CITY OF SANTA CRUZ
City Hall
809 Center Street
Santa Cruz, California 95060

Water Department

WATER COMMISSION

Regular Meeting

May 04, 2020

7:00 P.M. GENERAL BUSINESS AND MATTERS OF PUBLIC INTEREST, COUNCIL CHAMBERS/ZOOM

COVID-19 ANNOUNCEMENT: This meeting will be held via teleconference ONLY.

In order to minimize exposure to COVID-19 and to comply with the social distancing suggestion, the Council Chambers will not be open to the public. The meeting may be heard remotely via telephone by following the directions listed below.

PUBLIC COMMENT AND ORAL COMMUNICATIONS:
If you wish to comment on items 1-7, please see information below:

Call at the start of the item.

- **Call any of the numbers below. If one line is busy, try the next one.**
  - 1-669-900-9128
  - 1-346-248-7799
  - 1 253-215-8782
  - 1-301-715-8592
  - 1-312-626-6799
  - 1-646-558-8656

- Enter the meeting ID number: **962 5739 9925**
- When prompted for a Participant ID, press #.
- Press *9 on your phone to "raise your hand" when the Chair calls for public comment.
  - It will be your turn to speak when the Chair unmutes you. You will hear an announcement that you have been unmuted. The timer will then be set to three (3) minutes.
  - You may hang up once you have commented on your item of interest.
  - If you wish to speak on another item, two things may occur:
    1) If the number of callers waiting exceeds capacity, you will be disconnected and you will need to call back closer to when the item you wish to comment on will be heard, or

2) You will be placed back in the queue and you should press *9 to "raise your hand" when you wish to comment on a new item.

NOTE: If you wish to listen to the meeting and don't wish to comment on an item, you can do so at any time via one of the three methods above.

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 public 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 arrangements can be made. The Cal-Relay system number: 1-800-735-2922.

APPEALS: 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.

Call to Order

Roll Call

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.

Consent Agenda (Pages 1.1 – 5.10) 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 Actions Affecting the Water Department (Pages 1.1 - 1.4)

   Accept the City Council Actions Affecting the Water Department.

2. Water Commission Minutes from March 2, 2020 (Pages 2.1 - 2.8)

   Approve the March 2, 2020 Water Commission Minutes.

3. FY20 2nd Quarterly Financial Report (Pages 3.1 – 3.6)

Accept the FY20 2nd Quarterly Financial Report.

4. Update on City Charter and Municipal Code Changes to Enable Best Value Project Delivery (Pages 4.1 – 4.22)

Accept the information on Best Value Project Delivery.

5. Annual Water Supply Outlook (Pages 5.1 – 5.10)

Recommend the the Annual Water Supply Outlook to City Council.

Items Removed from the Consent Agenda

General Business (Pages 6.1 – 7.20) 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.

6. Priority Setting for Water Pricing Objectives (6.1 – 6.44)

Participate in a work session to develop the Water Commission's input on its priorities for water pricing objectives.

7. FY 2021 Operating and Capital Budgets (Pages 7.1 – 7.20)

Receive information on the Department's FY 2021 Operating and Capital Budgets and Financial Pro Forma and provide feedback to staff (Water Commission action to recommend the FY 2021 Operating and Capital Budget to the City Council will occur at the Commission's June 1st meeting.)

Subcommittee/Advisory Body Oral Reports - No action shall be taken on these items.

8. Santa Cruz Mid-County Groundwater Agency

9. Santa Margarita Groundwater Agency

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

Adjournment

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WATER COMMISSION
INFORMATION REPORT

DATE: 4/30/2020

AGENDA OF: May 4, 2020

TO: Water Commission

FROM: Rosemary Menard, Water Director

SUBJECT: City Council Actions Affecting the Water Department

RECOMMENDATION: That the Water Commission accept the City Council actions affecting the Water Department.

BACKGROUND/DISCUSSION:

March 10, 2020

Carbonera Water Tank Access Road Storm Damage Repair – Notice of Completion (WT)

Motion **carried** to accept the work of Conley General Engineering, Inc. (Santa Cruz, CA) as complete per plans and specifications and authorize the filing of a Notice of Completion for the Carbonera Water Tank Access Road Storm Damage Repair Project.

Newell Creek Dam Inlet/Outlet Replacement Project – Execution of Agreements for Design and Construction Management Services during Construction (WT)

Motion **carried** to authorize the City Manager to execute an agreement in a form to be approved by the City Attorney with AECOM (Oakland, CA) for professional design services during construction of the Newell Creek Dam Inlet/Outlet Replacement Project and to authorize the Water Director to execute amendments within the approved project budget.

Motion **carried** to authorize the City Manager to execute an agreement in a form to be approved by the City Attorney with Mott MacDonald (San Ramon, CA) for construction management services for the Newell Creek Dam Inlet/Outlet Replacement Project and to authorize the Water Director to execute amendments within the approved project budget.

March 24, 2020

Newell Creek Dam Inlet/Outlet Replacement Project - Bid Protest and Award of Contract (WT)

Motion **carried** to overrule the March 17, 2020 bid protest submitted by Flatiron West, Inc. of Benicia, California and to award the Newell Creek Dam Inlet/Outlet Replacement Project to Obayashi Construction, Inc.

April 14, 2020

Ratify FIP-First Amendment to the Master Services Agreement for California Environmental Quality Act Compliance and Environmental Permitting for Phase 1 Environmental Review and Permitting, Graham Hill Water Treatment Plant Facility Improvement Project with DUDEK, and NCP – First Amendment to the Master Services Agreement for California Environmental Quality Act Compliance and Environmental Permitting for Phase 1 Environmental Review and Permitting, Newell Creek Pipeline with DUDEK (WT)

Motion **carried** to ratify FIP-First Amendment to the Master Services agreement for California Environmental Quality Act Compliance and Environmental Permitting for Phase 1 Environmental Review and Permitting, Graham Hill Water Treatment Plant Facility Improvement Project with DUDEK (Santa Cruz, CA) in the amount of $74,110 and to authorize the Water Director to execute future contract amendments within the approved budget.

Motion **carried** to ratify NCP – First Amendment to the Master Services Agreement for California Environmental Quality Act Compliance and Environmental Permitting for Phase 1 Environmental Review and Permitting, Newell Creek Pipeline with DUDEK (Santa Cruz, CA) for $70,000 and to authorize the Water Director to execute future contract amendments within the approved budget.

Contract Amendment No 2 with Carollo Engineering (WT)

Motion **carried** authorizing the City Manager to execute Contract Amendment No. 2 in the amount of $102,644 with Carollo Engineering for additional services in Capital Investment Program (CIP) funding support in a form to be approved by the City Attorney and to authorize the Water Director to execute future contract amendments within the approved budget.

April 28, 2020

Brackney Landslide Area Pipeline Risk Reduction – Phase 1 Hazard Mitigation Grant Program - Grant Acceptance and Budget Adjustment and Resolution Identifying Authorized Agents (WT)

Resolution No. 29,651 was adopted authorizing acceptance of funds and appropriating $371,595 from the Water Enterprise Operation (Fund 711) and amending the Water Department FY 2020 budget for the Hazard Mitigation Grant Program funded portion of Brackney Landslide Pipeline Risk Reduction – Phase 1.

Resolution No. 29,652 was adopted identifying Authorized Agents authorized to make agreements with California Office of Emergency Services (Cal OES) and the Federal Emergency Management Agency (FEMA) on behalf of the City of Santa Cruz for Hazard Mitigation Grant Program Brackney Landslide Area Pipeline Risk Reduction – Phase 1.

Purchase of Laboratory Information Management System (WT)

Motion **carried** to authorize the purchase of a Laboratory Information Management System software upgrade in the amount of $103,841 for LABWORKS, LLC, and authorize the Water Director to execute change orders within the approved budget.

University Tank No. 5 Replacement Project, Tank Replacement Contract with Crosno Construction, Inc. - Notice of Completion (WT)

Motion **carried** to accept the work of Crosno Construction, Inc. as complete per the plans and specifications and authorize the filing of a Notice of Completion for the Replacement of the University Tank No. 5.

Santa Cruz Water Rights Project: Professional Services Contract Amendment No. 1 with Dudek for California Environmental Quality Act Compliance (WT)

Motion **carried** to authorize the City Manager to execute Contract Amendment No. 1 in the amount of $183,181 with Dudek (Santa Cruz, CA) for additional professional services related to California Environmental Quality Act compliance for the Santa Cruz Water Rights Project in a form approved by the City Attorney.

Introduce for Publication an Ordinance Amending Sections 3.08.030 and 3.08.100 of, and Adding Section 3.08.091 to, the Santa Cruz Municipal Code to Establish Regulations for the Use, Award and Evaluation of Best Value Project Delivery Methods for Construction Projects (WT)

Ordinance No. 2020.08 was introduced for publication amending Sections 3.08.030 and 3.08.100 of, and adding Section 3.08.091 to, the Santa Cruz Municipal Code to establish regulations for the use, award and evaluation of best value project delivery methods for construction projects.

PROPOSED MOTION: Motion to accept the City Council actions affecting the Water Department.

ATTACHMENTS: None.

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Water Commission
7:00 p.m. – March 2, 2020
Council Chambers
809 Center Street, Santa Cruz

Water Department

Summary of a Water Commission Meeting

Call to Order: 7:00 PM

Roll Call

Present: D. Engfer (Chair), W. Wadlow (Vice-Chair), J. Mekis, A. Páramo, S. Ryan, D. Schwarm, L. Wilshusen

Absent: None

Staff: R. Menard, Water Director; C. Coburn, Deputy Director/Operations Manager; K. Crossley, Senior Professional Engineer; N. Haley, Assistant Engineer II; L. Kay, Engineering Associate; H. Luckenbach, Deputy Director/Engineering Manager; J. Martinez-McKinney, Associate Planner II; S. Perez, Associate Planner II; B. Pink, Environmental Programs Analyst II; I. Rivera, Associate Professional Engineer; T. Kihoi, Associate Professional Engineer; M. Zeman, Engineering Associate; K. Fitzgerald, Administrative Assistant III

Others: 2 members of the public.

Presentation: None.

Statement of Disqualification: None.

Oral Communications: None.

Announcements: None.

Consent Agenda

1. City Council Items Affecting the Water Department

Is the 4.2 million dollars for Water projects referenced on page 1.2 a new State Revolving Fund (SRF) loan?

- This is not a new SRF loan, it is a budget adjustment that was part of the Mid-Year Budget that was acted on by City Council on February 11th and reallocated funds already appropriated in the FY 20 budget to cover spending for various Water projects.

Commissioner Wilshusen moved the Consent Agenda. Commissioner Wadlow seconded.

VOICE VOTE: MOTION CARRIED
AYES: All

NOES: None
ABSTAIN: None

Items removed from the Consent Agenda

2. Water Commission Minutes From February 3, 2020

Commissioner Engfer presented a document that showed the suggested changes to the text on page 2.5.

Commissioners requested that the action text be added under Item 7 on page 2.6. The text was omitted in error.

No public comments were received.

Commissioner Ryan moved Item 2 as amended. Commissioner Wilshusen seconded.

VOICE VOTE: MOTION CARRIED
AYES: All
NOES: None
ABSTAIN: None

3. Quarterly Update on Water Supply Augmentation Strategy (WSAS)

In relation to Pueblo's oversight of the drilling of a new test well, a Commissioner asked how Pueblo Water Resources being validated given that they may be performing the actual work?

- An independent contractor was selected for the well drilling contract and Pueblo is overseeing their work. In addition, we have other hydrogeologists from HDR, Inc., Corona Environmental, that serve on technical committees and are providing additional review and oversight on the work being performed by Pueblo Water Resources.

Will the Technical Memorandum (TM) on Beltz 12 be brought to the Water Commission in April?

- We will try to provide the TM by the next quarterly update however, if we are unable to present the finalized document by that time, we can provide an updated summary.

Why are the injection rates at Beltz 12 appear to vary between low and high and how does this indicate the effectiveness of the wells?

- We can create a more sophisticated understanding of the operating capacity of the wells by running varying injection rates. The way we did the study provided that data, which also helps us better anticipate how the basin will behave in during periods of drought. The long-term average rate is 450gpm but this depends on future conditions.

Commissioner Ryan moved the staff recommendation on Item 3. Commissioner Wilshusen seconded.

VOICE VOTE: MOTION CARRIED
AYES: All
NOES: None
ABSTAIN: None

4. Updated Water Commission Schedule for 2020

Commissioners agreed to cancel the meetings of July 6th, 2020, and September 7th, 2020, and to postpone the August 3rd, 2020 meeting to August 24th, 2020.

Why are the July and September meetings canceled instead of rescheduled?

- These meetings are usually canceled because it conflicts with the Fourth of July holiday, Council goes dark in July and key staff are usually away. The September meeting falls on the Labor Day holiday so rescheduling the August meeting is an ideal middle ground.

Commissioner Wilshusen moved Item 4 as amended. Commissioner Ryan seconded.

VOICE VOTE: MOTION CARRIED
AYES: All
NOES: None
ABSTAIN: None

General Business

5. Presentation of 2019 Capital Projects (CIP)

Ms. Menard introduced Ms. Luckenbach for the annual presentation of the 2019 Capital Projects.

Commissioner Wadlow requested that staff who are presenting address the question "what this project will do for the customers" during their presentations.

Ms. Luckenbach introduced Jessica Martinez-McKinney for the presentation of the Laguna & Majors Diversions Retrofit Projects.

Ms. Martinez-McKinney responded to Commissioner Wadlow's request by saying that, among other things, these projects will bring the current intake screens into compliance with fish flow regulations as well as improve sediment management, which has been an ongoing problem for these facilities.

How does the Coanda Screen allow sediment to pass over the dam?

- The Coanda Screen is notched into the dam and passively allows the sediment to pass over the fill of the Coanda Screen.

What is the planned duration of construction?

- The construction period will last approximately two to three months next summer.

Can water be diverted from Laguna Creek during construction?

- No, but we typically do not draw from Laguna Creek during the drier summer months because it is a critical time for Coho salmon and steelhead rearing.

Have the fisheries agencies been involved with the design?

- Yes.

Mr. Isidro Rivera presented the Newell Creek Dam Inlet/Outlet Replacement Project.

Mr. Rivera responded to Commissioner Wadlow's request by saying that this project will ensure that we continue to have a safe, reliable source of drinking water during periods of drought as well as bring the dam in compliance with emergency release standards from the Division of Safety of Dams.

Why does this project have a short bid period?

- We shortened the bidding period by prequalifying prospective contractors which limited the number of qualified bidders to four. In addition, prospective contractors were given limited access to draft contract and technical specifications and were able to provide questions and feedback that helped to develop the final bidding documents.

How will operations of the reservoir be affected during construction

- The reservoir will remain in operation throughout the construction process. Construction impact due to things like the (minimal) planned dredging and the in reservoir construction of the intake structures will be managed through the installation of a silt curtain and extensive monitoring to identify and address any issues prior to when they might generate a water quality or other operating impact.

Is the Newell Creek Dam built on solid bedrock?

- Yes.

Ms. Nicole Haley presented the Water Street Main Replacement and Coast Pump Station 20" Raw Water pipeline replacement projects.

Ms. Haley responded to Commissioner Wadlow's request by saying that water main replacements improve water flow characteristics, water quality and overall system reliability. Mains are replaced due to deterioration and or deficiency and are selected for replacement based on factors such as leak history and water quality.

Are locations that can serve as evacuation sites during a disaster, such as hospitals, prioritized when determining which mains get replaced?

- Yes.

What determines whether city staff or outside contractors perform main replacements?

- The following are taken into consideration when deciding to self-perform this type of work within the Department or not. Projects aligned with any of these categories are typically contracted out.
    - Location: High trafficked areas (e.g., River Street), or remote areas with complicated traffic control (e.g., Highway 9).
    - Complexity: Significant utilities to maneuver around and avoid.
    - Pipe size: 8" and larger are generally contracted out due to the weight of the materials, size of equipment to install, and more frequent need for shoring. (It is worth noting that large size water mains are typically in areas of higher traffic with more complex designs.)
    - Longer projects: Contractors are able to more easily add a second work crew when needed for longer projects.

Is there a cost model that helps to determine if a main replacement project should be contracted

out?

- No.

What is the life expectancy of the new pipes that are being installed?

- Approximately 50-60 years.

How many existing pipes are from the 1900's era?

- We do not have the exact number, but we do have data that tells us the type of pipe material. We are in the process of collecting more data to evaluate the distribution system as a whole. This effort is part of an undertaking to look more comprehensively at our main replacement program and to provide improved data to support decision-making about main replacement priorities.

Was the 7th Ave water main scheduled to be replaced at a later time?

- Yes. This project was given an emergency status when the pipe failed three times within two years and resulted in serious property damages.

How many miles of water main does the Department anticipate to replace per year?

- 1 to 2 miles per year, out of about 300 total miles of mains.

Would the Felton Diversion be operational should the Coast Pump Station pipeline fail?

- It could be possible in an emergency situation, but currently, we are not permitted to pump water from the Felton Diversion to the Graham Hill Water Treatment Plant; water can only be pumped to the Loch Lomond Reservoir.

Lewis Kay presented the Ocean Street Extension Water Main Replacement and the Newell Creek Leak Pipeline Replacement projects.

Is the Ocean Street Extension Water Main Replacement Project project within City limits?

- It is within City limits at the Crossing, but further down it is in the County.

What criteria would be used to evaluate whether to move the segment of the Newell Creek Pipeline that is in Pipeline Road in Henry Cowell State Part to Graham Hill Road?

- Criteria include the risk to the pipe in each right of way, right of way issues, including the cost of construction in each right of way, and general cost analysis.

Matt Zeman presented the projects related to the Graham Hill Water Treatment Plant (GHWTP).

Mr. Zeman responded to Commissioner Wadlow's request by saying that the projects related to the GHWTP will ensure that we have a robust, reliable, disaster-resistant treatment plant that will continue to provide the community with safe reliable drinking water under a much wider range of circumstances than the current facility can.

Why is there an area for a future UV Building in the design layout for the Concrete Tanks?

- Ultraviolet Light (UV) is a treatment technology that is increasingly used to provide inactivation of pathogens. Unlike ozone or chlorine, both of which are disinfectants, UV does not produce disinfection byproducts. In thinking about the long term future of the Graham Hill Water Treatment Plant as we plan and construct the contemplated upgrades, we are leaving space to add UV to the treatment process in the future should it be

determined as necessary to meet future regulations or beneficial to the quality of finished water produced by the plant. Originally the site for the UV treatment facility was included in the Concrete Tanks Project but a decision has been made to eliminate it from that project and include it in the larger GHWTP Facility Improvement Project.

What was the reduction in the budget after the decision was made to move the UV building?

- We have reduced approximately 4-5 million from the engineer's original estimate.

Mr. Taylor Kihoi presented the University No. 5 and No. 4 Tank Replacement Projects.

What is the technique for inspecting the welds in the newly constructed University 5 tank?

- We use x-ray technology to scan the interior of the tank.

Does the coating on the new tank have a longer life span than coatings used in the original tank?

- Yes.

Mr. Kevin Crossley presented the Santa Cruz Water Program.

Commissioners suggested that staff address the question "what does this project do for the customers?" on staff reports.

Commissioners suggested that staff seek out ways to encourage the public to attend the next Annual CIP presentation.

No public comments were received.

No action was taken on this item.

6. Results on the Evaluation of the WaterSmart Home Water Use Reports Pilot Project

Due to the lateness of the hour, the Water Director suggested that this item be deferred to a future agenda.

7. Overview of Planned Community Engagement Activities for the Upcoming Financial Planning Update, including Work on System Development Charges and User Rates

Ms. Menard introduced the discussion of the Planned Community Engagement Activities for 2020.

Should water reliability be a pricing objective?

- No. Pricing objectives are criteria or characteristics that can be achieved by the design of rate structures or by the amount charged. Revenue stability or revenue sufficiency are examples of a rate structure and a rate amount pricing objective. It isn't feasible to achieve water supply reliability through rate structures, although funding to achieve water supply reliability can be achieved through including projects to increase supply reliability in the revenue requirements used to set rates. The City's revenue requirements do include funding for those types of projects.

Do we know what the scale of future rate increases will be?

- We have some preliminary ideas, and the Commission will see some representation of those ideas related to required levels of revenue increases in the Pro Forma provided with the budget. It should be remembered that a percent revenue increase has to be allocated to various customer classes based on the cost of providing service to each customer class, so actual rate increases for various customer classes may be different.

How will participants be selected for the customer panels?

- Participants will be selected based on invites and solicitations to customers that represent various groups such as businesses, landlords, and tenants, residential customers, etc. We are looking for participants that are willing to attend multiple meetings.

Will there be some anonymity in regards to the participants?

- Yes, the meetings will be done informally and will likely not require participants to disclose their last names.

Commissioners suggested that staff report on the overall feeling of the panel meeting.

Will the project team leads Sanjay Guar and Melissa Elliot from Raftelis be able to present their findings to the Commission?

- Yes.

What is the strategy for rolling out the web-based customer feedback portal?

- There is a strategic community engagement plan in development that we will be working on with Raftelis and the Director will give updates as the information is developed.

Are approaches that are not web-based being considered to engage the community?

- Yes.

What is a bill "snipe"?

- The bill snipe is a notification located on the outside of a mailing envelope.

What are the other approaches or strategies for those who cannot access the web portal?

- We are working on alternative strategies to engage community members that do not have or have limited internet access.

No public comments were received.

There was no action taken on this item.

Subcommittee/Advisory Body Oral Reports

8. Santa Cruz Mid-County Groundwater Agency

There will be a meeting on March 19th at Simpkins Family Swim Center at 7:00 p.m.

9. Santa Margarita Groundwater Agency

There was a meeting on February 27th and work has begun on the water quality section of the groundwater sustainability plan.

Director's Oral Report: The Coastal Commission will be holding its meeting in Scotts Valley next week on Wednesday, March 11th, and the coastal development permit approval for the Soquel Creek PureWater Soquel project will be on the agenda.

Is the Department making any preparations in response to the coronavirus outbreak?

- We are encouraging employees to practice good hygiene and take all necessary safety precautions to protect themselves and to prevent the potential spread of the coronavirus.

Adjournment Meeting adjourned at 10:03 PM.

Respectfully submitted,

Katy Fitzgerald, Staff

WATER COMMISSION
INFORMATION REPORT

DATE: 4/30/2020

AGENDA OF: May 4, 2020

TO: Water Commission

FROM: Nicole Dennis, Finance Manager (acting)

SUBJECT: FY 2020 2nd Quarter Financial Report

RECOMMENDATION: That the Water Commission accept the FY 2020 2nd Quarter Financial Report.

BACKGROUND: On June 6, 2016, the Water Commission approved the Water Department's Long Range Financial Plan (LRFP) which created a framework to ensure financial stability and maintain the credit rating needed to debt finance major capital investments planned for the utility. The LRFP includes financial targets for debt service coverage ratio (1.5x), a combined 180 days cash on hand, $3.1 million in an Emergency Reserve, and a $10.0 million Rate Stabilization reserve.

The data in the Quarterly Financial Reports provides a snapshot in time and gives Water Commissioners information about the Department's financial condition relative to its revenues and expenses and also for the LRFP's financial performance metrics.

DISCUSSION: In 2019, an Ad Hoc sub-committee of the Water Commission and Water Department staff worked together to update the quarterly financial report developed a few years ago. The members of the Water Commission ad hoc subcommittee were Linda Wilshusen, Sierra Ryan and James Mekis. The purpose of the update effort was to look at approaches for providing a clearer picture of financial trends and results to the Water Commission. A key goal was to be able to show success, identify problem areas and provide information to demonstrate that appropriate responses are being implemented.

The report's format has continued to evolve to achieve the goal of making the presentation of the Department's fiscal situation more informative, easier to understand and relevant. Page 1 reflects Operating budget, and we have broken out the financial summary into greater detail to show sources of the revenues and provide more information about expenses. Other changes include providing more information about prior year revenues, water sales and expenses. This information provides context on variances and allows us to report on those as they arise. Page 2 reflects the Capital budget. The major modification was the addition of several sub-categories

within the three major categories, removal of the project number and project duration, and slight modifications to the current status.

Based on feedback received at the December 2019 Water Commission meeting, the format of the quarterly report has been further refined to:

1) Display Revenues and Expenses in aggregate as opposed to dividing the amount into Operating Revenues, Operating Expenses and Non-Operating Sources;
2) Retain historical water rate revenue billings graph while eliminating the double axis displaying the billings while the YTD Water Consumption graph remains unchanged;
3) Retain YTD Operating Expenses graph and eliminated the YTD Operating Expenses by Activity graph since this information is presented and discussed as part of the annual budget process (Budget Analytics);
4) Retain Fund Balance information; and
5) Removed the CIP Expenses and CIP Funding charts due to space limitations and inserting them below.

The Department is presenting the second quarterly financial report for FY 2019-2020 and the attached is an unaudited snapshot of the transactions posted December 31, 2020.

Operating Revenues

Water sales billings came in just above $20 million for the second quarter of FY 2020, which is 2% below what was projected for this period. The Department is forecasting water consumption based on the previous year amount (2.4 billion gallons) rather than the former practice of 2.5 billion gallons of consumption put into effect the last few years. Through the second quarter, consumption is 1,734,000 CCF compared to the second quarter totals of 1,766,000 CCF in FY 2019 and 1,822,000 CCF in FY 2018.

In December 2019, the Department issued $26.2 million in Green Bonds secured by water rate revenues. A portion of the bond proceeds ($10.5 million) were used to retire the Line of Credit and the balance will be used to reimburse the Department for prior CIP expenditures. The Days Cash Ratio for our cash reserve funds, Water Operating Fund (Fund 711) and 90-Days Cash Reserve Fund (Fund 716), is 184 days.

Staff is closely monitor water sales to discern impacts from the COVID-19 pandemic. Due to the billing cycle, staff expects to begin to see whatever impacts may result from local and state Shelter-in-Place order in May 2020.

Operating Expenses

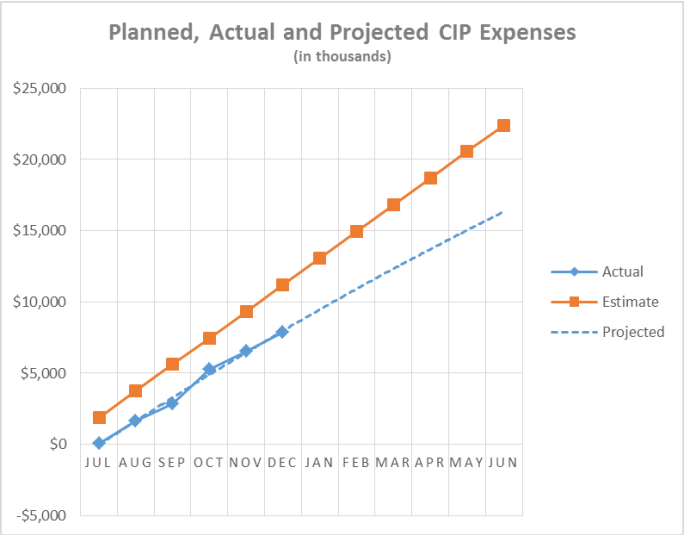
Operating expenditures in the second quarter track 24% below the year-to-date budget (YTD). The savings can be attributed to: staff charging time to CIP, which was planned but not incorporated into the operating budget, salary savings, and the delay in the purchase of three pieces of heavy equipment in addition to larger savings in Services and Supplies. These saving have artificially inflated the Debt Service Coverage ratio for the quarter.

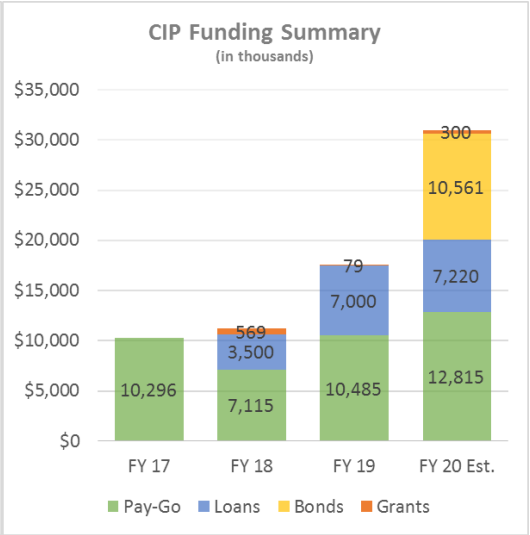
Capital Budget

The format for the CIP report continues to be a work in progress in an effort to convey meaningful yet concise information within the means of our financial tracking systems. Traditionally, project data was tracked and reported through the City's financial software which is unable to make the long-term projections essential for supporting the Water Department's capital program. Therefore, staff has worked with HDR to leverage the scheduling and costing software systems they are providing to support the Santa Cruz Water Program to develop a robust project budgeting system to support the Capital Program. That said, while the reporting format and descriptors have and may continue to change, the data provided is largely the same with a few changes highlighted below.

Both City staff and augmented staff provided through the Program Management services provided by HDR are billing their time to capital projects as applicable. While city staff is able to do this in real time through timecard accounting, HDR's assignments are less straightforward and allocated at the end of the fiscal year. Water Program Administration is a placeholder project, holding the funds that are then reallocated to cover these costs at the end of the fiscal year. In previous reports, augmented staff costs were tracked within the Water Program Administration project along with reserve funding for Water Program contingencies. A new project, Management Reserve, has been created to show the separate costs for augmented staff and Water Program contingencies.

The charts below were included in the previous quarterly report. The chart comparing planned, actual and projected expenses will be updated in the next quarterly report showing current spending forecasts indicating these lines will come closer together at the fiscal year end assuming the NCD IO project kicks off on schedule.





FISCAL IMPACT: None.

PROPOSED MOTION: Motion that the Water Commission to accept the FY 2020 2nd Quarter Financial Report.

ATTACHMENTS: 2nd Quarter Financials

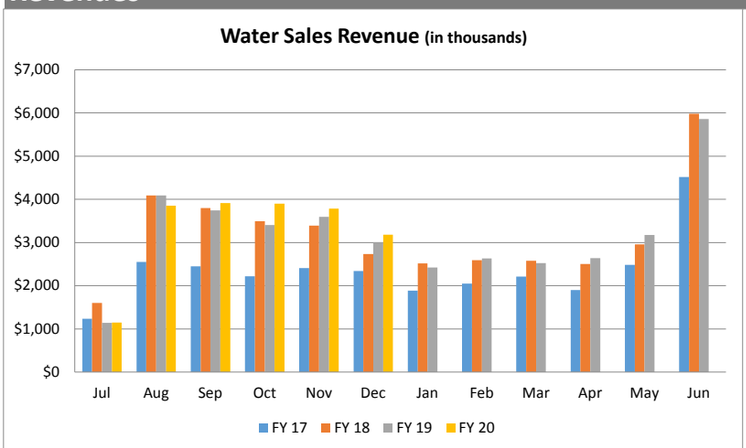
SANTA CRUZ WATER DEPARTMENT FINANCIAL REPORT

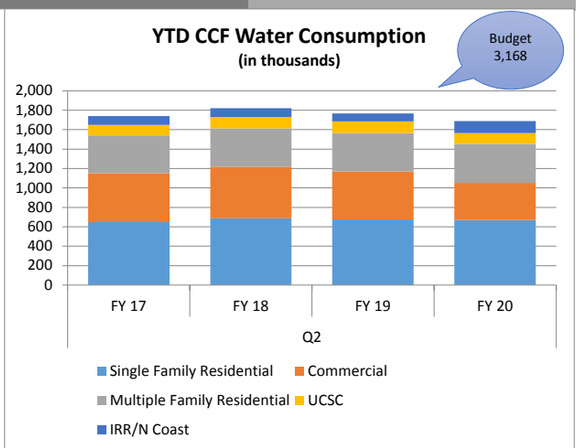
Fiscal Year 2019/20 through December 31, 2019

Financial Summary

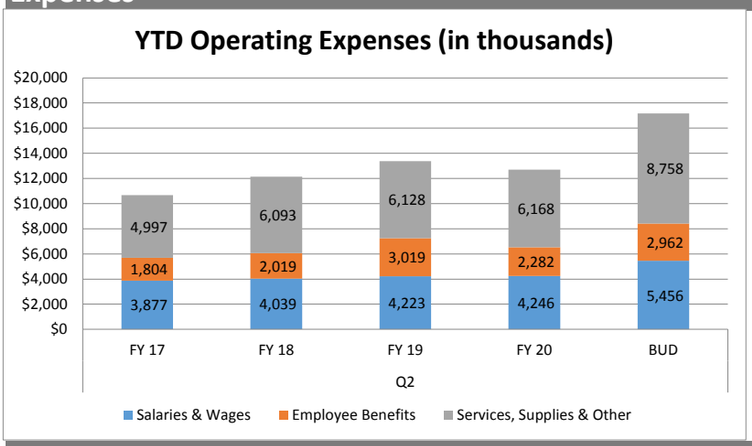
	FY 2020 Adjusted Budget	YTD Budget	Actual	Actual vs. YTD Budget Variance $ +/(-)	Actual vs. YTD Budget Variance % +/(-)
Operating Revenues					
Water Sales	40,484,000	20,242,000	19,776,850	(465,150)	(2%)
Other Charges for Services	1,273,268	636,634	653,279	16,645	3%
Other Revenues	385,353	192,677	218,487	25,811	13%
Investment Earnings	225,240	112,620	8,383	(104,237)	(93%)
Total Operating Revenues	42,367,861	21,183,931	20,656,999	(526,932)	(2%)
Operating Expenses					
Salaries & Wages	10,912,454	5,456,227	4,246,030	(1,210,197)	(22%)
Employee Benefits	5,924,882	2,962,441	2,282,113	(680,328)	(23%)
Services, Supplies & Other	16,006,984	8,003,492	6,025,780	(1,977,712)	(25%)
Capital Outlay	775,246	387,623	141,783	(245,840)	(63%)
Debt Service - Principal & Interest	2,008,873	1,004,437	286,185	(718,252)	(72%)
Total Operating Expenses	33,619,566	16,809,783	12,695,706	(4,114,077)	(24%)
Net Operating Revenue (Loss)	8,748,295	4,374,148	7,961,293	3,587,145	82%
Debt Service Coverage (Target >= 1.50x)	4.35x	4.35x	27.82x		

Revenues





Expenses



Cash

Fund Balances	YTD Balance	Year End
711 - Enterprise Operations	6,038,538	8,470,000
713 - Rate Stabilization	10,455,184	10,000,000
715 - System Development Charges	4,056,639	N/A
716 - 90 Day Operating Reserve	6,732,810	8,470,000
717 - Emergency Reserve	3,136,756	3,100,000
718 - Mount Herman June Beetle Endowment	145,711	144,000
719 - Equipment Replacement	702,115	700,000
Days' Cash (Includes only Funds 711 & 716)	183.6	183.9
Days' Cash Target	180.0	180.0

Project Titles	Life of Project Totals		Current FY Totals		
	Est. Project Costs FY19 - FY38	Actual Costs thru 12/31/19	FY20 Planned Expenditures [1]	Actual + Enc. thru 12/31/19	Current Status
WATER SUPPLY RESILIENCY & CLIMATE ADAPTATION PROJECTS					
Water Supply Augmentation Strategy					
Beltz Wellfield Aquifer Storage and Recovery					
ASR Planning	19,522,000	1,980,656	700,000	505,035	Planning
ASR Mid County Existing Infrastructure			-		Planning
ASR Mid County New Wells			-		Not Initiated
Santa Margarita Aquifer Storage and Recovery and In Lieu Water Transfers and Exchanges					
ASR Santa Margarita Groundwater	36,882,000		-		Not Initiated
ASR New Pipelines			-		Not Initiated
In Lieu Transfers and Exchanges	15,000	-	-	-	Planning
Studies, Recycled Water, Climate Change, Aquifer Storage and Recovery					
Water Supply Augmentation	624,000	424,335	140,000	113,571	Planning
Recycled Water Feasibility Study	284,388	575,432	155,358	24,186	Planning
River Bank Filtratation Study	5,312,000	729,678	323,000	440,022	Planning
Subtotal Water Supply Augmentation Strategy	**62,639,388**	**3,710,101**	**1,318,358**	**1,082,814**	
Subtotal Water Supply Resiliency and Climate Adaptation Projects	**62,639,388**	**3,710,101**	**1,318,358**	**1,082,814**	
INFRASTRUCTURE RESILIENCY AND CLIMATE ADAPTATION					
Raw Water Storage Projects					
NCD I/O Replacement Project	83,585,771	8,620,593	4,400,897	1,529,649	Design
Aerators at Loch Lomond	550,000	30,363		21,775	Design
Subtotal Raw Water Storage Projects	**84,135,771**	**8,650,956**	**4,400,897**	**1,551,424**	
Raw Water Diversion and Groundwater System Projects					
Laguna Creek Diversion Retrofit	3,790,500	802,065	715,500	696,291	Design
North Coast System Majors Diversion Rehab	4,123,500	118,508	-	6,936	On-hold
Tait Diversion Rehab/Replacement	5,200,000	334,718	92,047	238,765	PD/Feasibility
Coast Pump Station Rehab/Replacement	7,304,000	-	-	-	Planning
Beltz 10 and 11 Rehab & Development	100,000	184,955		2,810	Planning
Felton Diversion PS Assessment	3,444,000	123,639	234,334	90,973	Planning
Subtotal Raw Water Diversion and Groundwater System Projects	**23,962,000**	**1,563,885**	**1,041,881**	**1,035,775**	
Raw Water Transmission					
Coast Pump Station 20-inch RW Pipeline Replacement	4,741,000	867,065	1,377,333	263,634	Design
Newell Creek Pipeline Rehab/Replacement	1,466,000	733,228	600,500	127,313	Planning
Newell Creek Pipeline Felton/GHWTP	27,966,500	-	-	-	Planning
Newell Creek Pipeline Felton/Loch Lomond	29,132,500	-	-	-	Planning
Brackney Landslide Area Pipeline Risk Reduction	-	-	-	-	Planning
North Coast Pipeline Repair/Replacement - Planning	838,000	195,119	419,000	-	Planning
North Coast Pipeline Repair/Replacement - Ph 4	14,578,000				Not Initiated
North Coast Pipeline Repair/Replacement - Ph 5	14,578,000				Not Initiated
Subtotal Raw Water Transmission	**93,300,000**	**1,795,412**	**2,396,833**	**390,947**	
Surface Water Treatment					
GHWTP Tube Settler Replacement	1,613,000	1,710,185	1,383,047	1,489,531	Post Construction
GHWTP Flocculator Rehab/Replacement	2,397,000	1,316,808	1,826,503	1,196,111	Construction
GHWTP Concrete Tanks Replacement	38,732,000	4,527,266	2,820,000	1,776,917	Design
GHWTP Facilities Improvement Project	93,623,000	2,884,396	1,986,974	551,748	Planning
GHWTP Filter Rehab and Upgrades	5,837,300	5,837,026		18,000	Post Constr
Source Water Data Project [2]	657,068	465,536		27,486	Complete
Subtotal Surface Water Treatment	**142,859,368**	**16,741,217**	**8,016,524**	**5,059,793**	
Distribution System Storage, Water Main and Pressure Regulation, and Metering Projects					
University Tank No. 4 Rehab/Replacement	5,671,000	36,881	-	-	Planning
University Tank No. 5 Rehab/Replacement	4,397,000	4,243,265	1,729,600	1,855,486	Construction
Pressure Regulating Stations	140,000	179,499		48,064	Ongoing
Meter Replacement Project	11,000,000	164,198		67,784	Ongoing
Engineering and Distribution Main Replacement Projects	16,810,000	18,835,451		4,765,487	Ongoing
Distribution System Water Quality Improvements	75,000	75,347		75,347	Planning
Facility & Infrastructure Improvements	6,800,000		-	-	Ongoing
Bay Street Reservoir	25,375,072	25,279,300		9,500	Post Constr
Subtotal Distribution Storage, Wmain Pressure Reg, and Metering	**70,268,072**	**48,813,941**	**1,729,600**	**6,821,668**	
Subtotal Infrastructure Resiliency and Climate Adaptation	**414,525,211**	**77,565,411**	**17,585,735**	**14,859,607**	
OTHER RISK MANAGEMENT AND RISK REDUCTION PROJECTS					
Site Safety and Security					
Security Camera & Building Access Upgrades	360,000	208,681		31,685	Ongoing
Programmable Logic Controllers	160,000	186,956		31,382	Ongoing
Loch Lomond Facility Improvements	225,000	234,460		71,802	Post Constr
Spoils and Stockpile Handling	350,000	253,022		3,013	Post Constr
Newell Creek Access Rd Bridge	1,015,000	320,343		248,159	Post Constr
Carbonera Tank Rd	488,000	765,268		641,393	Post Constr
Subtotal Site Safety and Security	**2,598,000**	**1,968,730**	**0**	**1,027,434**	
Staff Augmentation					
Water Program Administration [3]	25,000,000	3,532,701	3,500,000	3,532,701	Ongoing
Subtotal Staff Augmentation	**25,000,000**	**3,532,701**	**3,500,000**	**3,532,701**	
Contingency					
Management Reserve [4]	50,000,000		-		Ongoing
Subtotal Contingency	**50,000,000**	**0**	**0**	**0**	
Storage for Emergency Facility and System Repair Tools and Equipment					
Bay Street Reservoir Storage Building	150,000			-	Design
Union/Locust Admin Building Back Up Power Generator	150,000			-	Not Initiated
Subtotal Storage for Emergency and System Repair	**300,000**	**0**	**0**	**0**	
Subtotal Other Risk Management and Risk Reduction Projects	**77,898,000**	**5,501,431**	**3,500,000**	**4,560,135**	
GRAND TOTAL	**555,062,599**	**86,776,943**	**22,404,093**	**20,502,556**	

[1] Planned expenditures do not include purchase order encumbrances.

[2] Expenses for the Source Water Data Project will be moved to the operating budget.

[3] Staff augmentation costs are transferred to specific projects during year-end process.

[4] FY20 Management Reserve costs are included in Water Program Administration.

WATER COMMISSION
INFORMATION REPORT

DATE: 4/30/2020

AGENDA OF: May 4, 2020

TO: Water Commission

FROM: Kevin Crossley, Senior Professional Engineer

SUBJECT: Update on City Charter and Municipal Code Changes to Enable Best Value Project Delivery

RECOMMENDATION: That the Water Commission accept information on Best Value Project Delivery.

BACKGROUND: This information report is intended to update the Water Commission on the recent City Charter and Municipal code changes related to Best Value project delivery. Over the past six months, the City has made significant progress towards enabling the use of Best Value project delivery to design and construct public works construction projects. Below is a timeline of key dates:

- October 22, 2019 - Council approves the Ballot measure to amend the City Charter to enable Best Value project delivery
- March 3, 2020 - Voters approve the City Charter amendment (80% vote yes)
- April 28, 2020 - Council presented with updates and additions to municipal code to accommodate the Best Value project delivery method

DISCUSSION: The April 28 City Council staff report, municipal code updates, and Council presentation are included as attachments to this information report. In June 2020, the Water Department will seek Council approval to use a Best Value delivery method (Progressive Design Build) to design and construct the Graham Hill Water Treatment Facility Improvement Project. The Water Commission will receive a status update of that project and an overview of the proposed delivery method at the June meeting.

FISCAL IMPACT: None.

PROPOSED MOTION: Motion to accept the information.

ATTACHMENTS:
1. April 28, 2020 Council Staff Report
    a. Best Value Draft Muni Code_Redline
    b. Best Value Draft Muni Code_Clean
2. April 28, 2020 Council Presentation

CITY COUNCIL
AGENDA REPORT

DATE: 4/19/2020

AGENDA OF: 4/28/2020

DEPARTMENT: Water

SUBJECT: Introduce for Publication an Ordinance Amending Sections 3.08.030 and 3.08.100 of, and Adding Section 3.08.091 to, the Santa Cruz Municipal Code to Establish Regulations for the Use, Award and Evaluation of Best Value Project Delivery Methods for Construction Projects (WT)

RECOMMENDATION: Introduce for publication an ordinance amending Sections 3.08.030 and 3.08.100 of, and adding Section 3.08.091 to, the Santa Cruz Municipal Code to establish regulations for the use, award and evaluation of best value project delivery methods for construction projects.

BACKGROUND: Under California Public Contract Code § 22160, et seq., cities and other public entities are authorized to use novel approaches to public works contracting, most commonly recognized as "Design Build" or "Best Value" project delivery methods. Best Value is the broad descriptor for a suite of collaborative project delivery models that include but are not limited to Design-build, Progressive Design build, and Construction Manager At Risk.

Best Value project delivery is different from the conventional design-bid-build method in that the engineering, design and construction services can be procured from a single entity (comprised of disciplines such as engineers, architects and construction firms) through a competitive request for proposal process, as opposed to being procured through individual entities in a sequential design-bid- build process. Some of the reported advantages of Best Value project delivery include:

- Reduced project costs.
- Expedited schedules for project completion.
- Innovative solutions to design and construction challenges.
- Improved quality and owner satisfaction with the projects.

Until recently Section 1415 of the City Charter precluded the use of Best Value procurements, thereby requiring the use of traditional design-bid-build approach. A change to the City Charter was proposed to permit Best Value contracting as an alternative to design-bid-build to be used as appropriate and the proposed charter amendment, Measure W, was approved by local voters in the March 3, 2020 election. On April 7, 2020 Council, through Resolution No. NS-29,644, confirmed and approved the election results, and authorized the Mayor to execute the amendments to Section 1415 of the City Charter.

With the option to consider delivering projects using Best Value contracting methods, the Water Department will be in a better position to accomplish capital improvement projects (that include major upgrades, repairs and replacement of the City's water storage, treatment and transmission infrastructure) as efficiently as possible.

DISCUSSION: The amended Section 1415 of the City Charter states: "… The City Council shall establish, by ordinance, regulations for the award, use and evaluation of such contracts." The attached ordinance satisfies this through the addition of Section 3.08.091- Best-Value Project Delivery Methods For Construction Projects, to Title 3: Revenue and Finance, Chapter 3.08: Purchasing of the Santa Cruz Municipal Code. Key points include:

- Approval to use: City Council will authorize the use of the best value contracting method prior to or concurrent with the award of contract.
- Procurement and Award Process: Best-Value contracts will be evaluated and awarded following existing competitive proposal processes defined in the municipal code.
- Eligibility: Defines which entities are eligible or ineligible to propose on a best value contract, depending on that entities prior project involvement.

In addition to the proposed municipal code updates, an Administrative Procedures Order (APO) is under development to further guide staff in using this new contracting method. The APO will address Department head oversight in the selection of the recommended best-value delivery method, criteria to use for prequalifying contractors, criteria to use in the evaluation of proposals, and subcontractor listing requirements.

FISCAL IMPACT: The use of Best Value project delivery methods is anticipated to result in cost savings.

Submitted by:	Submitted by:	Approved by:
Rosemary Menard	Mark Dettle	Martín Bernal
Water Director	Public Works Director	City Manager

ATTACHMENTS:
Draft Ordinance – Redline
Draft Ordinance – Clean

ORDINANCE NO.

AN ORDINANCE OF THE CITY OF SANTA CRUZ AMENDING SECTION 3.08.030, ADDING SECTION 3.08.091, AND AMENDING 3.08.100 TO ESTABLISH REGULATIONS FOR THE USE, AWARD AND EVALUATION OF BEST VALUE PROJECT DELIVERY METHODS FOR CONSTRUCTION PROJECTS

BE IT ORDAINED by the City Council of the City of Santa Cruz as follows:

SECTION 1: Section 3.08.030 of the Santa Cruz Municipal Code is hereby amended to read as follows:

(1) "Appointing authority" means the city manager who may delegate his or her power to any department head.

(2) "Best Value" means highest value determined by objective criteria, and may include, but is not limited to, price, features, functions, life cycle costs, and other criteria deemed appropriate in meeting the interests of the City and meeting the objectives of the work.

(3) "Best Value Project Delivery Entity" means the entity (whether a person, partnership, corporation, joint venture, or other legal entity) that proposes to enter into a contract with the City to design and construct any public works project under the procedures of this chapter.

(4) "Best Value Project Delivery Method" means a method of construction contracting with a single entity for both the design and construction, or method of construction contracting with separate design and construction entities who collaborate on a public works project. In addition to design and construction, other services may be furnished by the Best Value Project Delivery Entity including, but not limited to, soil/materials testing and soil remediation, or the provision of products, such as solar energy devices or playground equipment. Best Value Project Delivery Methods may include Progressive Design-Build, Construction Manager At Risk, Fixed-Price Design-Build, Design-Build-Operate contracts, and other similar approaches.

(5) "Construction," also known as "public works and improvements," means the process of building, altering, repairing, improving, or demolishing any public structure or building, or other public improvements of any kind to any public real property. It does not include routine operation, routine repair, or routine maintenance of existing structures, buildings, or real property.

(6) "Contract" means all types of city agreements, regardless of what they may be called, for the procurement of supplies, services, or construction.

(7) "Invitation for bids" means all documents, whether attached or incorporated by reference, utilized for soliciting bids.

(8) "Procurement" means the buying, purchasing, renting, leasing, or otherwise acquiring of any supplies, services, or construction. It also includes all functions that pertain to the obtaining of any supply, service, or construction, including description of requirements, selection, and solicitation of sources, preparation and award of contract, and all phases of contract administration.

(9) "Procurement Documents" means the Request for Qualifications, Request for Proposals, Invitation For Bid, or other documents created for the purpose of prequalifying designers or contractors and soliciting competitive proposals or bids.

(10) "Professional services" means services provided by persons performing professional services including, but not limited to, accountants, appraisers, archaeologists, architects, attorneys, consultants, engineers, physicians, and real estate brokers.

(11) "Public works and improvements." See "Construction."

(12) "Request for proposals" means all documents, whether attached or incorporated by reference, utilized for soliciting proposals.

(13) "Responsible bidder or offeror" means a person or entity who has the capability in all respects to perform fully the contract requirements, and the tenacity, perseverance, experience, integrity, reliability, capacity, facilities, equipment, and credit which will assure good faith performance.

(14) "Responsive bidder" means a person or entity who has submitted a bid which conforms in all material respects to the requirements set forth in the invitation for bids.

(15) "Services" means the furnishing of labor, time, or effort by a person or entity. ~~contractor~~, Services do not include ~~involving~~ the delivery of a specific end product but may include ~~other than~~ delivery of reports ~~which~~ that are ~~merely~~ incidental to the required service ~~performance~~. This term shall not include employment agreements or collective bargaining agreements.

(16) "Supplies" means all property, including but not limited to equipment, materials, printing, insurance, and leases of real property, excluding land or a permanent interest in land.

SECTION 2: Chapter 3.08 of the Santa Cruz Municipal Code is hereby amended by adding Section 3.08.091 to read as follows:

3.08.091 Best Value Project Delivery Methods For Construction Projects

A. The purpose of this section is to establish regulations for the use, award and evaluation of Best Value Project Delivery Methods For Construction Projects as required by Section 1415 (Contracts For Public Works) of the Santa Cruz City Charter.

B. Notwithstanding any provision to the contrary in the California Public Contracts Code or in any other ordinance or procedure of the City of Santa Cruz, the use of Best Value

Project Delivery Methods is authorized for any Construction Project, no matter the amount.

C. The city council shall authorize use of a best value project delivery method in accordance to this Section prior to or concurrent with the award of contract.

D. Contracts utilizing Best Value Project Delivery Methods For Construction Projects shall be procured and awarded according to Section 3.08.090, Award of Contracts - Construction and Section 3.08.120, Competitive Sealed Proposals.

1. Prior to issuing a Request For Proposals according to Section 3.08.120, the City may solicit competitive Statement of Qualifications according to Section 3.08.130, Contracting For Designed Professional Services, for the purpose of pre-qualifying Best Value Project Delivery Entities utilizing an uniform system of rating proposers based on objective criteria. In such cases, only prequalified Best Value Project Delivery Entities would be able to submit proposals for that project.

2. Nothing in this chapter shall require the City to accept any proposal and the City hereby reserves the right to reject any and all proposals. City assumes no responsibility for the costs incurred by any Best Value Project Delivery Entity in preparation of any proposal, unless stated otherwise in the procurement documents.

3. The Request For Proposals may allow for the submittal of alternative technical concepts that are a proposed change to the City-supplied base design configurations, project scope, design criteria or construction criteria with the intent of providing a solution that is equal or better to the requirements in the procurement document.

E. Any architectural firms, engineering firms, specialty consultants, or individuals retained by the City to assist in the development of project design or performance requirements or Procurements Documents are ineligible to participate in the competition for that project as a Best Value Project Delivery Entity or with any Best Value Project Delivery Entity if such work will provide them with a substantial competitive advantage.

1. The Department Head may make a written determination that a firm's, consultant's, or individual's previous work with the City will not provide a substantial competitive advantage.

2. The prohibition set forth in this section does not apply to a person, partnership, corporation, joint venture, or other legal entity that prepares a foundational report or study, such as a master plan, soils report, or environmental clearance document that is subsequently used by another person to prepare the design requirements for a project.

3. Nothing herein prohibits persons subcontracting with a Best Value Project Delivery Entity from participating as a subcontractor in more than one proposal.

F. Nothing in this chapter precludes a Best Value Project Delivery Method contract from being awarded to a sole source according to Section 3.08.150, Sole Source Procurement. Sole Source contracts exceeding the formal bid amount established pursuant to Section 3.08.080 shall be awarded by City Council.

G. Nothing in this chapter precludes a Best Value Project Delivery Method contract from being awarded according to Section 3.08.160, Emergency Procurement.

H. All specialty trade subcontractors not listed by the Best Value Project Delivery Entity in the proposal shall be awarded at a later time, through a competitive process and according to the contract. All specialty trade subcontractors listed by the Best Value Project Delivery Entity shall be afforded the protection of all applicable laws.

SECTION 3: Chapter 3.08.100 of the Santa Cruz Municipal Code is hereby amended to read as follows:

Unless otherwise authorized by law, all contracts shall be awarded by competitive sealed bidding, pursuant to Section 3.08.110, Competitive Sealed Bidding, except as provided in:

(1) Section 3.08.091, Best Value Project Delivery Methods For Construction Projects;

(2) Section 3.08.120, Competitive Sealed Proposals;

(3) Section 3.08.130, Contracting for Designated Professional Services;

(4) Section 3.08.140, Informal Bid and Small Purchases;

(5) Section 3.08.150, Sole Source Procurement;

(6) Section 3.08.160, Emergency Procurement; and

(7) Section 3.08.170, Cooperative Purchasing.

SECTION 4: Effective Date. This Ordinance shall become effective immediately following adoption.

ORDINANCE NO. 2020-

AN ORDINANCE OF THE CITY OF SANTA CRUZ AMENDING SECTION 3.08.030, ADDING SECTION 3.08.091, AND AMENDING 3.08.100 TO ESTABLISH REGULATIONS FOR THE USE, AWARD AND EVALUATION OF BEST VALUE PROJECT DELIVERY METHODS FOR CONSTRUCTION PROJECTS

BE IT ORDAINED by the City Council of the City of Santa Cruz as follows:

SECTION 1: Section 3.08.030 of the Santa Cruz Municipal Code is hereby amended to read as follows:

(1) "Appointing authority" means the city manager who may delegate his or her power to any department head.

(2) "Best Value" means highest value determined by objective criteria, and may include, but is not limited to, price, features, functions, life cycle costs, and other criteria deemed appropriate in meeting the interests of the City and meeting the objectives of the work.

(3) "Best Value Project Delivery Entity" means the entity (whether a person, partnership, corporation, joint venture, or other legal entity) that proposes to enter into a contract with the City to design and construct any public works project under the procedures of this chapter.

(4) "Best Value Project Delivery Method" means a method of construction contracting with a single entity for both the design and construction, or method of construction contracting with separate design and construction entities who collaborate on a public works project. In addition to design and construction, other services may be furnished by the Best Value Project Delivery Entity including, but not limited to, soil/materials testing and soil remediation, or the provision of products, such as solar energy devices or playground equipment. Best Value Project Delivery Methods may include Progressive Design-Build, Construction Manager At Risk, Fixed-Price Design-Build, Design-Build-Operate contracts, and other similar approaches.

(5) "Construction," also known as "public works and improvements," means the process of building, altering, repairing, improving, or demolishing any public structure or building, or other public improvements of any kind to any public real property. It does not include routine operation, routine repair, or routine maintenance of existing structures, buildings, or real property.

(6) "Contract" means all types of city agreements, regardless of what they may be called, for the procurement of supplies, services, or construction.

(7) "Invitation for bids" means all documents, whether attached or incorporated by reference, utilized for soliciting bids.

(8) "Procurement" means the buying, purchasing, renting, leasing, or otherwise acquiring of any supplies, services, or construction. It also includes all functions that pertain to the obtaining of any supply, service, or construction, including description of requirements, selection, and solicitation of sources, preparation and award of contract, and all phases of contract administration.

(9) "Procurement Documents" means the Request for Qualifications, Request for Proposals, Invitation For Bid, or other documents created for the purpose of prequalifying designers or contractors and soliciting competitive proposals or bids.

(10) "Professional services" means services provided by persons performing professional services including, but not limited to, accountants, appraisers, archaeologists, architects, attorneys, consultants, engineers, physicians, and real estate brokers.

(11) "Public works and improvements." See "Construction."

(12) "Request for proposals" means all documents, whether attached or incorporated by reference, utilized for soliciting proposals.

(13) "Responsible bidder or offeror" means a person or entity who has the capability in all respects to perform fully the contract requirements, and the tenacity, perseverance, experience, integrity, reliability, capacity, facilities, equipment, and credit which will assure good faith performance.

(14) "Responsive bidder" means a person or entity who has submitted a bid which conforms in all material respects to the requirements set forth in the invitation for bids.

(15) "Services" means the furnishing of labor, time, or effort by a person or entity. Services do not include the delivery of a specific end product but may include delivery of reports that are incidental to the required service. This term shall not include employment agreements or collective bargaining agreements.

(16) "Supplies" means all property, including but not limited to equipment, materials, printing, insurance, and leases of real property, excluding land or a permanent interest in land.

SECTION 2: Chapter 3.08 of the Santa Cruz Municipal Code is hereby amended by adding Section 3.08.091 to read as follows:

3.08.091 Best Value Project Delivery Methods For Construction Projects

A. The purpose of this section is to establish regulations for the use, award and evaluation of Best Value Project Delivery Methods For Construction Projects as required by Section 1415 (Contracts For Public Works) of the Santa Cruz City Charter.

B. Notwithstanding any provision to the contrary in the California Public Contracts Code or in any other ordinance or procedure of the City of Santa Cruz, the use of Best Value Project Delivery Methods is authorized for any Construction Project, no matter the amount.

C. The city council shall authorize use of a best value project delivery method in accordance to this Section prior to or concurrent with the award of contract.

D. Contracts utilizing Best Value Project Delivery Methods For Construction Projects shall be procured and awarded according to Section 3.08.090, Award of Contracts - Construction and Section 3.08.120, Competitive Sealed Proposals.

    1. Prior to issuing a Request For Proposals according to Section 3.08.120, the City may solicit competitive Statement of Qualifications according to Section 3.08.130, Contracting For Designed Professional Services, for the purpose of pre-qualifying Best Value Project Delivery Entities utilizing an uniform system of rating proposers based on objective criteria. In such cases, only prequalified Best Value Project Delivery Entities would be able to submit proposals for that project.

    2. Nothing in this chapter shall require the City to accept any proposal and the City hereby reserves the right to reject any and all proposals. City assumes no responsibility for the costs incurred by any Best Value Project Delivery Entity in preparation of any proposal, unless stated otherwise in the procurement documents.

    3. The Request For Proposals may allow for the submittal of alternative technical concepts that are a proposed change to the City-supplied base design configurations, project scope, design criteria or construction criteria with the intent of providing a solution that is equal or better to the requirements in the procurement document.

E. Any architectural firms, engineering firms, specialty consultants, or individuals retained by the City to assist in the development of project design or performance requirements or Procurements Documents are ineligible to participate in the competition for that project as a Best Value Project Delivery Entity or with any Best Value Project Delivery Entity if such work will provide them with a substantial competitive advantage.

    1. The Department Head may make a written determination that a firm's, consultant's, or individual's previous work with the City will not provide a substantial competitive advantage.

2. The prohibition set forth in this section does not apply to a person, partnership, corporation, joint venture, or other legal entity that prepares a foundational report or study, such as a master plan, soils report, or environmental clearance document that is subsequently used by another person to prepare the design requirements for a project.

3. Nothing herein prohibits persons subcontracting with a Best Value Project Delivery Entity from participating as a subcontractor in more than one proposal.

F. Nothing in this chapter precludes a Best Value Project Delivery Method contract from being awarded to a sole source according to Section 3.08.150, Sole Source Procurement. Sole Source contracts exceeding the formal bid amount established pursuant to Section 3.08.080 shall be awarded by City Council.

G. Nothing in this chapter precludes a Best Value Project Delivery Method contract from being awarded according to Section 3.08.160, Emergency Procurement.

H. All specialty trade subcontractors not listed by the Best Value Project Delivery Entity in the proposal shall be awarded at a later time, through a competitive process and according to the contract. All specialty trade subcontractors listed by the Best Value Project Delivery Entity shall be afforded the protection of all applicable laws.

SECTION 3: Chapter 3.08.100 of the Santa Cruz Municipal Code is hereby amended to read as follows:

Unless otherwise authorized by law, all contracts shall be awarded by competitive sealed bidding, pursuant to Section 3.08.110, Competitive Sealed Bidding, except as provided in:

(1) Section 3.08.091, Best Value Project Delivery Methods For Construction Projects;

(2) Section 3.08.120, Competitive Sealed Proposals;

(3) Section 3.08.130, Contracting for Designated Professional Services;

(4) Section 3.08.140, Informal Bid and Small Purchases;

(5) Section 3.08.150, Sole Source Procurement;

(6) Section 3.08.160, Emergency Procurement; and

(7) Section 3.08.170, Cooperative Purchasing.

SECTION 4: Effective Date. This Ordinance shall become effective immediately following adoption.

PASSED FOR PUBLICATION this 28th day of April, 2020, by the following vote:

AYES:

NOES:

ABSENT:

DISQUALIFIED:

APPROVED: _____
Justin Cummings, Mayor

ATTEST: _____
Bonnie Bush, City Clerk Administrator

PASSED FOR FINAL ADOPTION this _____ day of _____, 2020 by the following vote:

AYES:

NOES:

ABSENT:

DISQUALIFIED:

APPROVED: _____
Justin Cummings, Mayor

ATTEST: _____
Bonnie Bush, City Clerk Administrator

This is to certify that the above and foregoing document is the original of Ordinance No. 2020-XX and that it has been published or posted in accordance with the Charter of the City of Santa Cruz.

_____
Bonnie Bush, City Clerk Administrator

4.13

Council Presentation:

Ordinance to establish regulations for Best Value Project Delivery Methods

April 28, 2020

Our Water, Our Future

CITY OF SANTA CRUZ
Water Department

Project Delivery Methods

Traditional

Examples of Best Value Project Delivery Methods

4.14

These graphics illustrate the contractual and collaborative relationships that occur within each of project delivery methods. The process begins with the owner (in the green piece at the top) contracting with a collaborative-delivery firm (shown by the interlocking piece at the side).

Source: Water Design Build Council

Reported Benefits of Best Value

- Reduced project costs
- Expedited schedules for project completion
- Innovative solutions to design and construction challenges
- Improved quality and owner satisfaction with the projects

Why Make the Change Now?

- Several large, technically Complex projects on the Water Department's 5 year horizon
  - Allows for innovative solutions
  - Allows real time cost feedback to inform better decision making
  - Provides for close coordination between contractor and City Operations

4:16

Why Make the Change Now?

- In **June 2020**, Water Dept. will seek approval to use Progressive Design Build contracting.
  - Major Capital Investment planned for the Water Treatment Plant

4.17

Regulations for Best Value Project Delivery Methods

- California Public Contract Code § 22160, et seq., allows cities to use best value project delivery methods for projects over $1M for a building or buildings.
  - Specifically excludes street projects and water infrastructure projects
- Created Measure W to give us the flexibility to use best value project delivery methods for any project size and scope.

March Ballot Measure W

Approved by 81.08% of voters

That Section 1415 of the City Charter be amended to read as follows:

SECTION 1415 CONTRACTS FOR PUBLIC WORKS.

Any public works or improvements costing more than such amount as may be prescribed by ordinance shall be executed by contract, except where a specific work or improvement is authorized by the Council to be performed directly by a City department or officer in conformity with detailed plans, specifications and estimates. ~~All such contracts shall be awarded to the lowest responsible bidder after such public notice and competition as may be prescribed by ordinance or resolution, provided the Council or the City Manager, when so authorized, shall have the power to reject all bids and may readvertise in its discretion. All advertisements as to such contract shall so provide.~~

Notwithstanding any provision to the contrary in the California Public Contracts Code, or any other law or regulation of the City of Santa Cruz, the use of best value alternative project delivery methods including, but not limited to, progressive design-build, construction manager at risk, fixed-price design-build, and design-build-operate contracts is authorized for all public works projects. The City Council shall establish, by ordinance, regulations for the award, use and evaluation of such contracts.

All contracts entered into by the City shall be signed by the City Manager or other officer or officers as the Council may by ordinance or resolution prescribe.

Ordinance Highlights

- **Council approval to use:** Prior to or concurrent with the award of contract.
- **Procurement and award process**: Contracts will be evaluated and awarded following a competitive proposal process.
- **Clarifies eligibility:** Defines eligible or ineligible entities, depending on prior project involvement.

Best Value Contracts

- Include Apprentice and Local Hire requirement;
- Include Prevailing wage requirements;
- Accepted by State and Federal funding entities; and
- Can be paired with a Project Labor Agreement


Questions?
4.22
Our Water, Our Future
SANTA CRUZ
Water Department

WATER COMMISSION
INFORMATION REPORT

DATE: 04/17/2020

AGENDA OF: May 4, 2020

TO: Water Commission

FROM: Benjamin Pink, Acting Water Conservation Manager

SUBJECT: 2020 Annual Water Supply and Demand Assessment

RECOMMENDATION: For information and discussion by the Water Commission.

BACKGROUND: Every year during the winter season, the Water Department monitors local rainfall, runoff, and reservoir storage levels and prepares a series of written statements that describe current water conditions and discuss the water supply outlook for the year ahead. Towards the end of winter, an analysis is conducted to forecast water supplies, compare supplies with expected demands, and project how much water would be held in Loch Lomond Reservoir at the end of the dry season given anticipated fish flow releases, demand and available supply. The reason for performing this exercise is to determine whether any restrictions on water use are needed in the current year to help preserve reservoir storage in case of a subsequent dry year. Such restrictions were put in place as recently as 2018 as well as every year between 2012 through 2015 in response to historic drought conditions.

This report summarizes current water supply conditions and presents information supporting the staff recommendation that no water restrictions be implemented during the peak season of 2020.

DISCUSSION: Water year 2020 is shaping up to be different from prior years in several ways. In contrast to water year 2019, which saw an optimal water supply outlook in April due to abundant rainfall and strong surface water runoff, water year 2020 has been marked by comparatively lower rainfall amounts overall and one entire month, February 2020, that was completely dry. River runoff has been considerably lower throughout the winter thus far. As of the writing of this report in mid-April, rainfall totals in the City measured 22.66 inches, about 77% of average for the season to date. Cumulative river runoff for the San Lorenzo is following the trend of the 2018 water year. The current cumulative runoff amount as of April 15th is 25,717 acre-feet. In 2018, the end of March cumulative runoff amount was just over 22,000 acre-feet. That amount alone would classify the year as critically dry. However, in 2018 the cumulative runoff crossed the threshold from critically dry to dry by the end of May which ended the water year in the dry category. It is expected that this current water year, 2020, will follow a similar pattern and the water year will be classified as dry. Water conditions have improved somewhat,

beginning in mid-March and then again in early-April when several late-season storms provided much needed precipitation to the central coast region. These late season storms pushed up the local rainfall and runoff totals. If not for these storms, the water year classification would surely fall squarely in the critically dry category.

In addition to the hydrologic characteristics of the 2020 water year, a new unprecedented feature is the current COVID-19 crisis. The coronavirus pandemic that is disrupting every aspect of life around the world is, of course, having significant impacts locally. In Santa Cruz there has been a shelter-in-place order keeping people at home and closing establishments such as bars, coffee shops, the Beach Boardwalk and other tourist attractions. It is still too early to tell the impact of the crisis on water demand during the peak season.

On the production side, the amount of water available from North Coast sources is limited this year. One production challenge is that a landslide occurred in the watershed of Majors Creek in December 2019 that caused damage to the Majors Creek Pipeline. The pipeline has been out of service since approximately January 1st. Additionally the flows have been too low, given current fish flow requirements, to take water from Laguna Creek. There is some limited water available from Liddell Springs but for modeling purposes we will assume an amount similar to the last dry year, 2018.

The key data inputs to the annual water supply and demand assessment include the following:

1. Monthly and cumulative rainfall, both in the city and the watershed area
2. Reservoir storage, and specifically the lake elevation at the time of forecast
3. Cumulative runoff for the San Lorenzo River and the corresponding water year classification
4. The instream flows that the city has voluntarily committed to provide on the North Coast sources and the San Lorenzo River to maintain habitat for protected fisheries, which governs the diversion, availability, and use of water from these sources for municipal purposes
5. Projected water demand

Attachments 1 through 4 provide an illustration of current water conditions and show how the season has developed since October 1, 2019.

The forecast from these still changing water supply indicators is mixed. On the positive side, as of April 15, 2020, reservoir storage is healthy at near full capacity 95.2%. Overall water demand has been low and is expected to continue to be low, perhaps even somewhat lower than last year due to the COVID-19 crisis. However, on the contrary, flowing sources remain substantially below normal for the year. Consider Attachment 4, which shows the cumulative runoff from the San Lorenzo River since October 1, 2019. At the end of March, the cumulative runoff measured 22,730 acre-feet. That amount is approximately 31 percent of the long-term average for that time of year. The situation has improved due to the late-season storms. Cumulative runoff through April 14th is now at 25,717 acre-feet. It is expected that by approximately the end of May the cumulative runoff will exceed the threshold for the critically dry category and move into the dry category for the remainder of the year.

A main factor that will affect the final outcome of year-end reservoir level is water demand. Demand is driven not only by the weather, but also by tourism and general economic activity. The primary forecast for this assessment uses demand at 100 percent of 2019 demand. However, demand may be lower as a result of the COVID-19 crisis. In the event that demand is lower than normal, that would only improve the situation and result in a somewhat higher end of year reservoir level.

The 2020 Water Supply and Demand Assessment is provided in Attachment 5, and projected reservoir drawdown is illustrated in Attachment 6. The reservoir starts mid-April nearly full at 95.2 percent and is forecast to drop to about 78 percent of capacity by the end of October, leaving approximately 2.22 billion gallons as carryover storage. The City relies on river and stream flows for the majority of its water supply and the yield of those sources is expected to slowly decline over the season due to the low annual rainfall and runoff. Nevertheless, the reservoir is expected to stay relatively high for a dry year.

As perhaps a counter-balance to lower demand as a result of the COVID-19 crisis, there is a possibility that hotter than normal weather could increase water usage. Attachment 9 shows the three-month weather outlook produced by NOAA; this outlook map shows the three-month *temperature* outlook. The outlook, produced on April 16th, shows the probability of above or below normal temperature for the country for the next three months. For the western United States, and for coastal California in particular, the outlook shows that there is a 50% probability that temperatures for the next three months will be above normal.

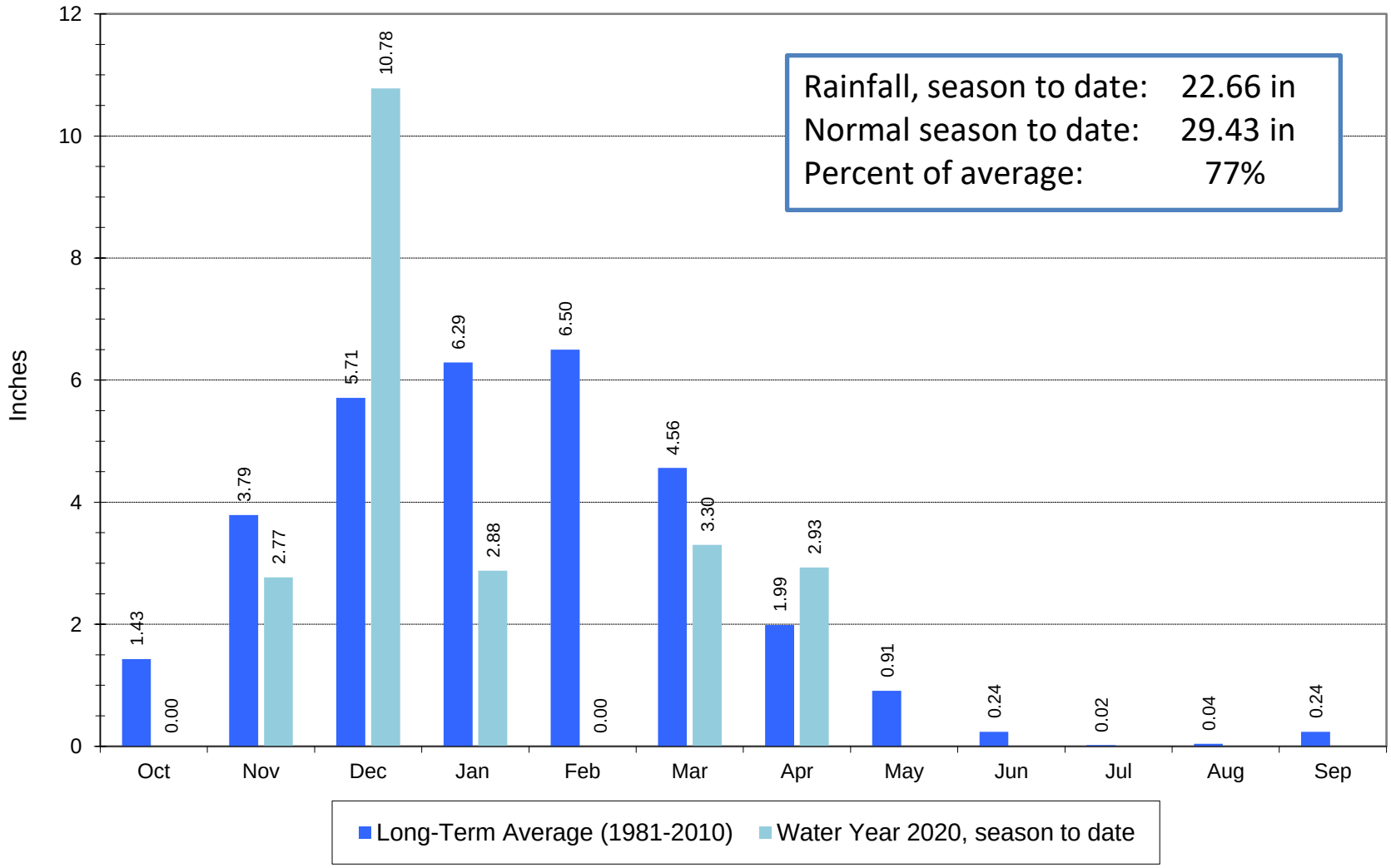
Despite the water year classification being dry, we are expecting healthy reservoir storage and ongoing low demand. Under the primary forecast scenario used in this assessment, the reservoir ends the year at 78% of capacity. It is therefore staff's recommendation that no water restrictions be implemented this season.

FISCAL IMPACT: None.

ATTACHMENTS::

1. Monthly Rainfall Totals
2. Cumulative Precipitation
3. Mean Monthly Stream Flow
4. Cumulative Runoff
5. 2020 Water Supply and Demand Assessment
6. Projected Reservoir Drawdown
7. NOAA three month temperature outlook April 16th 2020

Monthly Rainfall Water Year 2020, City of Santa Cruz



Cumulative Precipitation Water Year 2020, Santa Cruz CA

Rainfall, season to date (04-15-2020): **22.66 inches**
Percent of average: **77%**

Inches

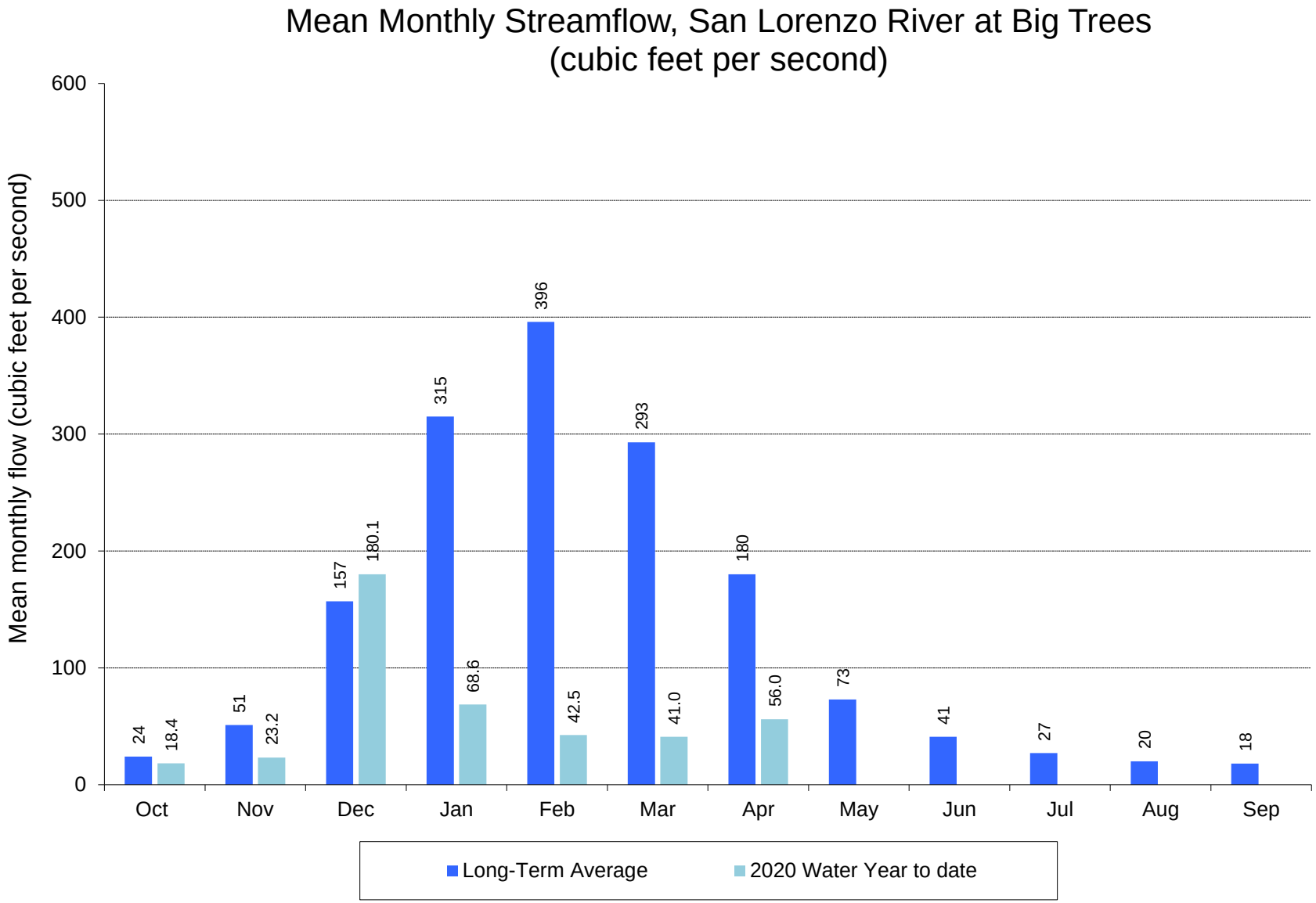
0
10
20
30
40
50

Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep

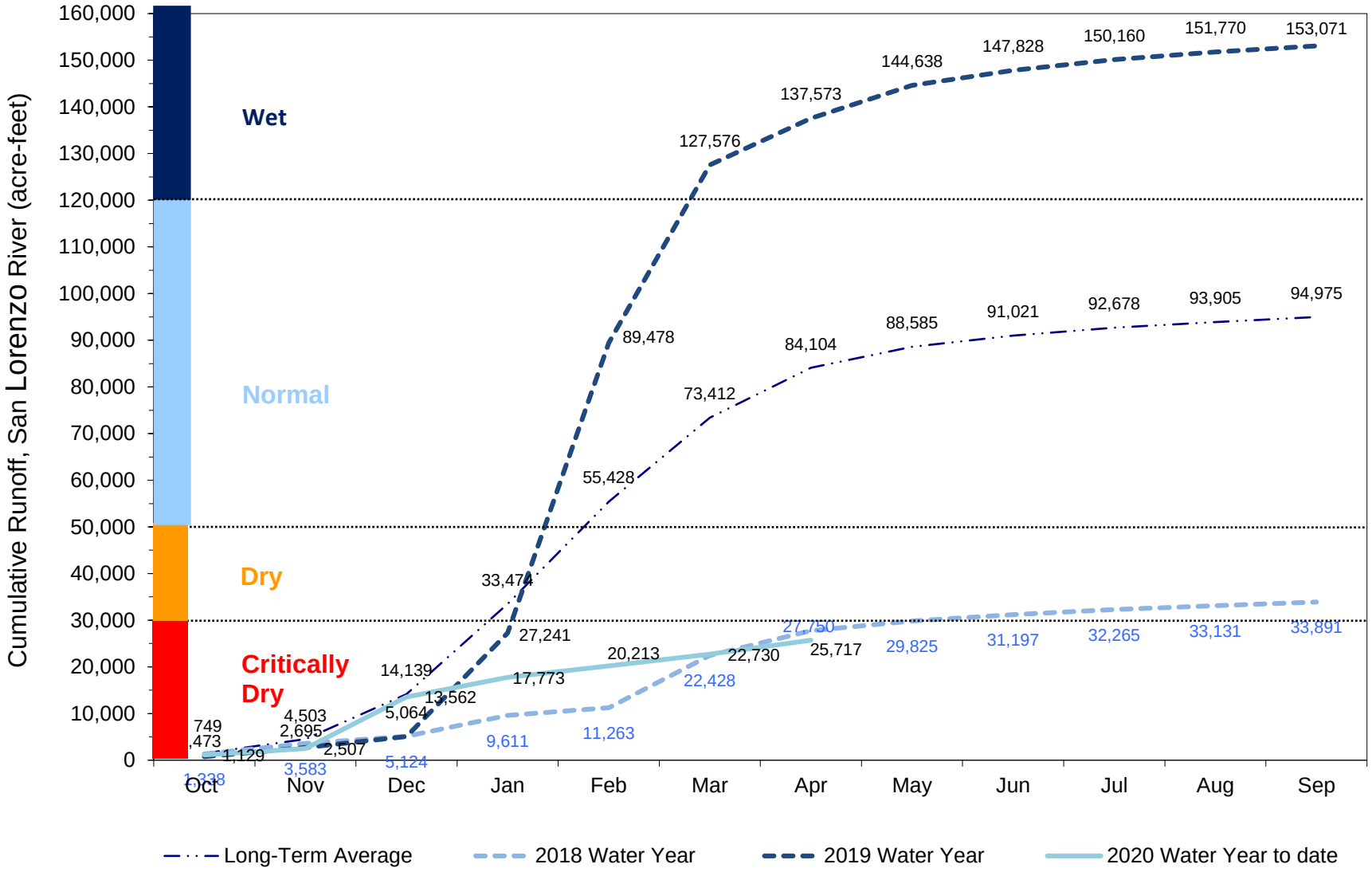
39.7
31.7
22.66
18.9

Long-Term Average 1981-2010
Water Year 2020
Water Year 2019
Water Year 2018

5.5


Mean Monthly Streamflow, San Lorenzo River at Big Trees
(cubic feet per second)
Mean monthly flow (cubic feet per second)
600
500
400
300
200
100
0
24
18.4
51
23.2
157
180.1
315
68.6
396
42.5
293
41.0
180
56.0
73
41
27
20
18
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Long-Term Average
2020 Water Year to date

Cumulative Runoff and Water Year Classification, Water Year 2020 to Date (acre-feet)



2020 Water Supply Scenario No. 1

SCWD Production Forecast (million gallons)	April	May	June	July	Aug	Sep	Oct	Total	
	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	
North Coast (gross production)	38	29	36	39	39	38	38	255	
North Coast (net production)	28	22	27	29	29	28	28	191	
San Lorenzo River	225	232	221	108	50	45	180	1,061	
Live Oak Wells	0	0	15	15	20	24	25	99	
Tait Wells	0	0	30	30	30	30	30	150	Enter manually for months when river diversi
Total Production without Lake	253	254	293	182	129	127	264	1,502	
Projected System Demand (row 46)	210	220	240	260	260	246	251	1,688	
Curtailed System Demand									
Beginning Lake Volume	**2,694**	**2,711**	**2,694**	**2,669**	**2,557**	**2,392**	**2,242**		
Projected Inflow from Newell Creek	46	16	8	5	3	2	5	85	
Lake Production Needed to Meet Demand	**0**	**0**	**0**	**78**	**131**	**119**	**0**	**329**	
Evaporation (feet)	0.2	0.3	0.3	0.4	0.4	0.3	0.2	2.1	
Evaporation (mil gal)	9	13	13	18	18	13	9	93	
Fish Release (mil gal)	20	20	20	20	20	20	20	140	
End of Month Lake Volume	**2,711**	**2,694**	**2,669**	**2,557**	**2,392**	**2,242**	**2,218**		
End of Month Lake Elevation (ft above msl)	**575.2**	**575.0**	**574.5**	**572.5**	**569.3**	**566.4**	**565.9**		
Monthly change in elevation	0.2	-0.2	-0.5	-2.0	-3.2	-2.9	-0.5		
Cumulative change in elevation	0.2	0.0	-0.5	-2.5	-5.7	-8.6	-9.1		
202 Percent of capacity (%)	95.8	95.2	94.3	90.4	84.5	79.2	78.4		
202 Actual Storage, percent of capacity									

Date Forecast Finaled: Month __, 2020 By: _____

1 Beginning lake level: **575.0** Dated April 15, 2020

North Coast Gross: Assume 2020 gross production equal to Liddell Spring production in 2018, Laguna and Majors both unavailable this year due to fish bypas requirements and pipeline damage

North Coast: North coast **net production** at coast pump station is 25% less than gross production due to leakage and sales

2 San Lorenzo River forecast flow **D75**

3 Releases at Tait Diversion: Hydrologic condition: **5**

Live Oak Wells: ASR testing through mid-July, per Isidro, Belt 12 well operating at approx. 0.5 mgd May to August, ramp up normal operations of 0.8 mgd in August

Tait Wells: Assume 1 MGD as needed when diversion of river is contstrained by fish flows (June- October)

Level of Curtailment Imposed (May thru October): **None**

4 Projected unconstrained system demand: % of 2019: 100%

Assumptions for Newell Creek inflow into Loch Lomond Reservoir **Dry**

Newell Creek Fish Release (line 15) - Normal release - 1.0 cfs

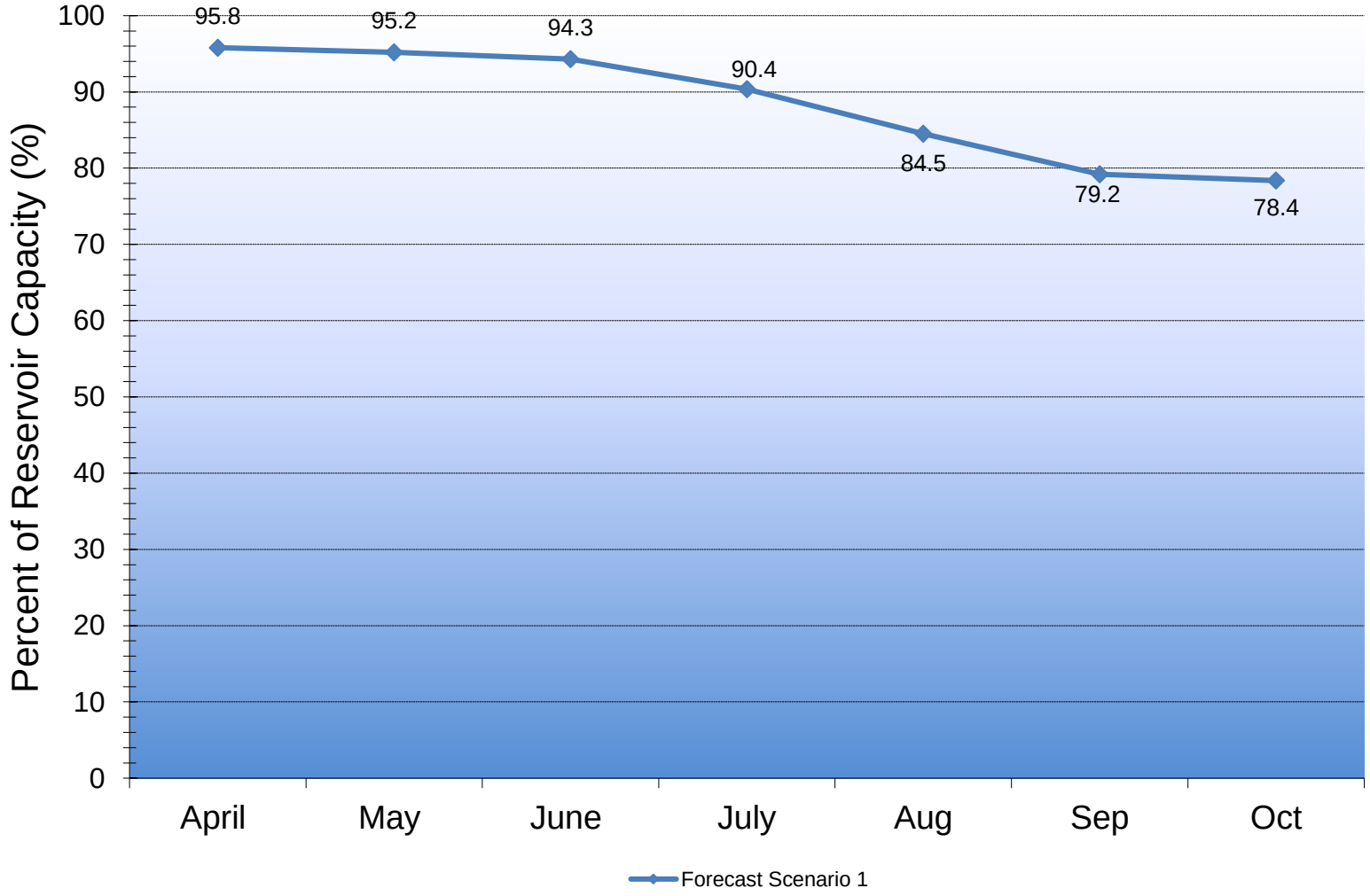
Actual

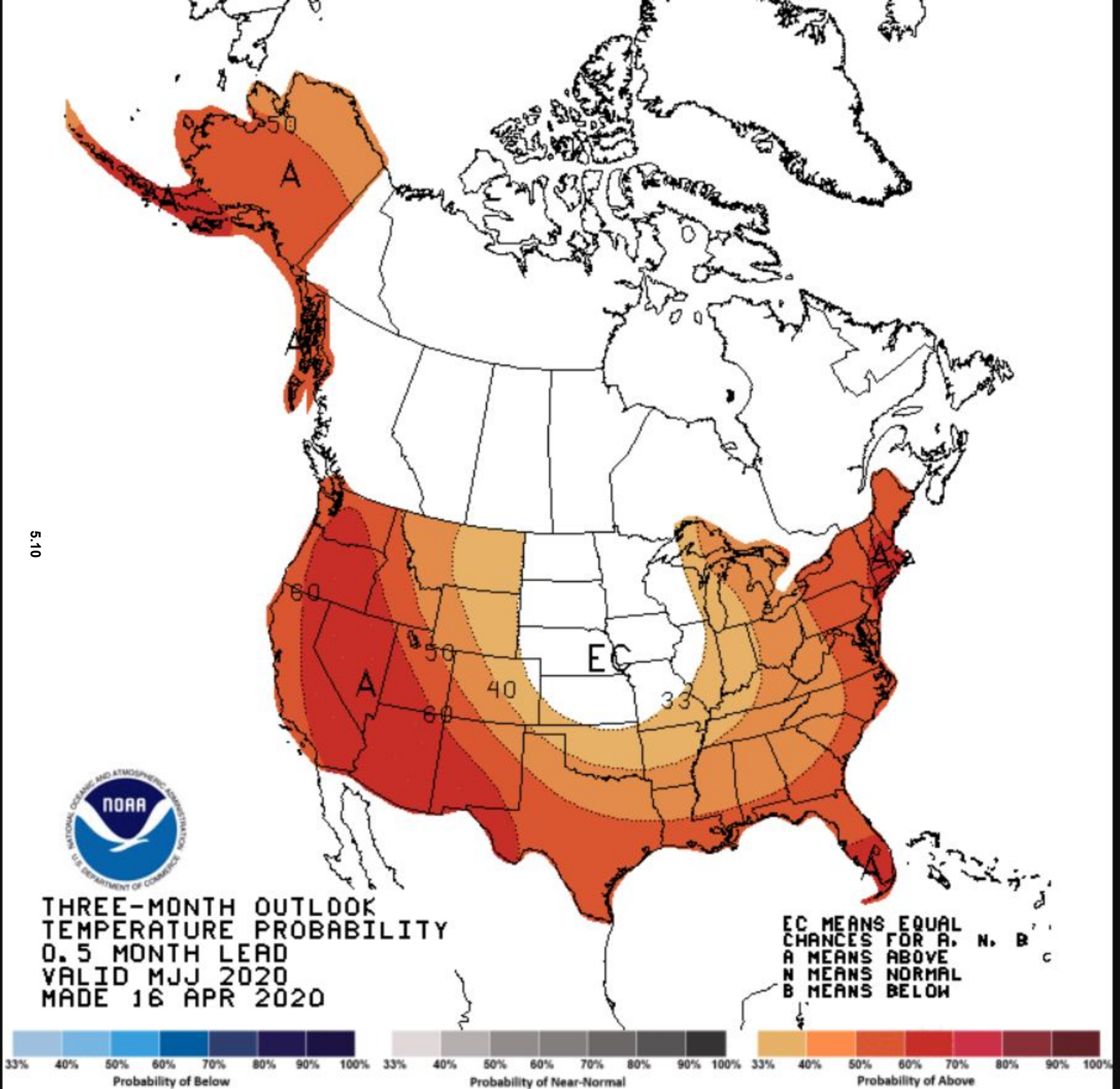
Projected San Lorenzo River stream flow at Felton 02	43.3	27.9	19.4	13.4	11.0	10.8	17.5	From Appendic C, Water Shortage Contingency Plan
Additional Inflow between Big Trees and Tait Diversio	1.0	1.0	0.5	0.5	0.0	0.0	0.0	
Flow at Tait St Diversion (cfs)	44.3	28.9	19.9	13.9	11.0	10.8	17.5	
Instream rearing flow release at Tait Diversion (cfs)	10.0	10.0	8.0	8.0	8.0	8.0	8.0	From May 1, 2019 Tolling Agreement Short-Term Flows, San Lore
Release Buffer (cfs)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Available Flow (cfs)	33.8	18.4	11.4	5.4	2.5	2.3	9.0	
Production (mg)	225.0	232.0	221.0	108.2	50.1	44.6	180.3	
Bypass Release as % Total Flow @ Tait	23%	35%	40%	58%	73%	74%	46%	
Actual Flow								

Pleasure Point Monitoring Well Projected Groundwater Elevation (feet above MSL)

Estimated monthly demand (mg)	210	220	240	260	260	246	251	**1,688**
Estimated daily demand (mgd)	7.0	7.1	8.0	8.4	8.4	8.2	8.1	**7.9**

Projected Reservoir Storage (Percent of capacity):
Starting Elevation 575 ft. on April 15, 2020




50
A
A
A
60
50
40
EC
33
60
A
A
THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.5 MONTH LEAD
VALID MJJ 2020
MADE 16 APR 2020
EC MEANS EQUAL CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW
33% 40% 50% 60% 70% 80% 90% 100%
Probability of Below
33% 40% 50% 60% 70% 80% 90% 100%
Probability of Near-Normal
33% 40% 50% 60% 70% 80% 90% 100%
Probability of Above

WATER COMMISSION
INFORMATION REPORT

DATE: 4/28/2020

AGENDA OF: May 4, 2020

TO: Water Commission

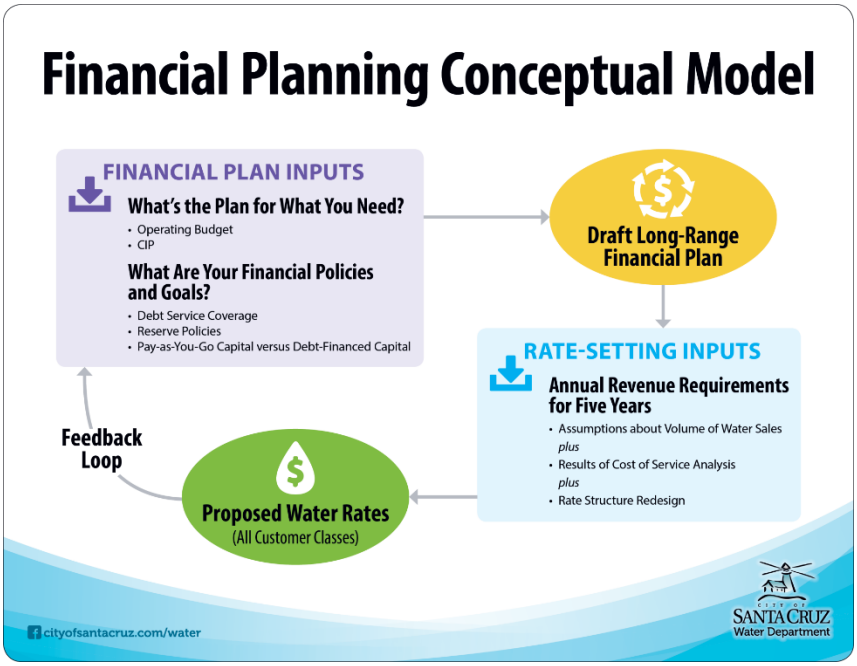
FROM: Rosemary Menard

SUBJECT: Water Pricing Objective Exercise

RECOMMENDATION: That the Commissioners participate in a work session to develop the Water Commission's input on its priorities for water pricing objectives.

BACKGROUND: Developing water rates is a multi-step process that starts with thinking about what your needs and key policy drivers and goals are. The figure below summarizes the steps in a conceptual model that starts with developing financial plan inputs.

Pricing objectives are a form of financial policies and goals. They are used to help inform the selection of both rate structures and rate levels.



DISCUSSION: At the May 4, 2020 Water Commission meeting, Commissioners will receive a comprehensive presentation about the rate-making process that will include discussion of legal requirements and rate-making principles and will include a briefing on water pricing objectives.

As part of this process, Commissioners will be invited to provide their input about how they would prioritize the various water pricing objectives. The process will include opportunities for Commissioners to share their perspectives and discuss various points of view. There are no "right or wrong" priorities for water pricing objectives, and the Commission's priorities for the various water pricing objectives will emerge from the Commission's discussions.

FISCAL IMPACT: There is no fiscal impact of this process.

PROPOSED MOTION: Motion to approve the Water Commission's priorities for water pricing objectives.

ATTACHMENTS:
1. Water Rate Making Briefing Presentation

RAFTELIS

City of Santa Cruz Water Commission Meeting

6.3

May 4, 2020

Our Water, Our Future

SANTA CRUZ Water Department

Agenda

- Study Objectives
- Water Rates 101
  - Overview
  - Legal Framework
  - Cost of Service Allocation
  - Rate Structure and Design
- Pricing Objectives Exercise
- Rate Structure Evaluation
- Schedule
- Public Outreach (COVID-19)

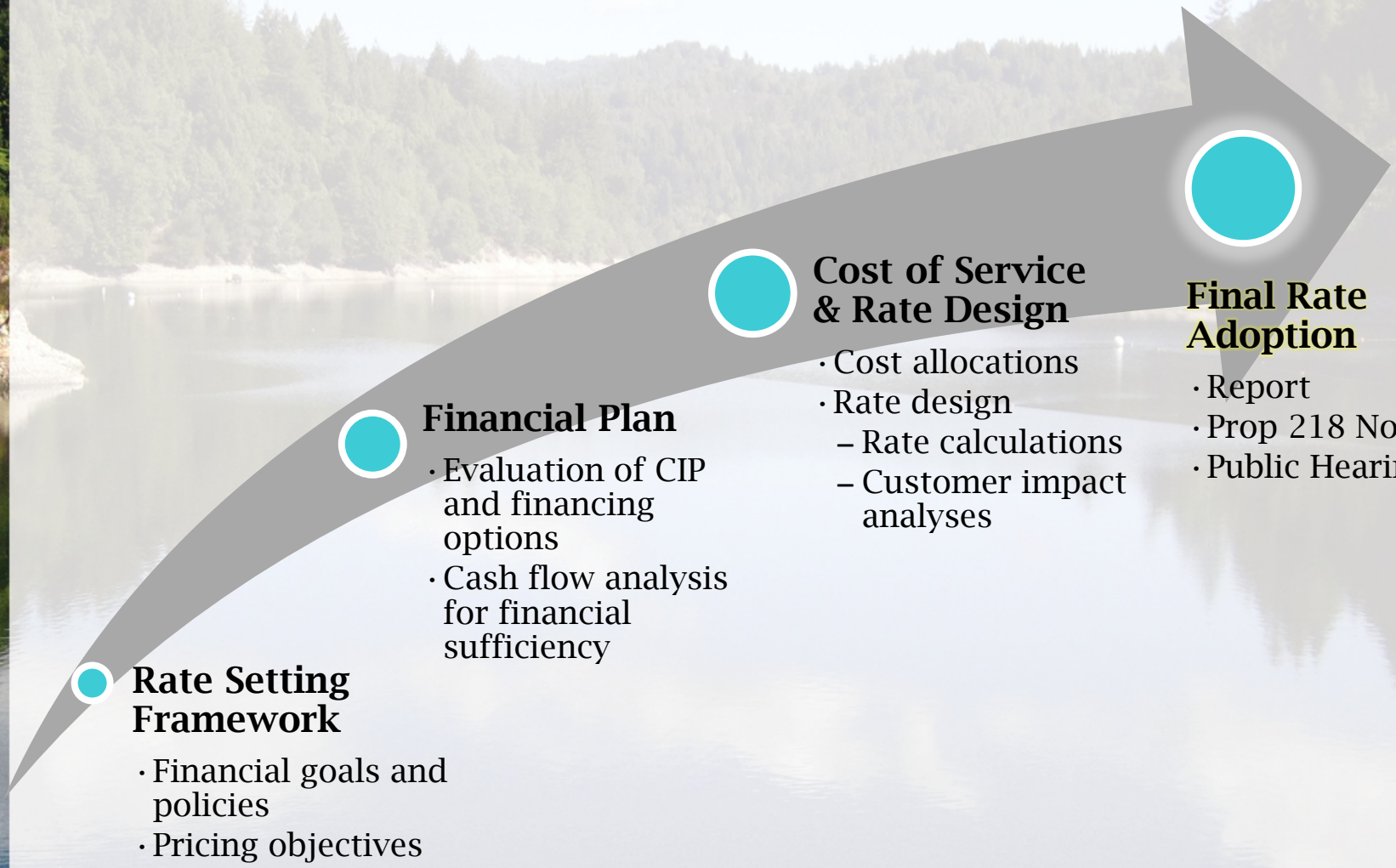
Study Objectives

1. Conduct an updated cost-of-service analysis
2. Design equitable and defensible rates for all water services
3. Develop drought rates by stages
4. Develop system development charges
5. Conduct public outreach strategy and gather input to shape the recommended rates and build stakeholder understanding
6. Develop an administrative record that justifies the logic / rationality on the proposed rates
7. Implement five years of water rates

6.5

Water Rates 101

Rate Study at a Glance



Legal Framework

Key Legislations in California Affecting Water Rate Studies

Cost of Service Requirements

- Proposition 218 (Article XIIIC and XIIID of California Constitution)
- Proposition 26
- California Government Code 54999

Water Conservation

- Article X of California Constitution
- SB 606 and AB 1668 –
  - Agencies will need to calculate their own efficient water use objective by November 2023
  - Efficient indoor use reduces over time
  - Efficient outdoor, commercial/institutional/industrial (CII) water use adopted by October 2021

Case Study: City of San Juan Capistrano

- **Recent Litigation: CTA vs. City of SJC**
  - Rate payers (Capistrano Taxpayer Association, CTA) sued the City of San Juan Capistrano over its water budget rate structure
- The Orange County Superior court ruled that the rates did not meet the nexus requirement in August 2013
- **Key factors:**
  - Lack of administrative record
  - City used multipliers to justify the tiered rates without any administrative record of an underlying rationale

6.10

Implication of San Juan Capistrano Ruling

- There needs to be a nexus between cost of providing services and rates
- The burden of proof falls on the agency to demonstrate this
- The administrative record (water rate study and report) is the venue to demonstrate the nexus
  - Walk the reader through calculations
  - Show your work

6.11

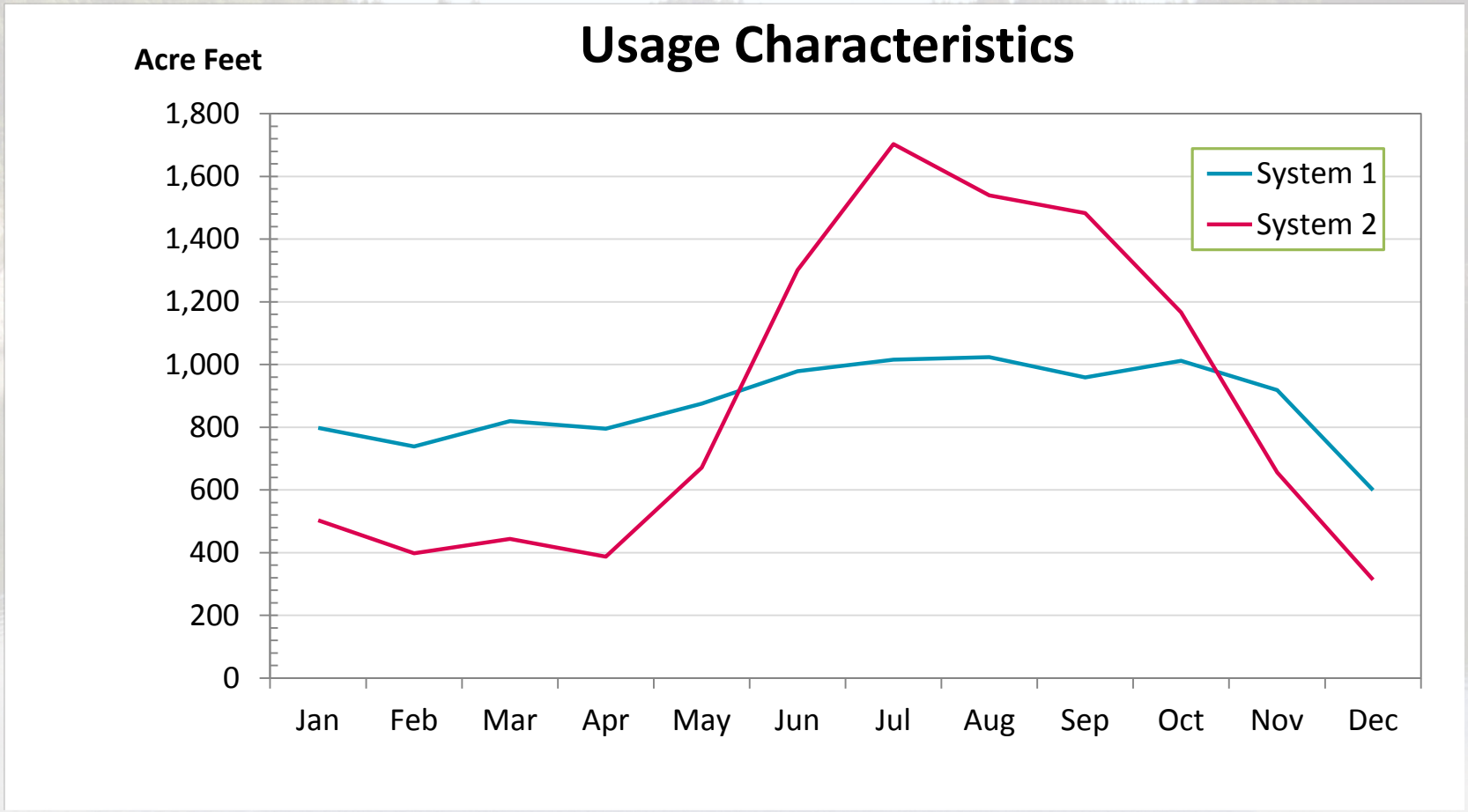
Cost of Service Allocation

What is Cost of Service?

6.13

- Method to recover costs from users in proportion to their use of the system, recognizing the impact of each class on system facilities and operations
  - A cost-based process of converting revenue requirements into unit costs
  - Allocation of cost of service to customer classes is based on customer usage characteristics
- Cost of service is the fundamental benchmark used for establishing utility rates in the United States

Water System Costs and Peaking Demand



6.14

Both water systems have annual demand of approximately 10,500 AF / year.

Which water system requires larger facilities/infrastructure?

What is Cost of Service?

Rationale:

- Different types of customers generate different costs because their patterns unique demand characteristics (unique cost of service)
- Cost of service allows the matching of the rates charged to each group with the cost incurred to serve them
- Each group will “pay its own way”; no subsidies

6.15

Identify and Allocate Different Cost Components

Understand Customer Water Use to Allocate Cost

Customer classes:

- Residential (SFR and MFR)
- Commercial
- Irrigation
- North Coast Ag
- UC Santa Cruz

Basis for customer classifications:

- Demand patterns (peaking)
- Annual usage
- Type of service

6.17

Distribute Cost Components to Customer Class

SUPPLY
Annual Demand

BASE/ DELIVERY COSTS
Annual Demand

PEAKING
Peaking Factors or Meter Cap Ratios

METER SERVICE
Meter Replacement Costs

CUSTOMER SERVICE
# of Bills in Each Class

FIRE
Fire Connection Size / Fire Hydrants

6.18

CUSTOMER CLASSES (Cost to Serve Each Class)
(Single Family, Multi-family, Commercial etc.)

Allocation of the Cost Components to Customer Class

6.19

Current Rate Structure

SFR Tiers	Current Tier Range	Tier Breakpoint Rationale
Tier 1	0-5 ccf	Average winter use
Tier 2	6-7 ccf	Average spring/fall use
Tier 3	8-9 ccf	Average summer use
Tier 4	10 & above	

6.20

Case Study: Prior Rate Study

Inside Water Rates	Water Supply	Treat-ment	Deliver.	Peak	Cons.	Prop. Rates	IRF
SFR & MFR							
Tier 1	$1.76	$0.46	$2.17	$1.35	$0.00	$5.75	$1.55
Tier 2	$1.76	$0.46	$2.17	$2.03	$0.00	$6.42	$2.32
Tier 3	$1.76	$0.46	$2.17	$2.51	$0.51	$7.41	$2.86
Tier 4	$1.76	$0.46	$2.17	$3.37	$1.03	$8.79	$3.85
Commercial	$1.76	$0.46	$2.17	$1.98	$0.20	$6.57	$2.27
UCSC	$1.76	$0.46	$2.17	$2.10	$0.21	$6.70	$2.40
North Coast	$1.76	$0.00	$1.55	$0.00	$0.27	$3.58	$3.05
Irrigation							
Tier 1	$1.76	$0.46	$2.17	$2.47	$0.00	$6.86	$2.82
Tier 2	$1.76	$0.46	$2.17	$3.69	$1.07	$9.15	$4.22
Tier 3	$1.76	$0.46	$2.17	$3.74	$2.14	$10.27	$4.27

Rate Structure and Design

Determining an Appropriate Rate Structure

1. Determine goals and objectives of the agency
   - What do we want the rates to achieve?

6.23

2. Business case
   - Do the benefits outweigh the costs?

3. Customer impact
   - To what degree are customer bills impacted?

Balancing Competing Objectives

Pricing Objectives

Efficiency/ Conservation	Funding Mechanism	Rate Stability & Affordability	Equity and Allocation Methodologies	Administration
Promotes efficient water use Promotes conservation Provides tool for drought management action plan	Enhances revenue stability Enhances revenue sufficiency Maintains transparency regarding CIP needs Meets the terms and conditions of the Long Term Financial Plan	Facilitates equitable access to water Supports affordability for essential use Promotes rate stability Minimize overall customer impacts	Complies with Proposition 218 Allocates capital costs equitably Accounts for individual needs Is based on best practices and industry standard methodologies	Eases administration Eases implementation Is simple to communicate

6.25

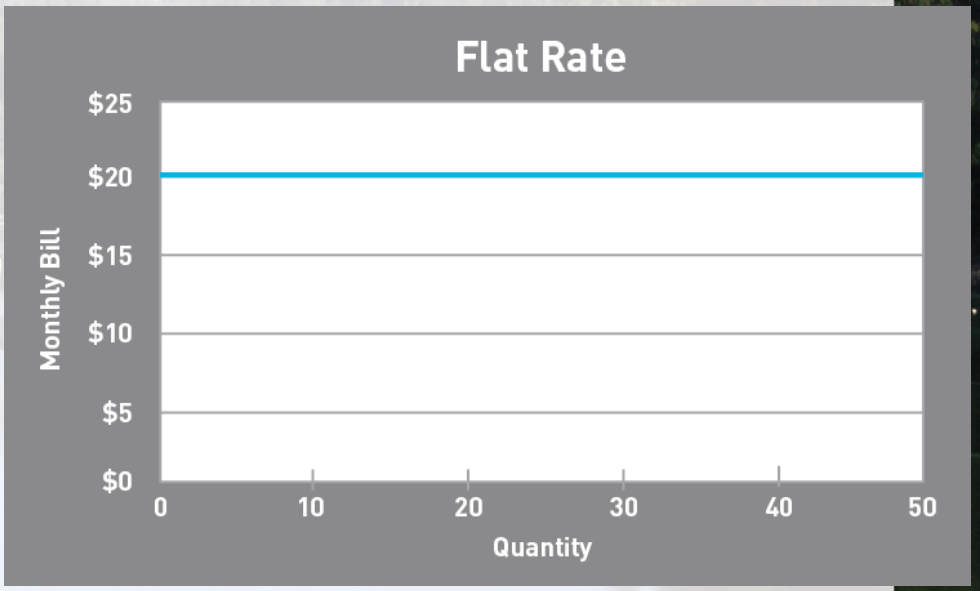
Pricing Objectives from Prior Study

Most Important Pricing Objectives
Revenue Sufficiency
Promotes Efficiency
Revenue Stability
Perceived to be Fair to the Public
Affordability for Essential Use
Customer Understanding
Promotes Conservation
Rate Stability

Water Rate Structure Evolution

Revenue Mechanism

Flat Rate



Flat Rate: $xx / month regardless of usage

Pros: Revenue stability, easy to understand

Cons: Inequitable, no conservation signal, not affordable for essential use

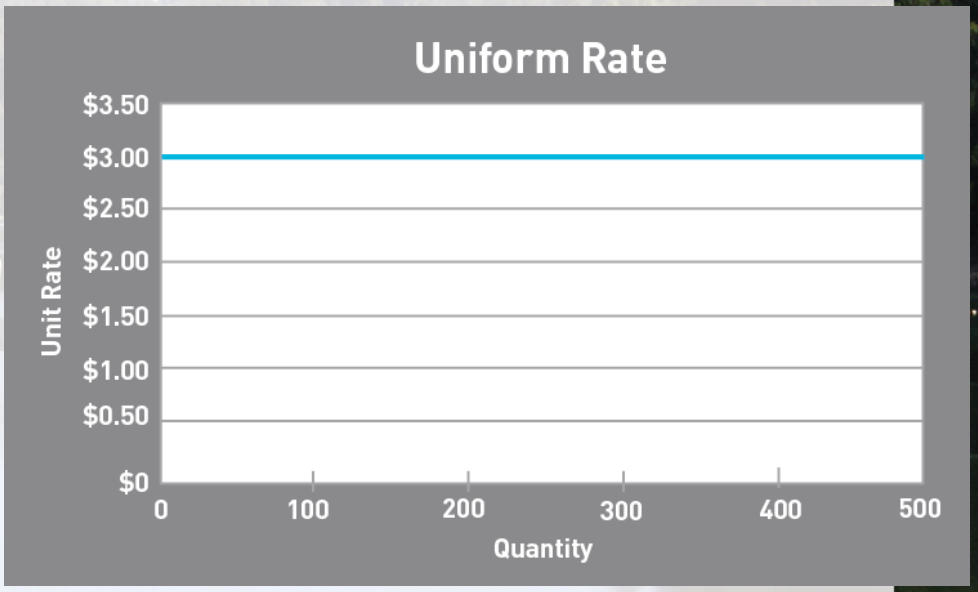
Water Rate Structure Evolution

Revenue Mechanism

Price Information

6.28

- Flat Rate
- Uniform Rate



Uniform Rate: $xx / hcf

Pros: Revenue stability, administrative ease, easy to understand

Cons: Weak conservation, not affordable for essential use

Water Rate Structure Evolution

Revenue Mechanism

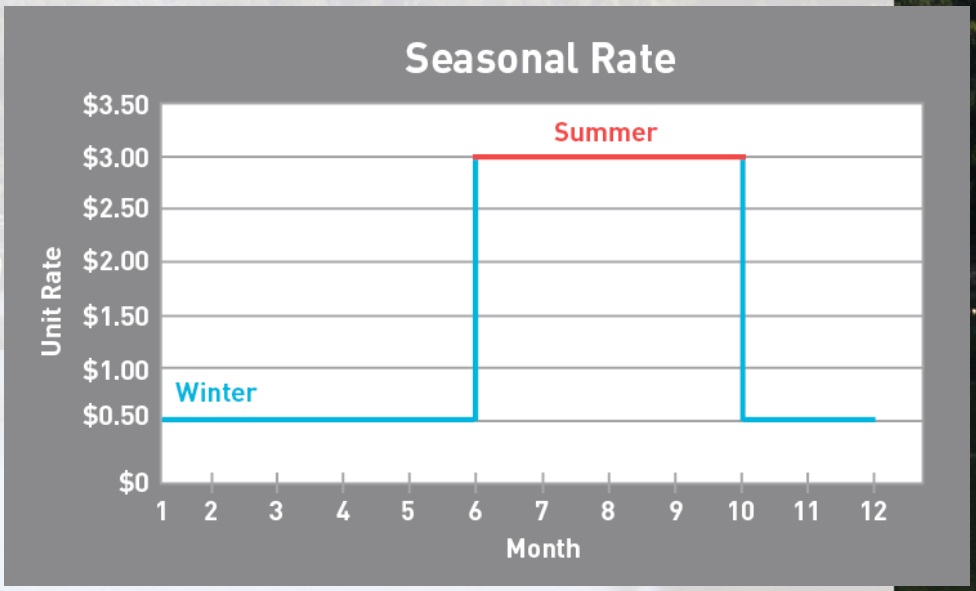
Price Information

Behavior Change

Flat Rate

Uniform Rate

Seasonal Rate



Seasonal Rate: $ xxx / hcf in Summer, $x/hcf in Winter

Pros: Promote water conservation in the summer, easy to administer

Cons: Revenue instability, not affordable for essential use

Water Rate Structure Evolution

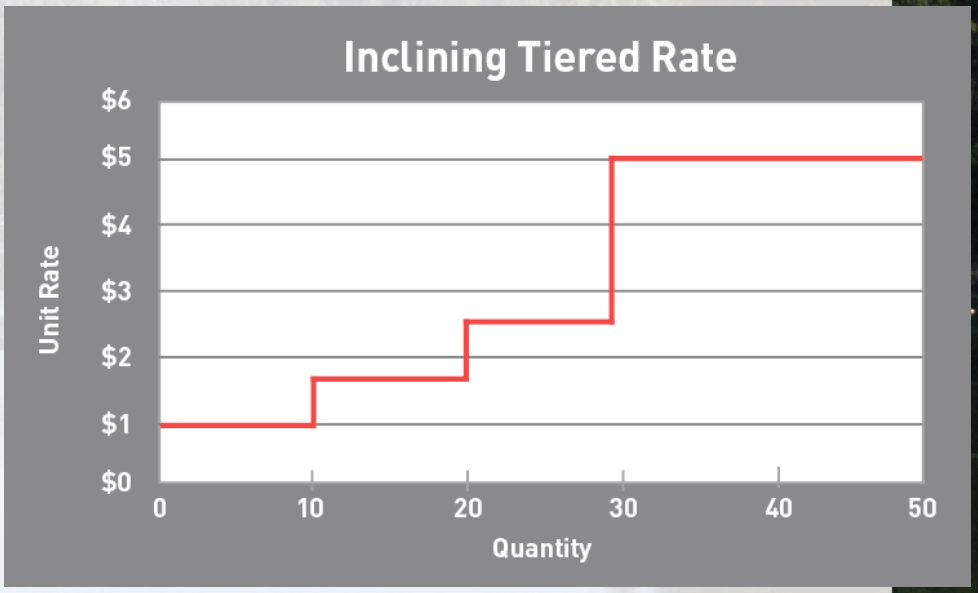
Revenue Mechanism

Price Information

Behavior Change

6.30

- Flat Rate
- Uniform Rate
- Seasonal Rate
- Inclining Tiered Rate



Inclining Tiered Rate:

Pros: Promote conservation, affordable for essential use, easy to administer, easy to understand

Cons: Target large users

Water Rate Structure Evolution

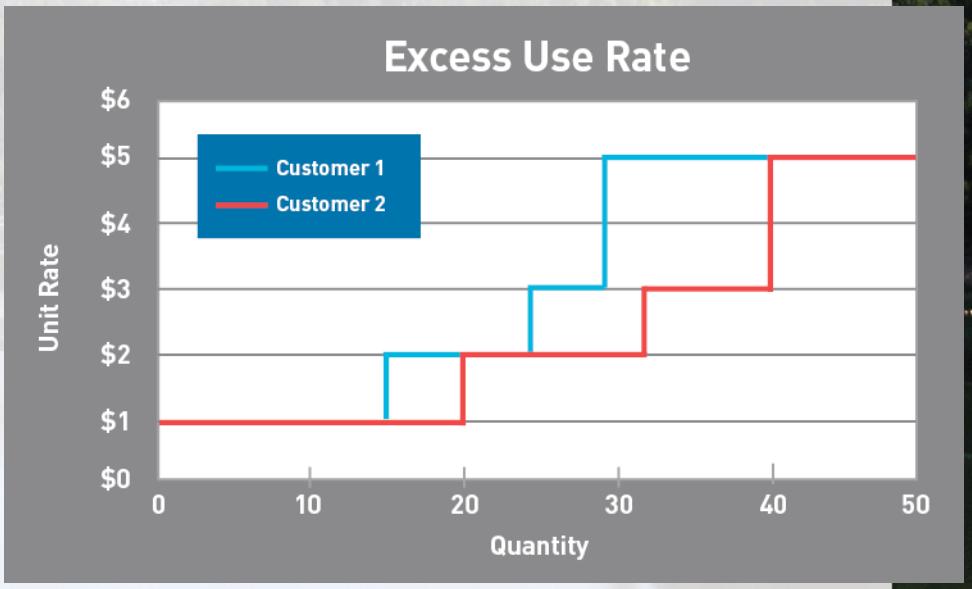
Revenue Mechanism

Price Information

Behavior Change

6.31

- Flat Rate
- Uniform Rate
- Seasonal Rate
- Inclining Tiered Rate
- Excess Use Rate



Excess Use Rate:

Pros: Promote conservation, affordable for essential use, fair among diversified customers

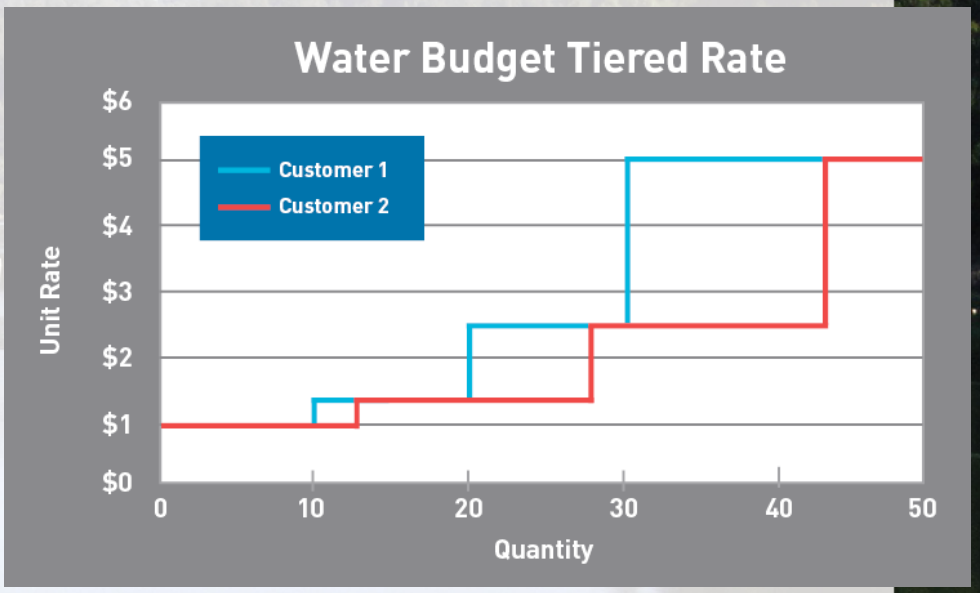
Cons: perceived opportunity for gaming, harder to understand

Water Rate Structure Evolution

- Revenue Mechanism
- Price Information
- Behavior Change
- Water Resource Management

6.32

- Flat Rate
- Uniform Rate
- Seasonal Rate
- Inclining Tiered Rate
- Excess Use Rate
- Water Budget Rate



Water Budget Tiered Rate:

Pros: Promote water efficiency, equitable, affordable for essential use, drought allocation tool, revenue stability

Cons: High administrative cost, harder to understand

Pricing Objectives Exercise

Pricing Objectives

Efficiency/ Conservation	Funding Mechanism	Rate Stability & Affordability	Equity and Allocation Methodologies	Administration
Promotes efficient water use Promotes conservation Provides tool for drought management action plan	Enhances revenue stability Enhances revenue sufficiency Maintains transparency regarding CIP needs Meets the terms and conditions of the Long Term Financial Plan	Facilitates equitable access to water Supports affordability for essential use Promotes rate stability Minimize overall customer impacts	Complies with Proposition 218 Allocates capital costs equitably Accounts for individual needs Is based on best practices and industry standard methodologies	Eases administration Eases implementation Is simple to communicate

6.34

Which objective is most important to you?

Rate Structure Evaluation

Rate Structure Considerations

- Appropriate amount of fixed and variable revenues
  - Currently, less than 10% of rate revenues are from fixed charges (meter charge, fire service charge)
  - Is it possible to increase revenue stability while maintaining affordability?

- Refining tier definitions
  - SFR / MFR – 4 tiers
  - Commercial – uniform rate
  - Irrigation – based on water budget

6.37

Components of Rate Structure

- Infrastructure Reinvestment Fee
  - Currently based on peaking factors
- Inside/Outside rates
  - 14.5% surcharge for outside City customers currently
  - Raftelis will update analysis
- Elevation Charge
  - Raftelis to allocate costs for pumping
  - Potential three-zone pumping charge?
- Drought Surcharge
  - Current surcharge on monthly fixed charge
- System Development Charge
  - Update the charge taking into account housing affordability concerns

6.38

Other Considerations

- Fixed/Variable rate structure
  - Additional fixed charge (separate from meter charge) based on historical peaking/capacity
  - Customers that peak in the summer will pay for this capacity throughout the year
    - Address equity concerns with summer rentals
    - Higher administrative cost

- Discussion: wastewater on property tax roll given delay in payments?

6.39

Schedule

Preliminary Schedule

Date	Activity	Objective(s)
August 2020	Water Commission Meeting #2	Rate structure alternatives
October 2020	Water Commission Meeting #3	Drought rate structure analysis
November 2020	Water Commission Meeting #4	Rate structure recommendations
February 2021	Proposition 218 Mailed	
July 2021	Rates Implemented	

6.41

Public Outreach

Strategy Considerations (COVID-19)

- Robust public engagement strategies revised to assume no in-person meetings and to get customer input into the rate study
  - Online "Community Feedback Forum"
  - Virtual Customer Stakeholder Panels
  - Video primers and instant online feedback
- Communication will focus on building understanding of the need to invest in water supply and infrastructure
- Uses established City and Department communication channels

6.43


Thank you!
6.44
Contact:
Sanjay Gaur / sgaur@raftelis.com
Melissa Elliott / melliott@raftelis.com
Our Water, Our Future
SANTA CRUZ
Water Department

WATER COMMISSION
INFORMATION REPORT

DATE: 4/30/2020

AGENDA OF: May 4, 2020

TO: Water Commission

FROM: Nicole Dennis, Finance Manager (acting)
Heidi Luckenbach, Deputy Director/Engineering Manager
Dave Culver, Chief Financial Officer

SUBJECT: Water Department's Proposed Fiscal Year (FY) 2021 Operating and FY 2021-25 Capital Investment Program (CIP) Budgets

RECOMMENDATIONS:

1) That the Water Commission review and provide feedback to staff on the Water Department's Proposed FY 2021 Operating and FY 2021-25 CIP Budgets (Budgets), including an updated multi-year Pro Forma integrating information about the Department's Budgets and financial position.
2) That the Water Commission recommend the Chair work with staff to draft a letter to the City Council related to the Department's FY 2021 Budgets and financial position recommending the Water Department's Budgets to the City Council based on Commission input, on behalf of the Commission to be approved at the June 8, 2020 Water Commission meeting.

BACKGROUND: As outlined in the Water Commission's Bylaws, the Commission's role includes the duty to "make recommendations concerning the proposed annual Water Department budget and CIP." To that end, the Department is presenting the Budgets to the Water Commission and seeking a recommendation to the Council in the form of a signed letter along with related materials to submit to the City Council.

The Water Department's Operating and Capital Investment Budgets authorize the necessary appropriation amounts for the Department to fulfill its mission to "ensure public health and safety by providing a clean, safe, reliable supply of water to its customers."

The Budgets have been specifically developed to support the continuing operations and maintenance of the water system and its ability to serve the community with a high quality and reliable water supply, and to provide the resources needed to finance major capital investments for the rehabilitation and replacement of water infrastructure, make further investments in improving the reliability of the Santa Cruz water supply, and prepare the water system to be

more resilient and reliable in the face of the significant uncertainty that arises from climate change.

The Santa Cruz City Council will hold its FY 2021 Operating and CIP budget hearings on May 12th (and 13th if needed) and adopt the Budgets on June 23, 2020. These Budgets are being considered "working" budgets due to the ongoing COVID 19 pandemic, which may require ongoing budget reviews and potential adjustments throughout the upcoming fiscal year. As noted in the staff report for the 2nd Quarterly Financial Report, Water Department staff is actively monitoring water sales to understand impacts from the COVID-19 pandemic and the local and state's Shelter-In-Place (SIP) order.

DISCUSSION: A number of documents related to the Department's FY 2021 Budgets and Pro forma are provided as part of the package of materials for Water Commission consideration and for transmittal to the City Council as part of the Water Commission's recommendation. Included are:

Attachment 1 - Water Department's FY 2021 Proposed Operating Budget
Attachment 2 - Water Department's FY 2021-25 Proposed CIP Budget
Attachment 3 - Water Department's CIP Project Descriptions
Attachment 4 – Working Draft of an Updated Financial Pro Forma

FY 2021 Operating Budget

The Department's FY 2021 Proposed Operating Budget represents a status quo budget and totals $36.4 million and includes 116.5 FTEs. The Department continued the practice of evaluating requests for additional resources using a data-driven approach. Budget proposals can be developed by any staff member and are developed using a standardized format which is consistent with the Department's Strategic Planning work. Only one proposal was submitted, requesting the replacement of Fume Hoods at the Water Quality Lab, and was included in the FY 2020 Proposed Budget.

The Department is pursuing the addition of a 1.0 FTE Water Chief Financial Officer and a 1.0 deletion of a Finance Manager. As part of the FY 2020 Mid-Year Budget, the recently vacated Water Conservation Manager will be deleted. These changes are included in the 116.5 FTE count for FY 2021.

The roughly $575,000 decrease in Capital Outlay reflects purchases of three pieces of heavy equipment and a Laboratory Information Management System (LIMS) completed in FY 2020 and removed from the FY 2021 budget. Debt service reflects the payoff of the Line of Credit and the new debt service for the Green Bonds issued by the Department in December 2019. Lastly, the Department's budget analytics will be provided to the Water Commission at their June meeting.

FY 2021-2025 Proposed Capital Investment Program Budget

Development of the CIP is an ongoing, iterative process. Following project validation in 2018-2019 where each project was thoroughly evaluated in terms of purpose, priority and cost, staff has continued to work with HDR, Inc., our program manager, to further develop a CIP that is

sufficiently resourced in terms of both staff and financial resources to help ensure successful implementation.

With such a large capital program, coupled with known and unknown internal and external influences, the iterative nature of developing the Capital program will be ongoing. With well-defined projects (including scope, schedule and budget), thoughtful and consistent application of contingencies, inclusion of price escalation, etc., staff is confident that we will be able to adequately and responsibly respond to changes.

Project Highlights
Below are highlights for several of the projects; staff will be available for any questions on these or other projects.

Aquifer Storage and Recovery We are well in to year two of pilot testing at the Beltz 8 well, having just wrapped up Cycle 2 of the 3-cycle test. This pilot test included the installation of a monitoring well at the Live Oak Beltz Treatment Plant and staff took the opportunity to install at Soquel Point to collect and monitor water level and water quality data from the Santa Margarita Sandstone aquifer. The existing well at Soquel Point is completed in the shallower Purisima Formation.

Newell Creek Dam Inlet/Outlet Replacement Project (NCD IO) This project was awarded to Obayashi Corporation for $69M to begin May/June 2020. City staff will continue to participate, filling roles as project manager, project engineer, environmental lead, and managing a team of consultants for construction management services, technical advisory board, dispute resolution board, and will be working closely on site with the State Division of Safety of Dams for ongoing inspection work. Staff also completed the financial agreement with the State for $103M.

Coast Pump Station 20-Inch Pipeline Replacement This project was awarded recently to Vadnais Construction. Work is scheduled to begin in late May or early June, delayed slightly by the various hurdles presented by the pandemic although due to contract float, is still expected to be completed on time.

GHWTP Concrete Tanks Replacement Staff was able to prequalify nine contractors for this project which will go out to bid in June. Construction is planned to begin the end of calendar year 2020.

University Tank No. 5 Construction activities on this project are complete except for final planting and paving. The one-year warranty has started.

Budget Changes
Two changes are worth noting in Attachment 2 with respect to how the budget information is being conveyed.

Last fiscal year the Department implemented a change in its capital budgeting approach to focus on yearly appropriations matching the amount paid to consultants/contractors rather than appropriating all funds required to complete the project at project initiation. The latter method

led to significant annual carry overs, complicating project accounting as well as cash flow planning and management. However, having implemented this new approach over the past year, the Department has realized a new set of issues in that budgeting to the anticipated spending amounts paid does not provide enough flexibility in funding for encumbrances. Specifically, enough funding is needed to cover encumbrances for future work and that is challenging to predict. Staff is looking for a hybrid approach that would reduce excess budget authority but accommodate a reasonable amount of encumbrances.

Management Reserve
The Management Reserve was created to cover unanticipated costs that arise on projects and cannot be covered with the available contingencies that are built into each project budget. For example, we covered greater than expected construction costs on the Coast Pump Station 20" Pipeline project by shifting money out of the management reserve, and into that project. This action was an administrative budget adjustment and allowed us to rapidly address the change, without any delay to the contract award process.

If management reserves are unspent in a given year, the expectation is that it would roll over to the next year.

Project Descriptions
Attachment 3 provides a description of all the projects that may be a useful companion piece to Attachment 2. Its linkage to Attachment 2 is through the Project #, (or Eden Number).

Funding Opportunities
Department staff continues to pursue low-interest loans and grants to fund the CIP, which results in substantial savings to rate payers. The Drinking Water State Revolving Fund (DWSRF) applications for the Newell Creek Inlet/Outlet ($103 million) and the GHWTP Concrete Tanks ($45.9 million) projects are proceeding well. Staff anticipates receiving the financing agreement for the Inlet/Outlet project from the State in the next few weeks. Previously, the Department received an eligibility date for the Inlet/Outlet project which allowed the Department to begin submitting reimbursement claims for design and planning costs. The Water Department is also pursuing a Water Infrastructure Finance and Innovation Act (WIFIA) federal loan through the US EPA. Using the DWSRF as the 51% match, WIFIA's low-interest loans allows agencies to "bundle" projects for financing. The Department will also look at issuing additional market-rate debt in FY 2021.

Working Draft FY 2021-2031 Pro Forma
The updated Financial Pro Forma is provided (Attachment 4) and includes financial performance for the Water Department's projected spending in the FY 2021 operating budget and a 5 year CIP. The Pro Forma is based on running the model developed for the 2016 Long Range Financial Plan (LRFP) as appropriately updated over time. There are a number of assumptions incorporated into the Pro Forma which include:

1) Sales of 2.37 billion gallons of water each fiscal year;
2) Inflation factors of:
    a) 6% for rate increase FY 2021 (the last year of approved rate adjustments);

b) 3% for salaries;
c) 9% for benefits;
d) 5% for operation and maintenance costs; and,
e) 5% for Capital Outlay.

3) CIP is based upon an updated 10 year plan;
4) Interest rate for future debt of 5% and project fund earnings of 1%.

In recent years since the 2008 recession CalPERS has made a number of policy decisions increasing pension costs for cities, counties and special districts. These policy decisions (expected rate of return on investments, mortality, and amortization periods) have substantially increased annual pension costs for Santa Cruz. Further increases due to the coronavirus impacts on investment markets may be inevitable but impossible to estimate at this time. The California Public Employees' Retirement System fund balance stood at $335 billion in March, down from a high of $404 billion in February 2020, a loss of $69 billion. The actual extent of losses at CalPERS won't be known until probably July according to the Sacramento Bee. When further information is available it will be incorporated into the financial Pro Forma.

The updated Financial Pro Forma reflects current year estimated total revenues of $45,219,758 and total operating expenditures of $33,399,010 (including debt service of $3,316,361) as well as $79,503,628 in capital expenditures.

The FY 2021 Pro Forma estimates the goal for maintaining 180 days cash will be achieved and the debt service coverage goal of 1.5 times the net operating revenues exceeds debt service through 2023. Both the Rate Stabilization Reserve Fund (713) and the Emergency Reserve Fund (717) are expected to maintain the minimum policy goal levels of $10 million and $3 million respectively through 2025.

The Department issued a $25 million Revolving Line of Credit (LOC) at the end of FY 2018 to help meet short term financing needs for FY 2018 and FY 2019 and provide a financial bridge to planned long term debt financing. The actual draws on the LOC was approximately $10 million and was retired during FY 2020 using a portion of the proceeds from the $25 million 2019 Green Bond issue. The remaining $15 million is expected to reimburse eligible capital projects during 2020 and 2021.

The Newell Creek Inlet/Outlet project has received approval for funding from the Drinking Water State Revolving Fund (DWSRF) and funding from this source is also expected for the GHWTP Concrete Tanks project. Staff will also be pursuing funding from the Environmental Protection Agency (EPA) Water Infrastructure Finance and Innovation Act (WIFIA) which is not currently reflected in the Pro Forma.

The projected size and timing of debt issues to finance these capital projects are summarized in the Table below. These figures do not include the potential benefits of additional DWSRF or WIFIA funding for projects that may defer or replace projected borrowing shown below.

Size and Timing of Revenue Bond Issues Needed to Fund Capital Program

2021	2022	2023	2024	2025
$ 16,782,784	$ 24,364,495	$ 36,323,483	$ 40,602,412	$ 60,006,364

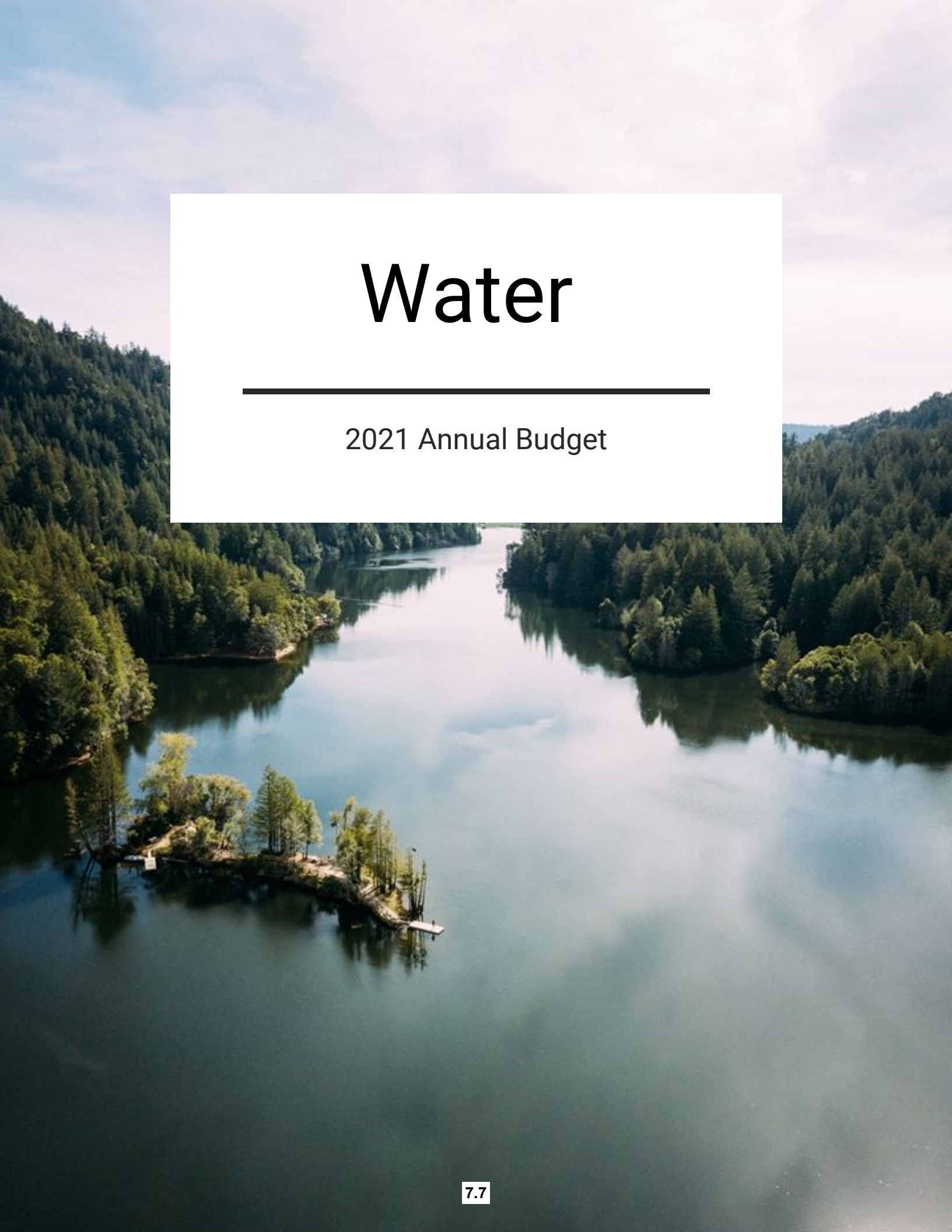
The total anticipated debt issues total $178 million over the next five years. To maintain the capital program bonds will need to be issued during FY 2021 that can also incorporate the amount needed in 2022 for a total of $40.2 million thereby postponing any further bond issuance until 2023.

It should be noted that the amounts reflected in the Working Draft Pro-Forma include only Fund 711 (Water Operations), Fund 713 (Rate Stabilization), Fund 716 (90 Day Operating Reserve) and Fund 717 (Emergency Reserve). However, a small portion of some capital projects is funded from Fund 715 (System Development). Due to the uncertainty associated with revenue projections related to development projects, this fund was left out of Attachment 5 in the interest of maintaining a conservative forecast.

FISCAL IMPACT: Funds are available to support the FY 2021 Proposed Budgets as demonstrated in the Financial Pro Forma.

PROPOSED MOTION: Move to recommend to the City Council approval of the Water Department's FY 2021 Operating and FY 2021-25 Capital Investment Program budgets and to authorize the Water Commission Chair to work with staff to finalize the Water Commission's letter and report accompanying its recommendation and sign the letter to the Council on behalf of the Commission.

ATTACHMENTS:
Attachment 1 - Water Department's FY 2021 Proposed Operating Budget;
Attachment 2 - Water Department's FY 2021-25 Proposed CIP Budget
Attachment 3 - Water Department's CIP Project Descriptions
Attachment 4 - Updated Financial Pro Forma



Water

2021 Annual Budget

Water Department

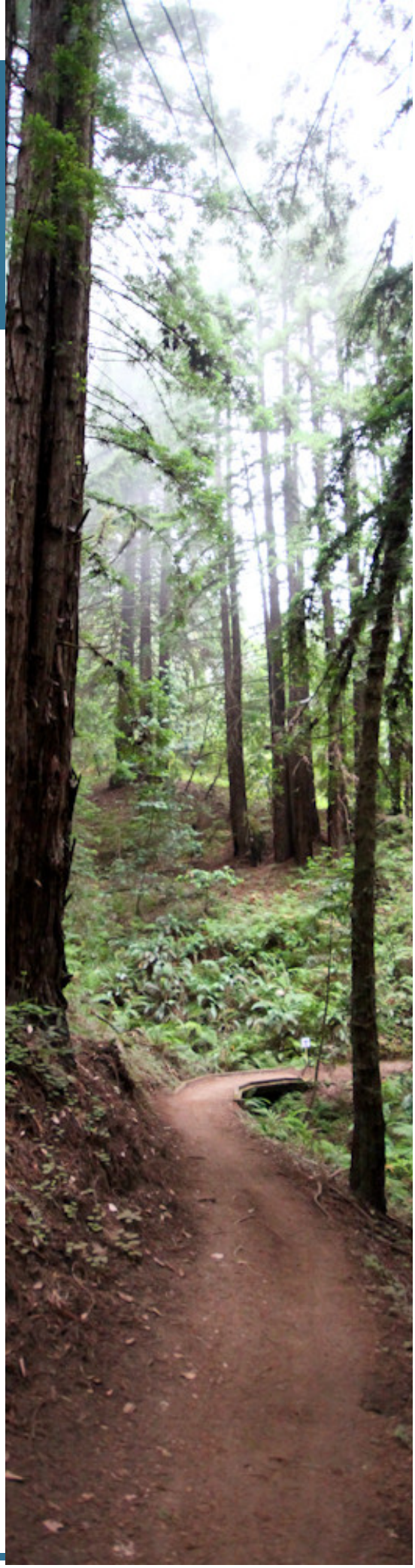
Department Description

The mission of the Water Department is to ensure public health and safety by providing a clean, safe and reliable supply of water. We strive to serve the community in a courteous, efficient, cost effective and environmentally sustainable manner. We are passionate about our work and try to instill our values of integrity, innovation, objectivity, professionalism, teamwork and transparency in everything we do. We collect water, treat and test it, move it, store it, distribute it, track how much is used and bill our customers for their use. We are at the end of the phone when customers call with questions and we are the smiling faces they see when they visit the department. We educate our customers about the quality of their water, how to use less water and provide them the tools to do so.

Our work includes the maintenance and operation of Loch Lomond Recreation area, as well as the protection of the Majors, Liddell, Newell Creek, Zayante and Laguna watersheds. We are stewards of an important community asset; the water system and all it entails, as well as a range of natural resources and ecosystems that we and many species depend upon and that are important elements of a sustainable community. We take pride in meeting the diverse needs of the broad region we serve. The Department is organized into operational and administrative sections. Operational sections include Production, Water Quality Lab, Distribution, Water Resources and the Loch Lomond Recreation area. These sections are responsible for managing the watersheds; collecting, treating and testing untreated and treated water; and storing and distributing treated water to our customers.

Water Department

The administrative sections are comprised of Finance and Administration, Engineering, Conservation, Customer Service, and Community Relations. Staff in these sections provide leadership, plan and implement the Capital Investment Program (CIP), develop and implement financial plans, read meters, bill customers and collect revenues, help our customers conserve water and support active community outreach and engagement efforts covering a range of department activities. Everyday, Department staff work hard to produce and deliver millions of gallons of water to over 98,000 customers and perform all the related utility, land and natural resource management activities that often happen behind the scenes, but play a part in providing reliable, high quality water service to our community.



		2019 Actual	Fiscal Year 2020 Adopted Budget	Fiscal Year 2020 Amended Budget	Fiscal Year 2020 Estimated Actual	2021 Proposed Budget
EXPENDITURES BY CHARACTER:						
Personnel Services		14,174,510	16,837,336	15,686,336	- 13,173,880	- 17,039,331
Services, Supplies, and Other Charges		12,553,247	16,058,444	15,936,598	13,453,043	15,724,969
Capital Outlay		212,510	766,000	775,246	715,000	198,000
Debt Service		2,247,613	10,138,026	10,188,026	10,188,026	3,458,545
Total Expenditures		29,187,880	43,799,806	42,586,206	37,529,949	36,420,844
EXPENDITURES BY ACTIVITY:						
Water Administration	7101	5,697,441	6,696,842	6,336,777	5,741,675	6,298,426
Water Engineering	7102	2,886,711	3,347,201	2,816,765	2,787,294	3,058,342
Water Customer Services	7103	1,974,229	2,015,751	2,030,870	1,854,800	2,230,293
Water Conservation	7104	913,474	1,240,293	1,240,293	1,017,400	1,498,904
Water Resources Management	7105	1,581,505	2,954,266	3,056,409	1,477,284	2,821,726
Water Production	7106	6,002,756	7,404,445	7,332,056	6,231,306	7,668,169
Water Quality Control	7107	1,321,358	1,775,267	1,783,812	1,679,108	1,843,949
Water Distribution	7108	4,212,029	5,163,688	5,097,509	4,484,758	4,950,576
Water Recreation Facility	7109	1,102,595	1,286,763	1,290,763	1,031,483	1,409,979
Water Operations	7110	-	321,983	610,991	441,582	677,708
Water Meter Shop	7113	1,248,169	1,455,281	851,935	645,233	504,228
Water Debt Service	7140	2,247,613	10,138,026	10,138,026	10,138,026	3,458,545
Total Expenditures		29,187,880	43,799,806	42,586,206	37,529,949	36,420,844
RESOURCES BY FUND:						
Water Fund (711)		36,821,568	74,356,868	63,504,001	36,817,988	42,500,851
Water Rate Stabilization Fund (713)		3,104,137	3,342,000	3,208,000	2,900,000	3,163,368
Water System Development Charges Fund (715)		660,495	820,000	821,109	500,000	820,000
Total Resources		40,586,200	78,518,868	67,533,110	40,217,988	46,484,219

Project Titles	Eden Number	Program Number	FY2021 Budget	FY2022 Budget	FY2023 Budget	FY2024 Budget	FY2025 Budget
WATER SUPPLY RESILIENCY & CLIMATE ADAPTATION PROJECTS							
Water Supply Augmentation Strategy							
Beltz Wellfield Aquifer Storage and Recovery							
ASR Planning	c701609, c701610	3.3	244,000	-	-	-	-
ASR Mid County Existing Infrastructure	c7021xx	3.3.1	601,000	884,000	1,207,000	-	-
ASR Mid County New Wells	c7021xx	3.3.2	219,000	369,000	4,509,000	541,000	7,060,000
Santa Margarita Aquifer Storage and Recovery and In Lieu Water Transfers and Exchanges							
ASR Santa Margarita Groundwater	c7021xx	3.3.3	165,000	728,000	-	1,639,000	6,351,000
ASR New Pipelines	c7021xx	3.3.4	-	-	353,000	1,688,000	2,503,000
In Lieu Transfers and Exchanges	NA	3.6	-	-	-	-	-
Studies, Recycled Water, Climate Change, Aquifer Storage and Recovery							
Water Supply Augmentation	c701705	3.1	480,000	138,000	11,000	-	-
Recycled Water Feasibility Study	c701611, c701612	3.2	159,000	-	-	-	-
River Bank Filtratation Study	c701806	4.5	-	243,000	714,000	381,000	1,950,000
Subtotal Water Supply Augmentation Strategy			**1,868,000**	**2,362,000**	**6,794,000**	**4,249,000**	**17,864,000**
Subtotal Water Supply Resiliency and Climate Adaptation Projects			**1,868,000**	**2,362,000**	**6,794,000**	**4,249,000**	**17,864,000**
INFRASTRUCTURE RESILIENCY AND CLIMATE ADAPTATION							
Raw Water Storage Projects							
NCD I/O Replacement Project	c701606	1.5	37,979,000	35,893,000	16,875,000	1,470,000	-
Aerators at Loch Lomond	c701706	NA	-	-	-	-	-
Subtotal Raw Water Storage Projects			**37,979,000**	**35,893,000**	**16,875,000**	**1,470,000**	-
Raw Water Diversion and Groundwater System Projects							
Laguna Creek Diversion Retrofit	c701801	1.1	1,111,000	2,028,000	13,000	-	-
North Coast System Majors Diversion Rehab	c701802	1.2	-	-	-	-	192,000
Tait Diversion Rehab/Replacement	c701903	1.3.1	-	2,000	2,000	2,000	454,000
Coast Pump Station Rehab/Replacement	TBD	1.3.2	-	-	-	-	-
Beltz 10 and 11 Rehab & Development	c700026	NA	-	-	-	-	-
Felton Diversion PS Assessment	c701906	1.4	-	-	-	-	207,000
Subtotal Raw Water Diversion and Groundwater System Projects			**1,111,000**	**2,030,000**	**15,000**	**2,000**	**853,000**

Project Titles	Eden Number	Program Number	FY2021 Budget	FY2022 Budget	FY2023 Budget	FY2024 Budget	FY2025 Budget
Raw Water Transmission							
Coast Pump Station 20-inch RW Pipeline Replacement	c701707	2.3	3,049,000	-	-	-	-
Newell Creek Pipeline Rehab/Replacement	c701701	2.2	61,000	110,000	-	-	-
Newell Creek Pipeline Felton/GHWTP	c7021xx	2.2.1	1,352,000	2,029,000	14,444,000	14,581,000	-
Newell Creek Pipeline Felton/Loch Lomond	c7021xx	2.2.2	-	-	68,000	3,044,000	1,501,000
Brackney Landslide Area Pipeline Risk Reduction	c702002	2.2.3	-	2,704,000	2,590,000	-	-
North Coast Pipeline Repair/Replacement - Planning	c701908	2.1	447,000	462,000	-	-	-
North Coast Pipeline Repair/Replacement - Ph 4	c7021xx	2.1.1	-	-	-	507,000	1,988,000
North Coast Pipeline Repair/Replacement - Ph 5	c7021xx	2.1.2	-	-	-	-	319,000
Subtotal Raw Water Transmission			**4,909,000**	**5,305,000**	**17,102,000**	**18,132,000**	**3,808,000**
Surface Water Treatment							
GHWTP Tube Settler Replacement	c701708	4.1	-	-	-	-	-
GHWTP Flocculator Rehab/Replacement	c701502	4.2	-	-	-	-	-
GHWTP Concrete Tanks Replacement	c701501	4.3	3,228,000	12,587,000	12,920,000	2,434,000	-
GHWTP Facilities Improvement Project	c700025	4.4	1,022,000	2,464,000	2,636,000	8,053,000	31,947,000
GHWTP Filter Rehab and Upgrades	c701303		-	-	-	-	-
Source Water Data Project	c701608		-	-	-	-	-
Subtotal Surface Water Treatment			**4,250,000**	**15,051,000**	**15,556,000**	**10,487,000**	**31,947,000**
Distribution System Storage, Water Main and Pressure Regulation, and Metering Projects							
University Tank No. 4 Rehab/Replacement	c701505	6.1	195,000	906,000	239,000	4,726,000	475,000
University Tank No. 5 Rehab/Replacement	c701506	6.2	-	-	-	-	-
Pressure Regulating Stations	c701703		-	-	-	-	-
Meter Replacement Project	c701603	5.2	2,347,000	2,424,000	2,504,000	2,587,000	2,672,000
Engineering and Distribution Main Replacement Projects	c700002, c700003,	NA	574,000	716,000	740,000	765,000	790,000
Distribution System Water Quality Improvements	c702001	NA	-	-	-	-	-
Facility & Infrastructure Improvements	c701907	NA	-	441,000	455,000	471,000	486,000
Bay Street Reservoir	c700027, c700313		-	-	-	-	-
Subtotal Distribution Storage, Wmain Pressure Reg, and Metering			**3,116,000**	**4,487,000**	**3,938,000**	**8,549,000**	**4,423,000**
Subtotal Infrastructure Resiliency and Climate Adaptation			**51,365,000**	**62,766,000**	**53,486,000**	**38,640,000**	**41,031,000**

Project Titles	Eden Number	Program Number	FY2021 Budget	FY2022 Budget	FY2023 Budget	FY2024 Budget	FY2025 Budget
OTHER RISK MANAGEMENT AND RISK REDUCTION PROJECTS							
Site Safety and Security							
Security Camera & Building Access Upgrades	c701704	NA	224,000	-	-	-	-
Programmable Logic Controllers	c701905		-	-	-	-	-
Loch Lomond Facility Improvements	c701301		-	-	-	-	-
Spoils and Stockpile Handling	c701508		-	-	-	-	-
Newell Creek Access Rd Bridge	c701904		-	-	-	-	-
Carbonera Tank Rd	e701706		-	-	-	-	-
Subtotal Site Safety and Security			**224,000**	-	-	-	-
Staff Augmentation							
Water Program Administration	c701901	z01	3,201,000	3,307,000	2,847,000	2,941,000	3,038,000
Subtotal Staff Augmentation			**3,201,000**	**3,307,000**	**2,847,000**	**2,941,000**	**3,038,000**
Contingency							
Management Reserve	c702003	TBD	5,469,000	5,883,000	5,219,000	2,870,000	-
Subtotal Contingency			**5,469,000**	**5,883,000**	**5,219,000**	**2,870,000**	-
Storage for Emergency Facility and System Repair Tools and Equipment							
Bay Street Reservoir Storage Building	c701910	NA	-	-	-	-	-
Union/Locust Admin Building Back Up Power Generator	c7021xx	NA	150,000	-	-	-	-
Subtotal Storage for Emergency and System Repair			**150,000**	-	-	-	-
Subtotal Other Risk Management and Risk Reduction Projects			**9,044,000**	**9,190,000**	**8,066,000**	**5,811,000**	**3,038,000**
GRAND TOTAL			**62,277,000**	**74,318,000**	**68,346,000**	**48,700,000**	**61,933,000**

Water Department CIP Project Descriptions

Project #	Current Project Title	Current Description	Status	Project Manager
c700002	Main Replacements - Engineering Section	Recurring program to replace distribution system water mains identified and prioritized by the Department based on maintaining water system reliability, delivering adequate fire flows, improving circulation and water quality, and reducing maintenance costs. These projects are typically installed by contractors according to bid plans and specifications. Funds may also be budgeted in project c709833 and will be distributed between the 2 projects when that year's replacement project is identified. An updated Main Replacement Master Plan is under development and will be completed in Fiscal Year 2021.	Active	Valby, Doug
c700003	Main Replacements -Outside Agency	Water main, service line, valve, or water meter relocation necessitated by City, County or other Agency improvements such as road improvement, storm drain improvement projects, and/or other projects that conflict with existing water infrastructure.	Active	Valby, Doug
c700004	Main Replacements - Customer Initiated	Recurring annual Main Replacement program initiated on an as-needed basis to accommodate customer-requested service connections to non-existent or inadequate mains. Funds, to the extent of the appropriation, are disbursed to customers on a first-come, first-served basis.	Active	Kihoi, Taylor
c700025	GHWTP Facilities Improvement Project	Treatment process and structural improvements to the Graham Hill Water Treatment Plant (GHWTP) to improve reliability of meeting water quality goals, support aquifer storage and recovery and water transfers, and assure supply and treatment resiliency given unknown climate change impacts to future hydrology and water quality. This project currently includes condition assessments, alternatives analyses, preliminary designs and preparation of a Facilities Improvement Project report. Final design and construction services are future phases included in this project. In Fiscal Year 2021 this project will be part of a low interest loan financing application through the Water Infrastructure Finance and Innovation Act (WIFIA) program. (Project 4.4)	Active	Holly Burles (HDR)
c700026	Beltz 10 and 11 Rehab & Development	This project involves the rehabilitation of Beltz 10 (an existing groundwater production well) and the conversion of an existing monitoring well to a production well (Beltz 11). This project will shift pumping to different geologic layers of the mid-county groundwater basin, helping to ensure sustainable groundwater management.	To close	Ernst, Ryan
c700313 & c700027	Bay Street Reservoir Reconstruction	The Bay Street Reservoir reached the end of its useful life and was replaced with two 6 MG tanks. The Notice of Completion has been recorded and post-construction activities are finished. Outstanding item is the completion of the maintenance period of the project landscape phase.	To close	Ernst, Ryan
c701301	Loch Lomond Facilities Improvements	Complete facilities assessment and improvement program at Loch Lomond. A Use Study was completed in FY 2013 which resulted in projects to enhance the recreation area usability for its visitors at several parking and restroom facilities, pathways and picnicking areas.	To close	Ernst, Ryan
c701303	WTP Filter Rehabilitation and Upgrades	This project rehabilitated and improved the filter performance at the Graham Hill Water Treatment Plant. The Notice of Completion has been recorded and post-construction activities are finished.	To close	Zeman, Matt
c701501	GHWTP CC Tanks Replacement	Infrastructure improvements to the GHWTP are necessary to meet regulatory requirements, improve operations and increase overall reliability. This project will improve the seismic resiliency of key process tanks, improve water quality, and enhance treatment residuals management. The design phase of this project is nearly complete for the replacement of the Filtered Water Tank, Wash Water Reclamation Tank (Reclaim Tank), and Sludge Storage Tank. Construction is anticipated to start in winter 2020. This project is expected to be financed with low-interest loans through the State Revolving Fund (SRF) Loan Program. (Project 4.3)	Active	Bradshaw, Greg (HDR)
c701502	GHWTP Flocculator Rehab/Replacement	Design and in-kind replacement of aging paddle wheel flocculators at the Graham Hill Water Treatment Plant. This project will reduce the risk of a major process failure during the construction phase of other major process improvements. Construction of this project will be completed in calendar year 2020. (Project 4.2)	Active	Zeman, Matt

Water Department CIP Project Descriptions

Project #	Current Project Title	Current Description	Status	Project Manager
c701505	University Tank No. 4 Rehab/Replacement	Perform engineering analysis and condition assessment of the aging University No. 4 (U4) tank and associated piping to ensure reliable service. Project includes an alternatives analysis to consider installing a larger high-pressure pipeline to bypass the U4 tank and pump directly. Project will include condition assessment, design, and acquisition of easements, permitting, and construction. (Project 6.1)	Active	Kihoi, Taylor
c701506	University Tank No. 5 Replacement	Completed engineering analysis and replacement of the aging 2 Million Gallon University No. 5 tank to ensure continued reliable service. Project includes replacement of 800 feet of 12” water main in El Refugio Way, and construction of a 35,000 gallon maintenance tank to provide service during future inspection and maintenance. Except for final paving, all construction activities will be complete in Fiscal Year 2020. (Project 6.2)	Active	Kihoi, Taylor
c701507	Main Replacements-Distribution Section	Recurring program to replace deteriorated or undersized water mains, as identified and prioritized by the Department and implemented by the Distribution Section. Projects are typically based on leak history, but also address water quality and fire flow issues.	Active	Valencia, Miguel
c701508	Spoils and Stockpile Handling Facilities	Completed project includes construction of concrete material storage bins for surplus storage of sand, base rock, cold mix and spoils at the City's Corporation yard as well as roof and sidewalls for protection for wind and rain. Improvements will allow for better handling of wet spoils generated by the vactor truck, as well as prevent sediment laden runoff from entering the storm water drainage system.	To close	Kihoi, Taylor
c701603	Meter Replacement Project	Implementation of system-wide water meter replacement program necessary to address a metering system that is at the end of its life, as seen in increasing number of failing meters. Water metering is crucial in accurately registering water consumption both for billing and system management purposes. Revenue losses are realized with an estimated 22 million gallons of water per year being delivered to customers unregistered due to performance degradation of old meters.	Active	Petersen, Kyle
c701606	NCD I/O Replacement Project	The Newell Creek Dam was constructed 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 will be replaced along with related infrastructure. This project is being implemented with oversight by the Division of Safety of Dams and, having demonstrated compliance with existing seismic regulations, is an upgrade to improve day to day operations and emergency drawdown rate. Construction is anticipated to start in spring 2020. This project is expected to be financed with low-interest loans through the State Revolving Fund (SRF) Loan Program and will be part of a low interest loan financing application through the Water Infrastructure Finance and Innovation Act (WIFIA) program. (Project 1.5)	Active	Van Der Maaten, Leah
c701608	Source Water Data Project	Evaluate source water quality to assist with the analysis of operational and infrastructure alternatives to maximize use of surface water. Source water testing began in October 2016. This project was prompted in part by the recommendations of the Water Supply Advisory Committee, accepted by Council in Nov 2015, to evaluate use of additional winter flows in the San Lorenzo River for various purposes to solve the regional water supply issues. This project also included the development of Standard Operating Procedures, data organization, and will continue through the operating budget indefinitely.	To close	Perez, Sarah
c701609 & c701610	ASR Planning	Evaluate the feasibility of Aquifer Storage and Recovery (ASR) in the Mid County and Santa Margarita Groundwater Basins per the recommendations of the Water Supply Advisory Committee. Project would potentially provide additional potable water to City and other agency customers, addressing part or all of water supply deficiencies. Project requires feasibility studies, design, permitting, and construction of infrastructure improvements. Funds in FY2021 will include ongoing pilot work and groundwater modeling. (Project 3.3)	Active	Rivera, Isidro
c702101	ASR Mid County Existing Infrastructure	Evaluate the feasibility of Aquifer Storage and Recovery (ASR) in the Mid County Groundwater Basin per the recommendations of the Water Supply Advisory Committee. This project looks specifically at the use of existing infrastructure in the Mid County Basin. (Project 3.3.1)	New	Rivera, Isidro

Water Department CIP Project Descriptions

Project #	Current Project Title	Current Description	Status	Project Manager
c702102	ASR Mid County New Wells	Evaluate the feasibility of Aquifer Storage and Recover (ASR) in the Mid County Groundwater Basin per the recommendations of the Water Supply Advisory Committee. This project looks specifically at the use of new infrastructure in the Mid County Basin. (Project 3.3.2)	New	Rivera, Isidro
c702103	ASR Santa Margarita Groundwater	Evaluate the feasibility of Aquifer Storage and Recover (ASR) in the Santa Margarita Groundwater Basin per the recommendations of the Water Supply Advisory Committee. This project looks specifically at the use of new property, and infrastructure (wells, pipelines, etc.) in the Santa Margarita Basin. (Project 3.3.3)	New Project	Rivera, Isidro
c702104	ASR New Pipelines	Evaluate the feasibility of Aquifer Storage and Recovery (ASR) in the Mid County and Santa Margarita Groundwater Basins per the recommendations of the Water Supply Advisory Committee. Project would potentially provide additional potable water to City and other agency customers, addressing part or all of water supply deficiencies. This project will plan, design, and potentially construct infrastructure requirements (pipes, pumps, etc) for ASR in one or both basins. (Project 3.3.4)	New Project	Rivera, Isidro
c701611 & c701612	Recycled Water Feasibility Study	Evaluate the feasibility of using treated wastewater for beneficial uses as per the recommendations of the Water Supply Advisory Committee. The Recycled Water Facilities Planning Study provided a high level assessment of the potential uses of treated wastewater from the City's Wastewater Treatment Facility. An additional study (Phase 2) will provide more detail about a shortlist of feasible projects and their ability to meet supply shortages. (Project 3.2)	Active	Luckenbach, Heidi
c701701	Newell Creek Pipeline Rehab/Replacement	This Newell Creek Pipeline was constructed in the 1960s and extends from Newell Creek Dam to the Graham Hill Water Treatment Plant. The pipeline is experiencing increasing breaks attributed to a combination of age, pipe condition, and unstable geological conditions. This project includes a planning level assessment: hydraulic analysis, evaluation of alternative alignments, recommended phasing, prioritization, lifecycle cost analysis and a program-level environmental impact report. Planning analysis recommends replacement in at least 3 phases, each with their own capital project number and budget: Newell Creek Pipeline Felton/Graham Hill WTP, Newell Creek Pipeline Newell Creek Dam/Felton, and was created, in FY 20 to carry forward initial design and environmental analysis. Another project: “Brackney Landslide Area Pipeline Risk Reduction” is also proceeding into preliminary design, based a FEMA grant funding opportunity. (Project 2.2)	Active	Valby, Doug
c702105	Newell Creek Pipeline Felton/Graham Hill WTP	This project includes approximately 4.5 miles of Newell Creek Pipeline from Felton to the Graham Hill Water Treatment Plant. This segment of pipe was identified as the highest priority segment for replacement. The Project will relocate the pipeline out of Pipeline Road and into Graham Hill Road, avoiding multiple geologic hazards that have caused past breaks. The project will initiate design in parallel with a program level environmental review. This project is intended to ensure continued reliability of this critical water supply transmission main. In Fiscal Year 2021 this project will apply for low interest loan financing through the Water Infrastructure Finance and Innovation Act (WIFIA) program. (Project 2.2.1)	Active	Valby, Doug
c702106	Newell Creek Pipeline Felton/Loch Lomond	This project includes approximately 4.0 miles of Newell Creek Pipeline from Felton to the Loch Lomond Dam. This project is intended to ensure continued reliability of this critical water supply transmission main. Design would begin in Fiscal Year 24. (Project 2.2.2)	New Project	Valby, Doug
c701702	Water Resources Building	This project will provide for new office and storage space for the Watershed Resources Division that is currently housed in temporary trailers. Those trailers will be displaced by the upcoming projects at Graham Hill Water Treatment Plant. There is no available City-owned options so leased space options, are being reviewed.	Active	Crossley, Kevin
c701703	Pressure Regulating Stations	Evaluation and replacement of aging pressure regulating stations (PRS). A PRS maintains (sustains or reduces) downstream pressure in order to deliver sufficient water pressure. The water distribution system contains 15 PRS and they vary in age, with the oldest being 66 years. This project will continue rehabilitation or replacement through FY2021.	To Close	Valby, Doug & McKinney, Terry

Water Department CIP Project Descriptions

Project #	Current Project Title	Current Description	Status	Project Manager
c701704	Security Camera & Building Access Upgrades	Continuation of the evaluation and implementation of security camera and building access upgrades at various water department facilities.	Active	McKinney, Terry
c701705	Water Supply Augmentation	This CIP replaces projects c701402 & c701403 to capture various studies and analyses to support the evaluation of water supply alternatives (ASR, transfers, recycled water) to further the WSAC recommendations. (Project 3.1)	Active	Luckenbach, Heidi
c701706	Aerators at Loch Lomond	Following the condition assessment and design of a new aeration system at Loch Lomond Reservoir, construction of the new system should be completed in FY2020.	Active	Kihoi, Taylor
c701707	CPS 20" RW Pipeline Replacement	Replacement of the Coast Pump Station discharge pipeline. This pipeline coveys on average 90% of the City raw water supply, and has experienced several leaks in recent years. The project consists of microtunneling a new/replacement pipe under the San Lorenzo River at the Coast Pump Station. Design is complete and project has been advertised for bids. Construction is expected to be completed by Fall 2020. (Project 2.3)	Active	Calderwood, Kevin (HDR)
c701708	Graham Hill WTP Tube Settler Replacement	Design and in-kind replacement of tube settlers and related appurtenances. Construction of this project was combined with the GHWTP Flocculator Replacement Project and will be completed in calendar year 2020. (Project 4.1)	Active	Zeman, Matt
c701801	Laguna Creek Diversion Retrofit	The City passively diverts water from Laguna Creek, originally constructed in 1890, into pipelines that carry the water to the North Coast Pipeline. Recent assessments indicate that the facility is in good structural condition; however, multiple deficiencies were identified including sediment accumulation, limited remote operating & monitoring capabilities, access & safety concerns, non-compliance with modern fish screening requirements and ongoing downstream habitat degradation due to the facility operations. This project will design and construct needed improvements. Design, permitting, and environmental review is planned for FY2020 and construction is planned for FY2021. (Project 1.1)	Active	Martinez-Mckinney, Jessica
c701802	N. Coast System Major Diversion Rehab	The City passively diverts water from Majors Creek, originally constructed in 1914, into pipelines that carry the water to the North Coast Pipeline. Recent assessments indicate that the facility is in good structural condition; however, multiple deficiencies were identified including sediment accumulation, limited remote operating & monitoring capabilities, access & safety concerns, non-compliance with modern fish screening requirements and ongoing downstream habitat degradation due to the facility operations. This project will evaluate, design, and construct improvements at the facility pending a planning study update on the forthcoming North Coast System Repair/Replacement project, c701908. (Project 1.2)	Active	Martinez-Mckinney, Jessica
c702002	Brackney Landslide Area Pipeline Risk Reduction	The Newell Creek Pipeline in the Brackney landslide area is susceptible to damage from repeated landslides. This project will replace approximately 875 feet of the pipeline to increase pipeline resiliency and the reliability of supply from Loch Lomond. This project is currently under final stages of consideration by the FEMA Hazard Mitigation Grant Program. This project is a continuation of work and supersedes c701803-Brackney Landslide Risk Reduction. (Project 2.2.3)	Active	Kay, Lewis
c702107	Union/Locust Admin Building Back up Power Generator	The Water Administration Building does not currently have a backup generator. This vulnerability was highlighted during the 2019 Public Safety Power Shutoffs (PSPS). The administration building lost power for several days. This interrupted the work of staff and impacted normal business functions in particular the customer service group who handle billing and new account signups. This project is one of several City projects currently under consideration for grant funding by the California Office of Emergency Management Services.	New Project	Genato, Ray (HDR)
c701806	River Bank Filtration Study	This project assesses the feasibility of locating new riverbank filtration wells along the San Lorenzo River near two different existing surface water diversions at Tait and Felton. If found feasible, locations and design parameters for installation of vertical or horizontal wells would be recommended. Construction would be scheduled and budgeted in future years. (Project 4.5)	Active	Luckenbach, Heidi

Water Department CIP Project Descriptions

Project #	Current Project Title	Current Description	Status	Project Manager
c701901	Water Program Administration and Contingency	The City has contracted with HDR Inc., for 5 years to provide Program Management Services. As Program Manager, HDR supplements City staff and brings the additional technical and managerial resources required to implement an expanded Capital Investment Program. Funding for this project will also function as a contingency reserve to cover unplanned but predictable cost increases in any separate project under the Capital Investment Program.	Active	Crossley, Kevin
c701903	Tait Diversion Rehab/Replacement	Phase 1 includes initial visual condition assessment and preliminary engineering for diversion intake site (dam, intake structures, and fish passage) and, if needed, design and permitting services for near term rehabilitation. A future phase of work includes full condition assessment of the Coast Pump Station that will include alternatives to mitigate against flooding. (Project 1.3.1)	Active	Kihoi, Taylor
c701904	Newell Creek Access Rd Bridge	The footings of this bridge had been eroding due to Newell Creek. This project completed construction in October of 2019; years 2-5 of the monitoring, maintenance, and reporting for environmental permits will be charged to the operating budget starting in FY 2021.	To close	Van Der Maaten, Leah
c701905	Programmable Logic Controllers (PLC) Upg	This project will enable better integration of future CIP projects at the Graham Hill Water Treatment Plant with the PLC system.	To Close	McKinney, Terry
c701906	Felton Diversion Pump Station Assessment	This project consists of evaluation of the existing dam and pump station with recommendations for improvements to the facility which may include new pumps and drives to improve energy efficiency, as well as fish passage modifications. (Project 1.4)	Active	Kihoi, Taylor
c701907	Facility & Infrastructure Improvements	Various capital improvements projects under $200K. Specific projects to be identified annually.	Active	Crossley, Kevin
c701910	Bay St Reservoir Storage Building	This project will create alternative storage space for critical spare parts and materials. Currently important backup materials are stored at the Coast Pump Station, which is prone to flooding. Extensive inventory damage was sustained during the 2017 winter storms. The project scope includes design and construction of a concrete foundation and installation of a prefabricated building for storage at the Bay Street Reservoir.	Active	Grube, Sydney
c702001	Distribution System Water Quality Improvements	Certain zones of the water distribution system have the potential to experience elevated water age, and low chlorine residuals. To avoid high water age, these areas are flushed to improve water turnover and maintain water quality. This practice consumes operations staff time, and increases water loss. This project will identify infrastructure improvements (tank aerators) to improve water turnover, enhance water quality, reduce water waste, and improve operations efficiency. (Project 4.4.1)	Active	Valby, Doug
c709833 & c700017	Main Replacements - Eng Section - Transmain	Similar to c700002, Main Replacements, this project specifically funds water transmission mains, or pipes 10" or larger. This project is funded partially by System Development Charges (20% SDC – Fund 715).	Active	Valby, Doug
e701706	Carbonera Tank Access Rd	Landslide damage repair for the road accessing the Carbonera tank. Repairs are approved for FEMA reimbursement. Work was completed in Fiscal Year 2020.	To close	Kay, Lewis
c701908	N Coast System Rehab/Replace - Planning	The City diverts water from several north coast streams to the North Coast Pipeline. The North Coast System Rehab project (c. 2005) was planned to be implemented in phases over a 15-20 year timeframe to evaluate, rehabilitate and/or replace portions to ensure continued reliability. Project c709835 funded phases 2-3 which are complete; this project (c701908) will fund a planning update in FY 2021, as work is needed to prioritize the remaining phases, and complete a hydraulic analysis and pipe sizing analysis given reduced diversion volumes due in stream flow commitments. Future phases of design and construction will be implemented under new project numbers. (Project 2.1)	Active	Crossley, Kevin
c702108	N. Coast Repair Ph4 Des and Const	This project relates to projects c709835 and c701908 and implements Phase 4 of a program that initially contemplated six phases to replace the North Coast System. In Fiscal Years 2021 and 2022 the planning work will occur under project c701908 to perform hydraulic analyses and siting studies to define the scope, schedule and budget for Phase 4. Once defined, Phase 4 work is scheduled to begin in FY 2024 with initial	Active	Crossley, Kevin

Water Department CIP Project Descriptions

Project #	Current Project Title	Current Description	Status	Project Manager
		environmental work and continue in FY2025 with final environmental work and design, followed by construction. (Project 2.1.1)		
c702109	N. Coast Repair Ph5 Des and Const	This project relates to projects c709835 and c701908 and implements Phase 5 of a program that initially contemplated six phases to replace the North Coast System. In Fiscal Years 2021 and 2022 the planning work will occur under project c701908 to perform hydraulic analyses and siting studies to define the scope, schedule and budget for Phase 5. Once defined, Phase 5 work is scheduled to begin in FY 2025 with initial environmental work, followed in future years with final environmental work, design and construction. (Project 2.1.2)	Active	Crossley, Kevin

City of Santa Cruz Water Department Pro-Forma Projections										
Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Revenues										
Rate Revenue										
Fixed Fee Revenue	$ 3,572,322	$ 3,601,780	$ 3,778,885	$ 4,557,513	$ 5,281,773	$ 5,899,360	$ 6,777,764	$ 7,556,850	$ 7,937,690	$ 8,295,294
Volumetric Revenue	$ 36,839,330	$ 37,143,109	$ 38,969,497	$ 46,999,045	$ 54,467,929	$ 60,836,749	$ 69,895,225	$ 77,929,501	$ 81,856,890	$ 85,544,657
Elevation Surcharges	$ 334,080	$ 352,788	$ 352,788	$ 352,788	$ 352,788	$ 352,788	$ 352,788	$ 352,788	$ 352,788	$ 352,788
Rate Stabilization Revenue	$ 3,163,368	$ 3,163,368	$ 3,163,368	$ 3,163,368	$ 3,163,368	$ 3,163,368	$ 3,163,368	$ 3,163,368	$ 3,163,368	$ 3,163,368
Manual Revenue Adjustment (Fire Service)	$ 60,658	$ 63,164	$ 63,164	$ 63,164	$ 63,164	$ 63,164	$ 63,164	$ 63,164	$ 63,164	$ 63,164
Total Rate Revenue	$ 43,969,758	$ 44,324,210	$ 46,327,703	$ 55,135,879	$ 63,329,023	$ 70,315,429	$ 80,252,309	$ 89,065,671	$ 93,373,901	$ 97,419,272
Non-Rate Revenue										
Other Income	$ 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	$ -
Investment Income	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ -
Total Non-Rate Revenue	$ 1,250,000	$ 1,250,000	$ 1,250,000	$ 1,250,000	$ 1,250,000	$ 1,250,000	$ 1,250,000	$ 1,250,000	$ 1,250,000	$ -
Total Revenues	$ 45,219,758	$ 45,574,210	$ 47,577,703	$ 56,385,879	$ 64,579,023	$ 71,565,429	$ 81,502,309	$ 90,315,671	$ 94,623,901	$ 97,419,272
Operating Expenses										
Personnel	$ 17,039,331	$ 17,937,272	$ 18,896,959	$ 19,923,378	$ 21,021,945	$ 22,198,547	$ 23,459,582	$ 24,812,006	$ 26,263,379	$ 27,821,924
Services, Supplies & Other	$ 16,151,779	$ 16,959,368	$ 17,807,336	$ 18,697,703	$ 19,632,588	$ 20,614,218	$ 21,644,928	$ 22,727,175	$ 23,863,534	$ 25,056,710
Capital Outlay	$ 207,900	$ 218,295	$ 229,210	$ 240,670	$ 252,704	$ 265,339	$ 278,606	$ 292,536	$ 307,163	$ 322,521
Other Operating Expenses	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Operating Expenses	$ 33,399,010	$ 35,114,935	$ 36,933,505	$ 38,861,751	$ 40,907,237	$ 43,078,103	$ 45,383,117	$ 47,831,717	$ 50,434,075	$ 53,201,156
Net Operating Revenues	$ 11,820,747	$ 10,459,275	$ 10,644,198	$ 17,524,128	$ 23,671,786	$ 28,487,326	$ 36,119,192	$ 42,483,955	$ 44,189,826	$ 44,218,116
Capital Expenditures	$ 79,503,628	$ 85,862,837	$ 71,522,016	$ 48,033,368	$ 66,888,226	$ 103,536,556	$ 88,982,756	$ 25,765,360	$ 16,482,472	$ 3,183,665
Grant Funded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
SRF Funded	$ 54,230,844	$ 58,858,126	$ 32,547,872	$ 2,540,495	$ -	$ -	$ -	$ -	$ -	$ -
WIFIA Funded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Currently Funded	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Pay-Go Funded	$ 8,490,000	$ 2,640,216	$ 2,650,662	$ 4,890,460	$ 6,881,863	$ 8,421,542	$ 10,901,802	$ 12,945,215	$ 13,446,587	$ 3,183,665
Debt Funded	$ 16,782,784	$ 24,364,495	$ 36,323,483	$ 40,602,412	$ 60,006,364	$ 95,115,014	$ 78,080,953	$ 12,820,145	$ 3,035,886	$ 0
Debt Service	$ 3,316,361	$ 6,973,571	$ 7,097,457	$ 13,815,618	$ 15,847,075	$ 18,994,700	$ 24,084,402	$ 28,328,942	$ 29,466,384	$ 29,498,811
Net Income	$ 14,386	$ 845,488	$ 896,079	$ (1,181,949)	$ 942,848	$ 1,071,084	$ 1,132,988	$ 1,209,798	$ 1,276,855	$ 11,535,640
Total Cash Balances										
Beginning Total Cash Balance	$ 30,808,631	$ 30,823,017	$ 31,668,505	$ 32,564,584	$ 31,382,635	$ 32,325,483	$ 33,396,567	$ 34,529,555	$ 35,739,353	$ 37,016,208
I-Bank Reimbursements	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Calculated Change to Cash Balances	$ 14,386	$ 845,488	$ 896,079	$ (1,181,949)	$ 942,848	$ 1,071,084	$ 1,132,988	$ 1,209,798	$ 1,276,855	$ 11,535,640
Ending Total Cash Balance	$ 30,823,017	$ 31,668,505	$ 32,564,584	$ 31,382,635	$ 32,325,483	$ 33,396,567	$ 34,529,555	$ 35,739,353	$ 37,016,208	$ 48,551,849
Beginning Cash Balances by Fund										
Fund 717 (Emergency Reserve)	$ 3,100,000	$ 3,100,000	$ 3,100,000	$ 3,100,000	$ 3,100,000	$ 3,100,000	$ 3,100,000	$ 3,100,000	$ 3,100,000	$ 3,100,000
Fund 713 (Rate Stabilization)	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000
Fund 716 (90 Day Operating Reserve)	$ 7,994,613	$ 8,235,372	$ 8,658,477	$ 9,106,892	$ 9,582,350	$ 10,086,716	$ 10,621,998	$ 11,190,357	$ 11,794,122	$ 12,435,799
Fund 711 (Water Operations)	$ 9,714,018	$ 9,487,645	$ 9,910,028	$ 10,357,693	$ 8,700,286	$ 9,138,767	$ 9,674,569	$ 10,239,198	$ 10,845,232	$ 11,480,409
Changes to Cash Balances by Fund										
Fund 717 (Emergency Reserve)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fund 713 (Rate Stabilization)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fund 716 (90 Day Operating Reserve)	$ 240,760	$ 423,105	$ 448,415	$ 475,458	$ 504,366	$ 535,282	$ 568,359	$ 603,764	$ 641,678	$ 682,294
Fund 711 (Water Operations)	$ (226,374)	$ 422,384	$ 447,665	$ (1,657,407)	$ 438,482	$ 535,802	$ 564,629	$ 606,034	$ 635,178	$ 10,853,346
Ending Cash Balances by Fund										
Fund 717 (Emergency Reserve)	$ 3,100,000	$ 3,100,000	$ 3,100,000	$ 3,100,000	$ 3,100,000	$ 3,100,000	$ 3,100,000	$ 3,100,000	$ 3,100,000	$ 3,100,000
Fund 713 (Rate Stabilization)	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000	$ 10,000,000
Fund 716 (90 Day Operating Reserve)	$ 8,235,372	$ 8,658,477	$ 9,106,892	$ 9,582,350	$ 10,086,716	$ 10,621,998	$ 11,190,357	$ 11,794,122	$ 12,435,799	$ 13,118,093
Fund 711 (Water Operations)	$ 9,487,645	$ 9,910,028	$ 10,357,693	$ 8,700,286	$ 9,138,767	$ 9,674,569	$ 10,239,198	$ 10,845,232	$ 11,480,409	$ 22,333,755
Coverage and Targets										
Debt Service Coverage (W/Out Reserves)	3.56x	1.50x	1.50x	1.27x	1.49x	1.50x	1.50x	1.50x	1.50x	1.50x
Debt Service Coverage Target	1.50x	1.50x	1.50x	1.50x	1.50x	1.50x	1.50x	1.50x	1.50x	1.50x
Debt Service Coverage (W/Reserves)	12.86x	6.04x	6.09x	3.54x	3.53x	3.26x	2.93x	2.76x	2.76x	3.14x
Days' Cash (Includes only Funds 711 & 716)	194	193	192	172	172	172	172	173	173	243
Days' Cash Target	180	180	180	180	180	180	180	180	180	180