the water supply impacts caused by new development in the city of Santa Cruz water service area, certain public water system improvements must be or have been constructed in order to accommodate system expansion. A system development charge shall be assessed to pay the proportional share of the costs of new and existing water facilities necessary to meet the demand resulting from new or enlarged water services.
- (b) Charges. A system development charge is payable upon the issuance of any permit, or similar grant of authority, for any of the following activities: installation of a new service connection, the addition of a new or additional residential dwelling unit onto an existing service, the upsizing of an existing service connection, or any other increased demand on the water system.

System development charges shall be reviewed periodically to determine whether the charge amounts are reasonably related to the impacts created by new or additional demand and whether the listing of system expansion improvements to be financed by system development charge revenues is accurate. System development charges shall be as adopted by resolution of the City Council containing the following:

- (1) The specific amount of the charge, including its development methodology;
- (2) A list of the specific improvements to be financed by the charges, including the estimated cost of such improvements; and
- (3) A description of the correlation between the charges and new development and the benefits from the improvements enabled by the charge.
- (c) Use of Charge Revenues. System development charge revenues shall be placed in a separate and special account and such revenues, along with any interest earnings on that account, shall be used exclusively for the following purposes:

- (1) To pay for the city's future construction of system expansion and improvements to be financed by system development charge revenues;
- (2) To reimburse developers who have installed system development financed water facilities which are larger than needed for the certain development and are subject to the terms of a reimbursement agreement; or
- (3) To pay for water conservation programs approved by the city council which have the net effect of increasing the amount of water supply available for allocation to new or additional demand."

Section 2: This ordinance shall take effect and be in force thirty (30) days after final adoption
PASSED FOR PUBLICATION this 26 <sup>th</sup> day of May, 2015, by the following vote:
AYES:
NOES:
ABSENT:
DISQUALIFIED:
APPROVED:  Mayor  ATTEST:  City Clerk Administrator
PASSED FOR FINAL ADOPTION this day of , 2015, by the following vote:
AYES:
NOES:
ABSENT:
DISQUALIFIED:

	APPROVED:	
		Mayor
ATTEST: City Clerk Administrator		
This is to certify that the above and foregoing document is the original of Ordinance No. and that it has been published or posted in accordance with the Charter of the City of Santa Cruz		
City Clerk Administrator		

#### RESOLUTION NO. NS-

# RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SANTA CRUZ ADJUSTING SYSTEM DEVELOPMENT CHARGES AND AMENDING PORTIONS OF RESOLUTION NO. NS-26,803

WHEREAS, Title 16 of the Santa Cruz Municipal Code provides rules governing the administration and operation of the City's Water System, including identification of the various sources of authority to establish and amend the System Development Charges by Resolution; and

WHEREAS, on February 8, 2005, the City Council adopted Resolution No. NS-26,803 establishing new water rates and Ready-to-Serve Charges and the current System Development Charges; and

WHEREAS, on September 23, 2014, the City Council adopted Resolution No. NS-28,836 adjusting water rates, Ready-to-Service Charges, and Drought Cost Recovery Fees without adjusting the System Development Charges established by Resolution No. NS-26,803; and

WHEREAS, an updated analysis of System Development Charges indicates the current charges are no longer a proportional share of new and existing facilities and infrastructure costs necessary to meet the demand resulting from new or enlarged water services; and

WHEREAS, the updated analysis of System Development has recalculated the charges to reflect the current cost of facilities and infrastructure necessary to meet the demand resulting from new or enlarged water services; and

WHEREAS, the City Council has determined that the proposed amendments to the System Development Charges are important for the safe and efficient operation of the City's water system and to preserve and improve the reliability of the water system; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Santa Cruz that the following System Development Charges shall be adopted:

Section 1. SYSTEM DEVELOPMENT CHARGES

Meter Size:	Charge:
5/8" X 3/4"	\$11,231
3/4"	\$16,847
1"	\$28,078
1½"	\$56,155
2"	\$89,848
3"	\$196,541
4"	\$353,774
6"	\$898,473

	10" \$2,358,491
	BE IT FURTHER RESOLVED that all water-related fees and charges established by Resolution No. NS-26,803 and not amended herein shall remain in full force and effect.
	Section 2. <u>EFFECTIVE DATE</u> .
	This Resolution shall be in force and effect July 1, 2015.
	PASSED AND ADOPTED this 26 <sup>th</sup> day of May, 2015, by the following vote:
	AYES:
	NOES:
	ABSENT:
	DISQUALIFIED:
	APPROVED:
A	TTEST: Mayor  City Clerk Administrator

8"

\$1,572,327

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## WATER DEPARTMENT MEMORANDUM

**DATE:** April 6, 2015

TO: Water Commission

FROM: Nicole B, Dennis; Principal Management Analyst

SUBJECT: Financing of the Recommended Capital Improvement Program (CIP) for

FY 2016-2018 and FY 2016 Operating Budget for the Water Department

#### **RECOMMENDATIONS:**

1. Receive information related to financing of the proposed Water Department's Recommended FY 2016 Operating Budget and the FY 2016-2018 CIP; and,

2. Recommend approval of the proposed Water Department's Recommended FY 2016 Operating Budget and FY 2016-2018 CIP budget to the City Council.

#### **BACKGROUND:**

At the February 2, 2015 meeting, the Water Commission heard presentations by the Engineering section staff on the Water Department's current capital projects. The next step in the CIP process is a review of the proposed CIP for FY 2016-2018 for the Commission's review and recommendation to the City Council. The CIP has been prepared using the City's standard format and has been reviewed by both the Finance Department and the City Manager's Office. As in past years, only the first year (FY 2016) will be appropriated. The two latter years (FY 2017 and FY 2018) provide a longer term view of multi-year projects as well as the extensive facility planning and rehabilitation conducted by the Water Department on an ongoing basis.

The Water Department's capital projects are primarily funded through the Water Enterprise Fund (Fund 711) with a smaller portion of some projects focused on improving system capacity funded through the System Development Fund (Fund 715). Keeping consistent with City policies, the CIP contains capital projects while maintenance projects are categorized as operating expenditures and included in the FY 2016 Operating Budget.

Concurrent with preparing the Department's proposed 3- year CIP, the proposed FY 2016 Operating Budget was also assembled. With the exception of a small amount of funding from the System Development Fund (Fund 715) for the cost of the SDC Fee

analysis and water conservation rebates (\$300,000), the operating budget is funded by the Water Enterprise Fund (Fund 711).

In prior years, the City Council has held budget hearings on the proposed CIP in April with the operating budgets heard in May. This year the Council will hear presentations related to the CIP on May 12<sup>th</sup> and the operating budget on May 26<sup>th</sup> or 27<sup>th</sup>.

#### DISCUSSION:

#### Capital Improvement Program (CIP)

Total estimated capital project expenditures for the current fiscal year ending June 30, 2015 are \$13.6 million, which includes funds spent and monies encumbered for various existing projects. The Water Enterprise Fund (Fund 711) accounts for \$12.1 million of the total and the System Development Charge Fund (Fund 715) making up the difference of \$1.5 million. The Proposed CIP for FY 2016-2018 allocates funds for FY 2016 only and is utilized as a planning document for FY 2016-2018. FY 2016 appropriates an additional \$9.1 million in new funds from both Fund 711 (\$8.8 million) and Fund 715 (\$.3 million) as summarized in Table A below:

Table A CIP

	Prior Year Actuals (Life of project)	FY 2015 Amended Budget	FY 2015 Encumbrance plus Actual Expenditures	FY 2016 Proposed Budget	FY 2017 Estimated Budget	FY 2018 Estimated Budget
<b>Fund 711</b>	\$39.8M	\$18.2M	\$12.1M	\$8.8M	\$20.9M	\$17.2M
Fund 715	\$8.3M	\$2.6M	\$1.5M	\$.3M	\$.5M	\$.8M
Total	\$48.1M	\$20.8M	\$13.6M	\$9.1M	\$21.4M	\$18.0M

Attachment A contains the Water Department's Proposed FY 2016-2018 and includes detailed project descriptions and funding amounts.

### **Operating Budget**

Current year end projection for the Water Department's operating budget is \$24.7 million which represents a savings of \$2.7 million when compared to the FY 2015 Amended Budget. Some of the saving is attributed to spending less than was allocated to implement the 2014 Drought, salary savings of \$.9 million, delay of expenditures associated with certain projects in the Water Resources and the Distribution sections. In preparing the FY 2016 Operating Budget, staff adopted a "maintenance of effort (MOE)" approach which reduced the budget by \$1.3 million when you compare the FY 2015 Amended Budget with the FY 2016 Proposed Budget.

## Table B Operating Budget

	FY 2014 Actuals	FY 2015 Amended Budget	FY 2015 Estimated Actual Expenditures	FY 2016 Proposed Budget
Fund 711	\$24.9M	\$26.7M	\$24.1M	\$25.6M
Fund 715	\$.2M	\$.7M	\$.6M	\$.5M
Total	\$25.1M	\$27.4M	\$24.7M	\$26.1M

Attachment B contains the Water Department's proposed FY 2016 Operating Budget and provides personnel, services and supplies as well as revenue information by section.

### FISCAL IMPACT:

The declining health of the Water Departments two major funds, the Water Enterprise Fund (Fund 711) and System Development Fees Fund (Fund 715), was discussed thoroughly in the summer of 2014 and was the driving factor behind the series of rate increases approved by the City Council on September 23, 2014. As part of a comprehensive approach to the long-term financing of the Department's operating and CIP budgets, leadership of the Water Department has initiated several efforts aimed at stabilizing and growing fund balances over the next 10 to 15 years including:

- Five years of rate increases implemented on October 1, 2014 and July 1st of the next four years;
- Establishment of two new reserve funds, a 90-day Operating Reserve and an Emergency Reserve Fund, in addition to the existing Rate Stabilization Fund;
- Institution of a Drought Cost Recovery Fee which coincides with the Council's declaration of a water shortage emergency;
- Comprehensive cost of service rate and System Development fee issue study to review current approaches and ensure adequate cost recovery and equitable distribution of costs.
- Conduct a long-term cash flow analysis to evaluate debt capacity and to support development of a longer term financial plan.
- Issue additional debt in FY 2016.

These efforts are in addition to the work of the Water Supply Alternatives Committee. In addition, the Department has convened a small, informal financing working group including a member of the WSAC and two members of the Water Commission. This group will work with the Department staff on the myriad of efforts underway to stabilize the utility's long-term financial condition. The first meeting of the group was held on April 21, 2015 and the Department Rate Model was reviewed in depth.

As discussed during the September 23, 2014 public hearing on the rate increases, a number of factors that have led to the declining fund balance over recent years. Projected revenues from the 2004 rate increase did not meet expectations for a variety

of reasons, and virtually all of the CIP between 2007 and 2015 has been cash financed using fund balance. These conditions lead to the declining fund balances as displayed in the Table C below.

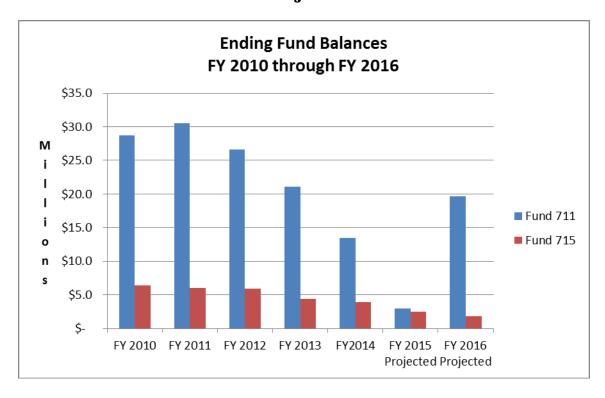


Table C Historical and Projected Fund Balance

It is important to note that work on the FY 2016 Recommended Budget was largely completed by the Department in February 2015. Fund balance amounts contained in this staff report represent amounts updated since the completion of the FY 2016 Recommended Budget. Furthermore, the FY 2016 projected fund balances have been taken from the FY 2015 Proposed Budget rather than from the Raftelis Rate Model which would normally be used to make these calculations. At the time of the writing of this staff report, the data was not available. As soon as it becomes available, the information will be shared with the Water Commissioners.

For FY 2016, the Department is planning on issuing approximately \$30 million in debt to finance the CIP as well as reimburse the Department for prior year CIP expenses. Other items will also impact fund balance in FY2016 and beyond may include:

- The second 10% rate increase on the ready-to-serve and volumetric portions of the water bill;
- Implementation of a second round of a Drought Cost Recovery Fee related to the May 1, 2015 Water Shortage Emergency declaration by the City Council;
- New System Development Charges resulting from the current study being completed by Raftelis Financial Consultants and schedule for implementation on July 1, 2015.

Until the Water Enterprise Fund (Fund 711) and System Development Charges Fund (Fund 715) are able to recover based on the efforts discussed above, the Department will need to pursue debt financing to continue the necessary investment into the water delivery system.

### PROPOSED MOTION:

- 1. Recommend approval of the Proposed FY 2016-2018 Capital Improvement Program Budget to the City Council.
- 2. Recommend approval of the Proposed FY 2016 Operating Budget to the City Council.

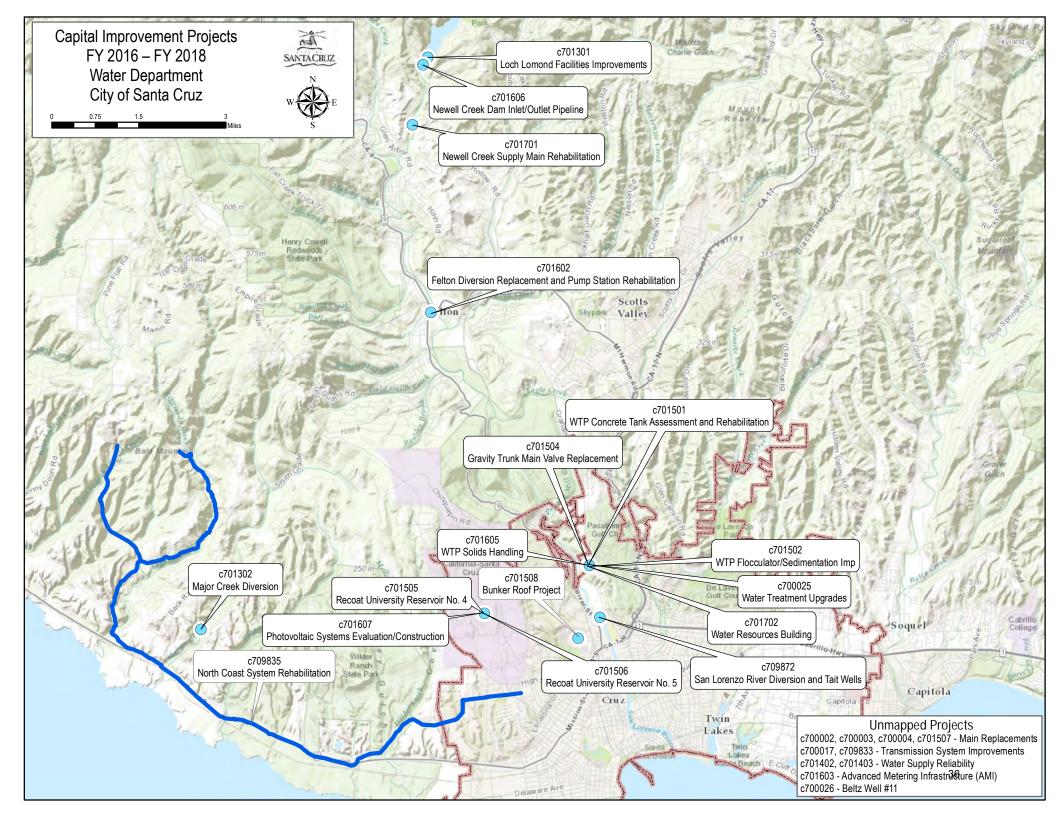
Attachment A – Proposed FY 2016-2018 Capital Improvement Program Budget for the Water Department

Attachment B – Proposed FY 2016 Operating Budget for the Water Department

# Water Department Capital Improvement Projects







### Water (NEW)

711- Water & Water System Development

### Advanced Metering infrastructure (AMI)

### **Project Description:**

Evaluate the use of AMI as replacement to the current AMR metering (Automatic Meter Reading). AMI would allow two-way communication; benefits include early leak detection, customer conservation affect, and workflow management. Evaluation and vendor recommendation in FY2016.

### Fiscal Year 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701603					Acco	unt # 711-70-9	91-7153-57302
Project Cost Estimate:	-	-	-	50,000	4,000,000	4,000,000	8,050,000
Net Project Cost Estimates:	-	-	-	50,000	4,000,000	4,000,000	8,050,000

### Beltz Well #11

#### **Project Description:**

This project would convert an existing monitoring well located at the site of Beltz 7 monitoring well and Beltz 10 production well. Beltz 11 would pump from the Santa Margarita. Project includes feasibility study, pump test, CEQA and construction efforts.

### Fiscal Year 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c700026					Acco	unt # 711-70-9	91-7153-57302
Project Cost Estimate:	-	-	-	-	70,000	300,000	370,000
Net Project Cost Estimates:	-	-	-	-	70,000	300,000	370,000

### 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 may be considered, such as horizontal collector wells or other subsurface intake(s). Additional funding for construction in FY2019.

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701602					Acco	ount # 711-70-9	91-7153-57302
Project Cost Estimate:	-	-	-	300,000	-	ı	300,000
Net Project Cost Estimates:	-	-	-	300,000	-	-	300,000

### Water (NEW)

711- Water & Water System Development

### **Majors Creek Diversion**

### **Project Description:**

Majors Creek Diversion is nearly 100 years old. This project will evaluate the condition of the structure, make recommendations to replace or repair, and complete the construction. Evaluation of facility to occur in FY2017 with scheduling of rehabilitation TBD.

### Fiscal Year 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701302					Acco	ount # 711-70-9	91-7153-57302
Project Cost Estimate:	-	-	-	-	-	300,000	300,000
Net Project Cost Estimates:	-	-	-	-	-	300,000	300,000

### **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 and valve replacement.

### Fiscal Year 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701606					Acco	ount # 711-70-9	91-7153-57302
Project Cost Estimate:	-	-	-	125,000	1,500,000	1	1,625,000
Net Project Cost Estimates:	-	-	-	125,000	1,500,000	-	1,625,000

### **Photovoltaic Systems Evaluations/Construction**

### **Project Description:**

Ongoing project to evaluate, design and construct PV systems on water department facilities. Current project is at the Bay Street Tank Site.

	Prior Year		Estimated	FY 2016	FY 2017	FY 2018	Total
	Totals	Budget	Actuals	Estimate	Estimate	Estimate	2016 - 2018
Project # c701607					Acco	ount # 711-70-9	1-7153-57302
Project Cost Estimate:	-	-	-	40,000	500,000	-	540,000
Net Project Cost Estimates:	-	-	-	40,000	500,000	-	540,000

### Water (NEW)

711- Water & Water System Development

### **WTP Solids Handling**

### **Project Description:**

Solids produced at the Graham Hill Water Treatment Plant currently are disposed of in the City's sewer system. Treatment and disposal of these solids needs to be evaluated prior to any modifications. Project evaluation will occur with existing project c701501.

Eiccol	Vaar	2015
risca	rear	2013

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701605					Acco	ount # 711-70-9	91-7153-57302
Project Cost Estimate:	-	-	-	250,000	500,000	-	750,000
Net Project Cost Estimates:	-	-	-	250,000	500,000	-	750,000

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

#### Fiscal Year 2015 **Prior Year** Total Estimated **FY 2016** FY 2017 FY 2018 **Totals** 2016 - 2018 **Budget** Actuals **Estimate Estimate Estimate Total Project Cost Estimate:** 11,935,000 765,000 6,570,000 4,600,000 **Total Project Funding Estimate: Total Net Project Cost Estimate:** 765,000 6,570,000 4,600,000 11,935,000

### Water (EXISTING)

711- Water & Water System Development

### **Bay Street Reservoir Reconstruction**

### **Project Description:**

The Bay Street Reservoir has reached the end of its useful life and will be replaced with two 6 MG tanks. Construction of Tank 1 was completed in FY 2014. Demolition of the temporary tanks and Tank 2 construction commenced in FY 2014. A portion of the project is funded by System Development Charges (20% SDC-Fund 715).

#### Fiscal Year 2015

	Prior Year		Estimated	FY 2016	FY 2017	FY 2018	Total
	Totals	Budget	Actuals	Estimate	Estimate	Estimate	2016 - 2018
Project # c700313					Acco	ount # 711-70-9	1-7153-57302
Project Cost Estimate:	15,611,839	5,468,836	5,468,836	-	-	-	-
Net Project Cost Estimates:	15,611,839	5,468,836	5,468,836	-	-	-	-
	•						
Project # c700027					Acco	ount # 715-70-9	1-7153-57302
Project Cost Estimate:	3,979,771	1,313,725	1,313,725	-	-	-	-
Net Project Cost Estimates:	3,979,771	1,313,725	1,313,725	-	-	-	-

### **Beltz Well #4 Replacement with #12**

### **Project Description:**

Replace Beltz Well #4 with a new inland well to redistribute pumping away from the coast. Land was acquired in 2012, drilling of the well took place in FY 2013, engineering and construction of the wellhead in FY 2014. Installation of the treatment system began in FY 2014 and will be complete in early FY 2015.

#### Fiscal Year 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701003					Acco	ount # 711-70-9	91-7153-57302
Project Cost Estimate:	3,368,134	1,755,427	1,755,427	-	-	-	-
Net Project Cost Estimates:	3,368,134	1,755,427	1,755,427	-	-	-	_

### **Bunker Roof Project**

### **Project Description:**

The bunker was designed for more suitable storage for materials (sand, base rock, cold mix and spoils) at the City's Corporation yard that are used in repairing and maintaining the water distribution system. The roof will keep these materials dry in the winter months as well as keeping storm water runoff from entering the drainage system. Solar panels may be incorporated into the roof structure.

		113041 101	2025				
	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701508		_			Acco	ount # 711-70-	97-7151-57302
Project Cost Estimate:	-	200,000	200,000	150,000	-	-	150,000
Net Project Cost Estimates:	-	200,000	200,000	150,000	-	-	150,000

### Water (EXISTING)

711- Water & Water System Development

### **Gravity Trunk Main Valve Replacement**

### **Project Description:**

Replace failed isolation valves on and surrounding the 36 inch trunk transmission main leaving the Graham Hill Water Treatment Plant and make improvements needed to inspect the condition of the pipeline. Project also includes potential inspection of the transmission main.

### Fiscal Year 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701504					Acco	unt # 711-70-	91-7151-57302
Project Cost Estimate:	-	150,000	150,000	200,000	-	-	200,000
Net Project Cost Estimates:	-	150,000	150,000	200,000	-	-	200,000

### **Loch Lomond Facilities Improvements**

#### **Project Description:**

Complete facilities assessment and improvement program at Loch Lomond. A Use study was completed in FY 2013. Further analysis was scheduled for FY 2015 but put on hold due to the drought and closure of the lake during the 2014 season. The facilities assessment will be followed by development of a master plan and various improvements.

### Fiscal Year 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701301					Acco	ount # 711-70-9	91-7153-57302
Project Cost Estimate:	4,676	180,324	180,324	100,000	-	-	100,000
Net Project Cost Estimates:	4,676	180,324	180,324	100,000	-	-	100,000

### **Newell Creek Supply Main Rehabilitation**

### **Project Description:**

Conduct a condition assessment and program level environmental review followed by full or partial replacement of the pipeline between the base of Loch Lomond Reservoir and the Graham Hill Water Treatment Plant. (Project title modified from Newell Creek Supply Main Rehabilitation.)

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701701					Acco	ount # 711-70-9	91-7153-57302
Project Cost Estimate:	-	-	-	-	700,000	-	700,000
Net Project Cost Estimates:	-	-	-	-	700,000	-	700,000

### Water (EXISTING)

711- Water & Water System Development

### **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 were constructed as early as 1889 and are in need of rehabilitation. The program consists of multiple projects over the next 15 to 20 years. Engineering, environmental review, and permitting for the coast segment (Phase 3) began in FY 2013 and continues through FY 2015. Construction scheduled to begin in FY 2016.

#### Fiscal Year 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c709835					Acco	ount # 711-70-9	91-7153-57302
Project Cost Estimate:	4,841,883	1,267,876	1,267,876	4,235,000	4,000,000	i	8,235,000
Net Project Cost Estimates:	4,841,883	1,267,876	1,267,876	4,235,000	4,000,000	-	8,235,000

### Recoat University Reservoir No. 4

#### **Project Description:**

Perform engineering analysis and condition assessment of the aging University 4 tank. 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 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701505					Acco	unt # 711-70-9	91-7153-57302
Project Cost Estimate:	-	95,000	95,000	100,000	75,000	1,300,000	1,475,000
Net Project Cost Estimates:	-	95,000	95,000	100,000	75,000	1,300,000	1,475,000

### Recoat University Reservoir No. 5

### **Project Description:**

Perform engineering analysis and condition assessment of the aging University 5 tank. 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.

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701506					Acco	ount # 711-70-9	91-7153-57302
Project Cost Estimate:	-	110,000	110,000	75,000	1,750,000	-	1,825,000
Net Project Cost Estimates:	-	110,000	110,000	75,000	1,750,000	-	1,825,000

### Water (EXISTING)

711- Water & Water System Development

### 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, potential use of infiltration gallery, and relocation of existing wells. Condition assessment followed by recommended intake modifications and/or new wells. (Project title modified from San Lorenzo Tait Intake.)

#### Fiscal Year 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c709872					Acco	unt # 711-70-9	91-7153-57302
Project Cost Estimate:	171,581	253,434	253,434	300,000	1,600,000	ı	1,900,000
Net Project Cost Estimates:	171,581	253,434	253,434	300,000	1,600,000	-	1,900,000

### **Water Main Replacements - Distribution**

### **Project Description:**

Recurring program of deteriorated mains, as identified and prioritized by the Water Department's Distribution Section, which performs the work. Projects are typically based on leak history, but also address water quality and fire flow issues.

### Fiscal Year 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701507					Acco	unt # 711-70-9	7-7151-57302
Project Cost Estimate:	-	300,000	300,000	325,000	325,000	325,000	975,000
Net Project Cost Estimates:	-	300,000	300,000	325,000	325,000	325,000	975,000

### Water Main Replacements -City Engineering

### **Project Description:**

Recurring program of deteriorated or undersized mains as identified and prioritized by the Water Department's Engineering Division. Priorities are based on the need to maintain water system reliability, deliver adequate fire flows, improve circulation and water quality, and reduce maintenance costs. This project focuses on pipes less than 10" in diameter.

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c700002					Acco	unt # 711-70-9	91-7151-57302
Project Cost Estimate:	2,295,647	742,481	742,481	1,000,000	1,000,000	1,000,000	3,000,000
Net Project Cost Estimates:	2,295,647	742,481	742,481	1,000,000	1,000,000	1,000,000	3,000,000

### Water (EXISTING)

715- Water & Water System Development

### Water Main Replacements -Customer Initiated

### **Project Description:**

Recurring program similar to the City-Initiated Main Replacement Project; 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 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c700004					Acco	unt # 715-70-9	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 and/or storm drain improvement projects. Available project balance will be used for any projects in FY 2015, rolled over to FY 2016, plus new appropriations for FY 2016 due to several known projects.

### Fiscal Year 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c700003					Acco	unt # 711-70-9	91-7151-57302
Project Cost Estimate:	757,173	374,620	374,620	200,000	200,000	200,000	600,000
Net Project Cost Estimates:	757,173	374,620	374,620	200,000	200,000	200,000	600,000

### **Water Resources Building**

### **Project Description:**

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

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701702					Acco	ount # 711-70-9	91-7153-57302
Project Cost Estimate:	-	-	-	100,000	1,000,000	-	1,100,000
Net Project Cost Estimates:	_	-	-	100.000	1.000.000	-	1.100.000

### Water (EXISTING)

711- Water & Water System Development

### **Water Supply Project**

### **Project Description:**

CEQA process continued in FY 2014. A portion of the project is funded by System Development Charges (30% SDC-Fund 715). Remaining project balance will be transferred as needed to the Water Supply Reliability project (c701402, c701403)

#### Fiscal Year 2015

	_						
	Prior Year		Estimated	FY 2016	FY 2017	FY 2018	Total
	Totals	Budget	Actuals	Estimate	Estimate	Estimate	2016 - 2018
Project # c700305					Acco	ount # 711-70-9	91-7153-57302
Project Cost Estimate:	9,969,168	173,815	173,815	-	700,000	1,400,000	2,100,000
<b>Project Funding Estimates:</b>							
Other agency contributions	4,915,092	881,077	-	-	-	-	-
Net Project Cost Estimates:	5,054,076	(707,262)	173,815	-	700,000	1,400,000	2,100,000
Project # c700016					Acco	ount # 715-70-9	91-7153-57302
Project Cost Estimate:	3,548,866	583,920	583,920	-	300,000	600,000	900,000
Project Funding Estimates:							
Other agency contributions	2,106,467	527,165	-	-	-	-	-
Net Project Cost Estimates:	1,442,399	56,755	583,920	-	300,000	600,000	900,000

### Water Supply Reliability

### **Project Description:**

Support the Water Supply Advisory Committee to explore the City of Santa Cruz's water situation and potential supply options. Will include exploration of elements that impact supply such as the Habitat Conservation Plan process, elements affecting demand such as the conservation master plan, and potential water supply alternatives such as water exchange and beneficial uses of recycled water, and funding of Water Supply Advisory Committee facilitation. Potential for funding contributions from other agencies for exploration of regional solutions and/or grant funding. Remaining project balance from the Water Supply Project (c700305, c700016) will be transferred as needed to these projects.

Project # c701402	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate Acco	FY 2018 Estimate ount # 711-70-9	Total 2016 - 2018 1-7153-57302
Project Cost Estimate:	85,252	1,385,448	1,385,448	350,000	-	-	350,000
Net Project Cost Estimates:	85,252	1,385,448	1,385,448	350,000	-	-	350,000
Project # c701403					Acco	ount # 715-70-9	1-7153-57302
Project Cost Estimate:	36,537	593,763	593,763	150,000	-	1	150,000
Net Project Cost Estimates:	36,537	593,763	593,763	150,000	-	-	150,000

### Water (EXISTING)

711- Water & Water System Development

### **Water Transmission System Improvements**

### **Project Description:**

Recurring program of water main replacement for pipes 10" and larger (the transmission grid) to extend its useful life and improve performance. Portion of the project funded by System Development Charges (20% SDC - Fund 715)

### Fiscal Year 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c709833					Acco	unt # 711-70-9	1-7151-57302
Project Cost Estimate:	1,771,927	513,510	513,510	400,000	400,000	400,000	1,200,000
Net Project Cost Estimates:	1,771,927	513,510	513,510	400,000	400,000	400,000	1,200,000
Project # c700017					Acco	unt # 715-70-9	1-7151-57302
Project Cost Estimate:	393,530	100,000	100,000	100,000	100,000	100,000	300,000
Net Project Cost Estimates:	393,530	100,000	100,000	100,000	100,000	100,000	300,000

### **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. FY 2016 will focus on evaluation of chemical feed and bulk storage area and study new oxidant.

### Fiscal Year 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c700025					Acco	ount # 711-70-9	91-7152-57302
Project Cost Estimate:	313,986	26,561	26,561	200,000	-	-	200,000
Net Project Cost Estimates:	313,986	26,561	26,561	200,000	-	-	200,000

### WTP Concrete Tank Assessment and Rehabilitation

### **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 of-site concrete tank), make improvement recommendation, and construction. Project title modified from WTP Filter Water Tank. Includes \$145,000 endowment for MHJB HCP mitigation.

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701501					Acco	unt # 711-70-9	1-7152-57302
Project Cost Estimate:	-	258,320	258,320	250,000	2,000,000	2,000,000	4,250,000
Net Project Cost Estimates:	-	258,320	258,320	250,000	2,000,000	2,000,000	4,250,000

### Water (EXISTING)

711- Water & Water System Development

### WTP 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 filters.

#### Fiscal Year 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701303					Acco	unt # 711-70-9	91-7152-57302
Project Cost Estimate:	629,006	4,788,994	4,788,994	-	-	ı	-
Net Project Cost Estimates:	629,006	4,788,994	4,788,994	-	-	-	-

### WTP Flocculator/Sedimentation 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 2015

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701502					Acco	unt # 711-70-9	91-7152-57302
Project Cost Estimate:	-	-	-	60,000	600,000	6,000,000	6,660,000
Net Project Cost Estimates:	-	-	-	60,000	600,000	6,000,000	6,660,000

### WTP 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.

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701401					Acco	ount # 711-70-9	91-7152-57302
Project Cost Estimate:	-	75,000	75,000	-	-	1	-
Net Project Cost Estimates:	-	75,000	75,000	-	-	-	-

### Water (EXISTING)

711- Water & Water System Development

### WTP UV System - Pasatiempo

### **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 upgrading the Pasatiempo Pump system with ultra violet disinfection. This project would need to be constructed in conjunction with improvements to the filtered water tank as part of the WTP Concrete Tank Project.

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Project # c701503					Acco	ount # 711-70-9	91-7152-57302
Project Cost Estimate:	-	40,000	40,000	-	-	-	-
Net Project Cost Estimates:	-	40,000	40,000	-	-	-	-

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

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Total Project Cost Estimate:	48,080,235	20,801,054	20,801,054	8,345,000	14,800,000	13,375,000	
Total Project Funding Estimate:	7,021,559	1,408,242	-	-	-	-	-
Total Net Project Cost Estimate:	41,058,676	19,392,812	20,801,054	8,345,000	14,800,000	13,375,000	36,520,000

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

Fiscal Year 2015							
	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Total Project Cost Estimate:	48,080,235	20,801,054	20,801,054	9,110,000	21,370,000	17,975,000	48,455,000
Total Project Funding Estimate:	7,021,559	1,408,242	-	-	-	-	-
Total Net Project Cost Estimate:	41,058,676	19,392,812	20,801,054	9,110,000	21,370,000	17,975,000	48,455,000

### Water Totals

	Prior Year Totals	Budget	Estimated Actuals	FY 2016 Estimate	FY 2017 Estimate	FY 2018 Estimate	Total 2016 - 2018
Total Project Cost Estimate:	48,080,235	20,801,054	20,801,054	9,110,000	21,370,000	17,975,000	48,455,000
Total Project Funding Estimate:	7,021,559	1,408,242	-	-	-	-	-
Total Net Project Cost Estimate:	41,058,676	19,392,812	20,801,054	9,110,000	21,370,000	17,975,000	48,455,000

### **DEPARTMENT SUMMARY**

					<b>-</b> 156	
	_	Fiscal Year* 2014 Actuals	Adopted Budget	Amended* Budget	Estimated Actual	Fiscal Year 2016 Proposed
EXPENDITURES BY CHARAC	TER:					
Personnel Services		9,743,716	11,157,013	11,157,013	10,289,563	11,703,401
Services, Supplies, and Other O	Charges	13,371,481	13,227,610	14,788,229	13,264,338	12,323,048
Capital Outlay		1,151,124	540,860	608,134	486,274	338,500
Debt Service		851,488	850,546	850,546	691,079	1,762,552
Total Expenditures	_	25,117,808	25,776,029	27,403,922	24,731,254	26,127,501
EXPENDITURES BY ACTIVITY	<b>/</b> :					
Water Administration	7101	3,835,697	4,234,919	4,458,369	4,621,687	4,717,842
Water Engineering	7102	4,147,378	2,354,372	2,791,602	2,145,001	2,378,183
Water Customer Services	7103	1,156,201	1,341,660	1,341,660	1,191,487	1,326,157
Water Conservation	7104	697,041	932,355	1,237,310	979,537	939,624
Water Resources	7105	1,158,906	1,454,705	1,816,012	1,536,633	1,368,333
Water Production	7106	5,505,854	6,053,873	6,210,952	6,203,114	6,277,398
Water Quality	7107	879,300	920,627	921,025	888,222	996,194
Water Distribution	7108	4,886,432	4,790,342	4,790,342	3,946,441	4,413,766
Water Recreation	7109	,	1,161,467	1,161,467	991,780	961,841
Meter Shop	7118	,	1,347,808	1,347,808	1,175,654	985,611
Water Debt Service	7140	,	850,546	850,546	691,079	1,762,552
Drought Response 2014	719 <u>9</u>		333,355	476,828	360,619	
Subtotal Other Funds		25,117,808	25,776,029	27,403,922	24,731,254	26,127,501
Total Expenditures	_	25,117,808	25,776,029	27,403,922	24,731,254	26,127,501
RESOURCES BY FUND						
Water	711	24,603,616	42,729,935	45,129,935	26,060,089	57,221,775
Water System Development Fees Fund	715	687,753	600,000	600,000	1,060,000	850,000
Total Resources	_	25,291,369	43,329,935	45,729,935	27,120,089	58,071,775
		FY 2014			FY 2015	FY 2016
TOTAL AUTHORIZED PERSONN	IEL:	98.75			102.25	102.25

<sup>51</sup> 

### Water Administration

Activity Number: 7101 ACTIVITY SUMMARY

Fund(s): Water & Water System Development Fees (711 & 715)

**Department: Water** 

### **Activity Description:**

The Water Administration section coordinates and manages department business by focusing on the following operational areas: human resources, finances, public relations, safety, and regulatory compliance. Administration is responsible for maintaining a rate structure that reflects cost of service, funds the department's capital improvement program, and provides adequate reserves. This section also facilitates the communication and interaction with the Water Commission, City Council, City Manager's Office and regulatory agencies.

	_		et l.v		
_	Fiscal Year 2014 Actuals	Adopted Budget	Amended Budget	Estimated Actual	Fiscal Year 2016 Proposed
EXPENDITURES BY ACTIVITY:					
Personnel Services Services, Supplies, and Other Charges	846,227 2,989,469	1,078,641 3,156,278	1,078,641 3,379,728	1,170,812 3,450,875	1,252,447 3,465,395
Total Expenditures	3,835,697	4,234,919	4,458,369	4,621,687	4,717,842

Activity Number: 7102 ACTIVITY SUMMARY

Fund(s): Water (711) Department: Water

### **Activity Description:**

The Water Engineering section provides engineering, planning, project design and construction management necessary for water facilities, as well as evaluation and installation of water saving technologies. The section keeps current with new technologies and water quality issues, remaining sensitive to mitigation of environmental impacts; reviews all requests for water services; maintains records of facilities, installations and maps; and oversees the Backflow Prevention Program.

		Fiscal Year 2015			
_	Fiscal Year 2014 Actuals	Adopted Budget	Amended Budget	Estimated Actual	Fiscal Year 2016 Proposed
<b>EXPENDITURES BY ACTIVITY:</b>					
Personnel Services Services, Supplies, and Other Charges Capital Outlay	1,452,916 2,694,462 -	1,625,959 728,413 -	1,625,959 1,121,973 43,670	1,335,702 765,629 43,670	1,752,270 590,913 35,000
Total Expenditures	4,147,378	2,354,372	2,791,602	2,145,001	2,378,183
ACTIVITY RESOURCES:					
Grants	-	-	-	19,097	20,000
Total Resources	-			19,097	20,000

<sup>53</sup> 

Activity Number: 7103 ACTIVITY SUMMARY

Fund(s): Water (711) Department: Water

### **Activity Description:**

The Customer Services section (Santa Cruz Municipal Utilities -SCMU) provides customer service for water, sewer, refuse, and recycling services to the residents and businesses of the City of Santa Cruz, and only water services to the unincorporated surrounding areas. This section manages utility accounts and billing, processes opening and closing of accounts; and provides service in response to requests from the customers.

	Fiscal Year 2014 Actuals	Fiscal Year 2015			Figure Vega
_		Adopted Budget	Amended Budget	Estimated Actual	Fiscal Year 2016 Proposed
<b>EXPENDITURES BY ACTIVITY:</b>					
Personnel Services	817,655	927,842	927,842	824,490	937,128
Services, Supplies, and Other Charges	338,546	403,818	403,818	366,997	359,029
Capital Outlay	-	10,000	10,000	-	30,000
Total Expenditures	1,156,201	1,341,660	1,341,660	1,191,487	1,326,157
ACTIVITY RESOURCES:					
Charges for Services	643,959	641,935	641,935	641,935	691,062
Total Resources	643,959	641,935	641,935	641,935	691,062

<sup>54</sup> 

Activity Number: 7104 ACTIVITY SUMMARY

Fund(s): Water & Water System Development Fees (711 & 715)

**Department: Water** 

### **Activity Description:**

The Water Conservation section is responsible for promoting efficient water use and for implementing management practices that reduce customer demand for water, including public information and education activities, water budgets for large landscape customers, plumbing fixture replacement and appliance rebate programs, technical assistance, administration of landscape, and water waste regulations.

	Fiscal Year 2014 Actuals	Fiscal Year 2015			Et a l War
		Adopted Budget	Amended Budget	Estimated Actual	Fiscal Year 2016 Proposed
<b>EXPENDITURES BY ACTIVITY:</b>					
Personnel Services Services, Supplies, and Other Charges	257,372 439,670	369,767 562,588	369,767 867,543	227,228 752,309	388,583 551,041
Total Expenditures	697,041	932,355	1,237,310	979,537	939,624
ACTIVITY RESOURCES:					
Rents, & Misc Revenues	415	-	-	-	-
Total Resources	415	-			

<sup>55</sup> 

Activity Number: 7105 ACTIVITY SUMMARY

Fund(s): Water (711) Department: Water

### **Activity Description:**

The Water Resources Management section is responsible for the drinking water source protection, environmental regulatory compliance, and general natural resource management. The section coordinates environmental projects related to water rights, water supply, habitat conservation, and environmental resource protection.

_	Fiscal Year 2014 Actuals	Adopted Budget	Amended Budget	Estimated Actual	Fiscal Year 2016 Proposed
<b>EXPENDITURES BY ACTIVITY:</b>					
Personnel Services	463,441	508,438	508,438	518,409	555,374
Services, Supplies, and Other Charges	695,465	946,267	1,307,574	1,018,224	812,959
Total Expenditures	1,158,906	1,454,705	1,816,012	1,536,633	1,368,333

<sup>56</sup> 

Activity Number: 7106 ACTIVITY SUMMARY

Fund(s): Water (711) Department: Water

### **Activity Description:**

The Water Production section is responsible for production, operation, and maintenance of water storage, diversion, collection, pumping, and treatment facilities from all sources throughout the system.

	Fiscal Year 2014 Actuals		Figure Voca		
_		Adopted Budget	Amended Budget	Estimated Actual	Fiscal Year 2016 Proposed
<b>EXPENDITURES BY ACTIVITY:</b>					
Personnel Services	2,139,433	2,320,054	2,320,054	2,315,781	2,462,374
Services, Supplies, and Other Charges	3,192,523	3,554,319	3,711,398	3,708,333	3,668,524
Capital Outlay	173,898	179,500	179,500	179,000	146,500
Total Expenditures	5,505,854	6,053,873	6,210,952	6,203,114	6,277,398

<sup>57</sup> 

Activity Number: 7107 ACTIVITY SUMMARY

Fund(s): Water (711) Department: Water

### **Activity Description:**

The Water Quality Control section performs all water quality testing, and oversees matters pertaining to water quality control to maintain compliance with State and Federal standards and for planning for future treatment needs.

	Fiscal Year 2014 Actuals		Fiscal Year 2015		
_		Adopted Budget	Amended Budget	Estimated Actual	Fiscal Year 2016 Proposed
<b>EXPENDITURES BY ACTIVITY:</b>					
Personnel Services	623,493	640,661	640,661	648,131	692,490
Services, Supplies, and Other Charges	234,355	261,966	262,364	235,091	263,704
Capital Outlay	21,452	18,000	18,000	5,000	40,000
Total Expenditures	879,300	920,627	921,025	888,222	996,194

<sup>58</sup> 

Activity Number: 7108 ACTIVITY SUMMARY

Fund(s): Water (711) Department: Water

### **Activity Description:**

The Water Distribution section is responsible for the maintenance and operation of all transmission mains, distribution mains, service lines, and hydrants in the service area.

	Fiscal Year 2014 Actuals		Figure Voca		
_		Adopted Budget	Amended Budget	Estimated Actual	Fiscal Year 2016 Proposed
EXPENDITURES BY ACTIVITY:					
Personnel Services	2,178,960	2,385,021	2,385,021	2,067,406	2,492,825
Services, Supplies, and Other Charges	1,999,932	2,120,321	2,120,321	1,644,035	1,870,941
Capital Outlay	707,540	285,000	285,000	235,000	50,000
Total Expenditures	4,886,432	4,790,342	4,790,342	3,946,441	4,413,766

<sup>59</sup> 

Activity Number: 7109 ACTIVITY SUMMARY

Fund(s): Water (711) Department: Water

### **Activity Description:**

The Water Recreation Facility section operates and maintains Loch Lomond Recreation Area. The section is also responsible for patrolling watershed property and protecting source water quality.

	Fiscal Year 2014 Actuals		Fiscal Year 2015		
		Adopted Budget	Amended Budget	Estimated Actual	Fiscal Year 2016 Proposed
<b>EXPENDITURES BY ACTIVITY:</b>					
Personnel Services Services, Supplies, and Other Charges Capital Outlay	525,334 178,111 47,052	682,288 479,179 -	682,288 479,179 -	586,109 405,671 -	693,549 231,292 37,000
Total Expenditures	750,497	1,161,467	1,161,467	991,780	961,841
ACTIVITY RESOURCES:					
Licenses and Permits Grants Rents, & Misc Revenues	(1,065) - 79,246	600 - 85,000	600 - 85,000	- 4,931 -	600 - 85,000
Total Resources	78,181	85,600	85,600	4,931	85,600

<sup>60</sup> 

**ACTIVITY SUMMARY** 

Activity Number: 7118 Fund(s): Water (711) Department: Water

### **Activity Description:**

The Meter Shop section is responsible for reading, inspecting, installing, maintaining, and replacing water meters in the service area that covers the City of Santa Cruz and the unincorporated surrounding areas.

	Fiscal Year 2014 Actuals		Figgal Vacy		
		Adopted Budget	Amended Budget	Estimated Actual	Fiscal Year 2016 Proposed
EXPENDITURES BY ACTIVITY:					
Personnel Services	316,563	440,127	440,127	404,699	476,361
Services, Supplies, and Other Charges	349,230	859,321	859,321	770,955	509,250
Capital Outlay	73,465	48,360	48,360	-	-
Total Expenditures	739,258	1,347,808	1,347,808	1,175,654	985,611

<sup>61</sup> 

### Water Debt Service

Activity Number: 7140 ACTIVITY SUMMARY

Fund(s): Water & Water System Development Fees (711 & 715)

Department: Water

### **Activity Description:**

Funds principal and interest payments on issued debt.

			Final Van		
	Fiscal Year 2014 Actuals	Adopted Budget	Amended Budget	Estimated Actual	Fiscal Year 2016 Proposed
<b>EXPENDITURES BY ACTIVITY:</b>					
Debt Service	851,488	850,546	850,546	691,079	1,762,552
Total Expenditures	851,488	850,546	850,546	691,079	1,762,552

Activity Number: 7199 ACTIVITY SUMMARY

Fund(s): Water (711) Department: Water

### **Activity Description:**

This activity accounts for expenses and revenues beyond the department's base operating budget related to Stage 3 (or higher) Water Shortage Emergency incurred in calendar year 2014. Tracking of such expenses and revenues will begin with the Stage 3 Water Shortage Emergency declared by City Council on February 25, 2014 and continuing until such emergency is reduced to Stage 2 or lower.

	Fiscal Year 2014 Actuals	Fiscal Year 2015			et l .v
		Adopted Budget	Amended Budget	Estimated Actual	Fiscal Year 2016 Proposed
<b>EXPENDITURES BY ACTIVITY:</b>					
Personnel Services	122,321	178,215	178,215	190,796	-
Services, Supplies, and Other Charges	259,718	155,140	275,009	146,219	-
Capital Outlay	127,717	-	23,604	23,604	-
Total Expenditures	509,756	333,355	476,828	360,619	
<b>ACTIVITY RESOURCES:</b>	_				
Fines and Forfeitures	341,275	-	-	600,000	-
Total Resources	341,275	-		600,000	

<sup>63</sup>