



Water Department

Water Commission
7:00 p.m. – March 5, 2018
Council Chambers
809 Center Street, Santa Cruz

Summary of a Water Commission Meeting

Call to Order: 7:00 PM

Roll Call

Present: Present: L. Wilshusen (Chair), D. Engfer (Vice-Chair), D. Baskin, J. Mekis, A. Schiffrin, D. Schwarm, W. Wadlow

Absent: None

Staff: R. Menard, Water Director; H. Luckenbach, Deputy Director/Engineering Manager; N. Dennis, Principal Management Analyst; K. Crossley, Sr. Professional Engineer; B. Pink, Environmental Projects Analyst; D. Culver, Acting CFO; K. Fitzgerald, Administrative Assistant III

Others: 6 members of the public.

Presentation: None.

Statement of Disqualification: None.

Oral Communications: One public comment was received by Becky Steinbruner.

Announcements: None.

Consent Agenda

1. City Council Items Affecting Water
2. Approve February 5, 2018 Water Commission Minutes
3. 2018 Water Supply Outlook - Update

Commissioner Schiffrin moved the consent agenda. Commissioner Baskin seconded.

VOICE VOTE: MOTION CARRIED

AYES: All

NOES: None

ABSTAIN: None

General Business

4. FY2019-2028 Capital Improvement Plan Summary

A presentation of the project components of the FY 2019- 2028 Capital Improvement Plan (CIP) Summary was given by H. Luckenbach, Deputy Director/Engineering Manager. Note: this presentation was purposefully designed to focus on the projects rather than the financial aspects of the CIP, which will be covered in detail in the budget discussion at the May 7th Water Commission meeting.

Is this the first time that this format for the Capital Improvement Plan has been presented?

- Yes. The purpose of presenting the projects in this format was to show the schedule and work flow for each project (without budget as another data point) as a preface for future discussions when projects are further prioritized and/or shifted per HDR's validation and workload analysis.

What is the strategy of the current Capital Improvement Plan in regards to the prioritization of the projects? Could the presentation of the plan be reorganized to better show how projects are prioritized?

- The project implementation schedule developed for this presentation was intended to show each project by its existing category – rehabilitation/replacement, upgrades, supplemental supply - and is the same format used with the quarterly financial report. This format indicates where there is some flexibility in the planning and implementation of projects.
- The Department is working with HDR to develop a schedule that will reflect staff's analyses of resources and funding required to complete the projects. The resulting schedule may show projects more evenly spread throughout time, which would be done as part of the need to levelize resources. One outcome of this effort will be that it will necessarily prioritize projects.
- The commission's input (e.g., showing priority projects first, being consistent with terms, etc.) will be included in the next version.

Should Desalination also be listed under the "Water Supply Reliability & Studies" section until the final recommendations and decisions are made concerning the water supply?

- The Department can certainly relist Desalination to reflect that status. The current desalination feasibility study has been funded out of the Water Supply Augmentation Strategy project. A footnote can be added to the chart to show this categorization for future clarification and or a new line item.

What are the major considerations for determining the location of the intake gate pipes for the Newell Creek Inlet/Outlet Project?

- The two primary drivers for locating and sizing the intakes for the project are: 1) ability to deliver water to the reservoir and from the reservoir at the required volume rate and 2) providing flexibility to draw water from different elevations within the reservoir in order to optimize water quality.

Why is the University No. 5 (U5) Tank Replacement not eligible for State Revolving Funds (SRF)?

- This project consists of three elements: pipeline replacement, installation of a maintenance tank (to function as temporary storage during construction), and replacement of the U5 tank. The Department initially thought SRF loans could fund a portion of this project, specifically the U5 tank. However, the SRF staff considers the entire project when considering eligibility and because work had already begun on the maintenance tank and pipeline, the entire project was ineligible from receiving funding through the SRF.

Can the Department provide a description of the Union Locust Street Building Expansion?

- The Water Department currently occupies a portion of the first floor of the Union Locust Street Building for staff functions. (City/County Library occupies the remainder of the first floor and the second.) The Library vacated some space on the first floor last year and the Water Department is expanding into this space. The project will remodel the existing space and add the entire front of the first floor to Water Department use to

accommodate current and future staff additions and the project management staff brought in from HDR.

The chart shows that the Department has four years to complete the planned projects for the Graham Hill Water Treatment Plant; how can the remaining infrastructure improvements be outlined to reflect this timeline?

- Water treatment is a major issue at the center of much of our capital planning. Three basic issues need to be addressed in the planning work that will be done in the coming months: the physical and seismic condition of the plant, what upgrades, if any, need to be made to the treatment process to deal with the changed water quality of the current and anticipated future mix of sources of supply without assuming major investments in upgrades to treat winter water, and the increments of treatment plant upgrades required to treat significant quantities of winter water. The Department is planning on bringing an item on these water treatment issues and how they relate to the water supply augmentation strategy in the late fall or winter of 2018/2019. That discussion will provide the opportunity to more fully respond to this question.

Are there any Water Supply Augmentation Strategy projects in the Capital Improvement Plan that are more than six months behind schedule?

- There are currently no projects that are more than six months behind schedule. In fact, at this time the only delay is with the groundwater modeling which is estimated at being approximately 4 months behind schedule.

What is the current status of the Pipe Loop study?

- The work on evaluating surface water- groundwater compatibility is taking place in two phases under the Black & Veatch contract. The first phase is the bench scale testing program, where samples of pipes are harvested and placed in test beakers with finished water to replicate potential future conditions of the pipes. Corrosion effects are evaluated after a period of ~3 months and a full report is expected in May when more decisions can be made on what actions should be taken on second phase. The second phase would involve a pilot-scale Pipe Loop study. There will be no recommendation as to whether or not to pursue phase two until the full report on phase one has been completed.

Is the Santa Cruz Water Department the lead agency in the Pipe Loop study?

- Yes, the Department is the leading agency and is contracted to manage this study by Soquel Creek Water District. Soquel Creek Water District will reimburse the City for 50% of the work completed by the consultant.

Is the bench scale phase causing the delay in the Pipe Loop study?

No. Bench scale testing is less expensive and less time consuming than a full scale pipe loop study and may very well produce all the information that the City and Soquel Creek Water District will need to make a decision about whether or how to proceed with in lieu water transfers.

Will the water that would be produced from any successful river bank infiltration system be considered surface river water or ground water under the State's water rights laws and policies?

- Similar to the water extracted from the Tait wells, the water extracted from riverbank filtration would be considered as surface water and treated as such.

A member of the public commented and suggested including cost data in any future presentations on the CIP.

- Staff responded that the Department's decision not to include CIP project cost data at this time was made in an attempt to highlight the work phases of each project. As noted earlier, cost data will be presented and discussed in the context of the comprehensive budget discussion planned for the May 7th Water Commission meeting.

One additional member of the public commented on topics that were covered in the meeting summary details provided for this agenda item.

5. Draft Agenda for the April 10, 2018 Joint Meeting of the Santa Cruz City Council and the Santa Cruz Water Commission

The Draft Agenda for the April 10, 2018 Joint Meeting of the Santa Cruz City Council and the Santa Cruz Water Commission was presented by R. Menard, Water Director.

Can the Department provide further information to the Water Commission on the Water Supply Augmentation Strategy decision making framework to be presented in Item 3 of the Draft Agenda before the Joint Meeting with City Council?

- Yes, the Department will be providing a presentation and a follow up discussion on Item 3 as well as the other items at next month's Commission meeting. Also, the Commission had a presentation on the Water Supply Advisory Committee's (WSAC) recommended decision-making framework at its November meeting.

Will a discussion on the fishery flows management in the river for this year be covered in the materials and presentation of the 2018 water supply outlook in Item 1?

- Yes that discussion will be included.

A Commissioner commented that it would be beneficial to use the opportunity of the joint meeting to clarify whether the water demand forecast used by WSAC and subsequently in the 2015 update of the City's Urban Water Management Plan contemplated the kind of growth in student population currently being projected by UC Santa Cruz.

One member of the public commented on topics that were covered in the meeting summary details provided for this agenda item.

6. Water Supply Augmentation Strategy, Quarterly Work Plan Update

Please explain No.5 Home Water Use Report on page 6.2

- This is a Demand Management option that is included in the Water Conservation Master Plan. It is an approach that uses the principles of social norming to influence water use. Water usage data for single family residential customers is provided to customers in a printed report or via a customer information portal. A household's usage will be compared to other similar households with a goal of incentivizing those using more water than similar households in their neighborhood to take steps to reduce their water use. Similar water monitoring programs are currently being utilized by other agencies in the Bay Area.

How can redundancy be avoided in accessing customer water usage from Advanced Metering Infrastructure (AMI) based data and separate non-AMI based data software?

- If the Department were to develop a customer portal as a way to deliver home water use reports now and later fully implement AMI, the idea would be to merge AMI data and a customer portal so as not to have competing customer portals.

Will the Home Water Use monitoring option become available to all residents who receive water services through the City?

- The long-term goal of the Department is to provide all city residents access to their water usage data via web portals; but for now it is only available to the test group of customers who will receive a mailed letter that provides online access to water usage data. This letter is part of the pilot program for online access to water usage data. Another tool that is being considered by the Department is providing printed reports targeted to the top 20-30% of the highest water users that will detail their current and goal usage levels, and provides local comparisons to influence lower water usage levels.

Please elaborate on the term GRR found on page 6.5.

- GRR and GRRP are used in the industry to describe Groundwater Replenishment Reuse Projects. These projects involve the planned use of recycled municipal wastewater for the purpose of replenishing a groundwater basin.

What quantity of water for groundwater replenishment was identified as being available to the City from the recycled water study and will that volume be enough to meet the City's needs if Soquel Creek's Pure Water Soquel project goes forward?

- The Recycled Water Feasibility Planning Study identified the seasonal and diurnal volumes of water available from the City's wastewater treatment facility. The project studied to date included the Pure Water Soquel Project plus GRR for the City with the remainder of the available summer flow; the most conservative approach. This analysis, while encouraging in terms of the injection and extraction capability of the basin, was limited by the volume of water available in the summer, and injection/extraction in the City's service area. The next step will be to analyze non-summer volumes (which will be higher than summer time) and additional wells to better understand the feasibility of joint GRRPs.

Is water compatibility (between the source water and native groundwater) an issue with GRRPs?

- It is possible that water compatibility could be an issue. Soquel Creek Water District is conducting its own compatibility tests with the source water and advanced treated recycled water for the Pure Water Soquel Project which could provide some useful data.
- At the end of the discussion on desalination on page 6.9, there is a reference to a planned meeting with state agency staff to discuss the implications of the Ocean Plan Amendment on a potential desal plant option. Which state agencies are going to participate, and what will be their familiarity with the work the City has already done on desal? The Department will be meeting with staff from the California Coastal Commission (CCC), Central Coast Regional Water Quality Control Board (CCRWQCB), State Water Resources Control Board (SWRCB) to discuss the Desalination Feasibility Update Review in the context of the 2016 Ocean Plan Amendment (OPA) which adds requirements to seawater desalination intakes and discharges. Regarding their familiarity with the feasibility and process of desalination, the CCC and RWQCB staff were both involved in the scwd2 project, and the SWRCB staff is tasked with implementing the 2016 OPA so they all should be very familiar.

Can the Department provide a copy of the summary of the new approach to climate change that has been developed and is being used in the ongoing work looking at Aquifer Storage and Recovery?

- Yes, the work on a summary memo is underway. In addition to the memo, the Department is planning on having Shawn Chartrand provide a presentation to the Commission that details the approach he took to developing this updated projection for future climate change. We expect to schedule that presentation for some time in the next three to six months.

How can residents who have already subscribed to receiving their bills online be notified of the Dishwasher Rebate program referenced on page 6.2?

- Last month, bill inserts describing the new dishwasher rebate program were included in customer bills. For those customers receiving online bills, access to any informational updates included in bills at <http://www.cityofsantacruz.com/government/city-departments/water/conservation/rebates/energy-star-clothes-washer-rebates>

Is there a sample of the marketing for the pilot project on Advanced Metering Infrastructure (AMI) on page 6.2?

- As noted in the write up, the Department is conducting an evaluation of how having information affects the way irrigation water is being used. The test group is split into two (a control and a treatment group) with the treatment group receiving “marketing materials” (a letter) that lets them know how to access their account and use the information available online to manage their use. The control group will not receive this information. Data from the two groups for usage between May and November this year will be evaluated late this year.

Where can the Trussell Technologies report referenced on page 6.7 be accessed publicly?

- The report is available on the City website and the Department will follow up after the meeting to ensure it is available. <http://www.cityofsantacruz.com/government/city-departments/water/online-reports>

How will the Trussell Technologies Source Water Monitoring evaluation be used in considering the potential for using river bank filtration to reduce turbidity during the winter?

- A significant amount of previously unavailable information on the water quality parameters of the City’s various source waters has been collected and analyzed during the last two years. This data creates a foundation for evaluating a variety of additional opportunities and challenges, including whether or to what degree river bank filtration could be an effective approach to reducing turbidity in the San Lorenzo River during the winter, thereby potentially making more water available for use in various storage and water transfer projects.

A member of the public commented on what he believes to be the excellent potential for water transfers to be a useful tool for addressing groundwater depletion in our region.

Subcommittee/Advisory Body Oral Reports

7. WSAS Ad Hoc Committee – Project Evaluation Framework

Commissioner Engfer announced the Ad Hoc Committee is meeting and is in the informational gathering stage.

8. Santa Cruz Mid-County Groundwater Agency

Commissioner Baskin reported the MGA Board Members are in the information gathering stage with the Agency staff and the public in learning the regulatory framework under which all groundwater agencies will operate in regards to water basins and aquifers.

9. Santa Margarita Groundwater Agency

Commissioner Engfer reported the SMGWA Board is in the formative stages. There was Brown Act seminar at the last meeting that provided information on private well owners. Hydro Focus has been selected by the SMGWA as the consultant for the ground water model review and evaluation, and facilitation services are being sought out through an RFQ. The next meeting will take place on April 26th.

Director's Oral Report: The Department will be presenting at a meeting of the Soquel Creek Water District (SqCWD) board meeting on the 20th of March at 6:00pm at the Capitola Council Chambers. The presentation will focus on describing and discussing the Department's work on winter water harvest options including in lieu and ASR. Gary Fiske will be presenting an updated version of the work originally presented in October of 2017.

On the financial side, quarterly cash flow analyses on CIP spending has indicated that we will need between \$7 and \$11 Million to complete the work planned for the remainder of this fiscal year (through June 30th). This is a planned situation, as the 2016 Long Range Financial Plan includes financing about 75% of the CIP through issuing long term debt. As we aren't quite ready to move forward with issuing debt we have determined that obtaining a Revolving Line of Credit would be a good way for us to provide bridge funding until later this year or early in the next calendar year when we will be in a better position to define what spending we will need to finance over the coming three years. The Revolving Line of Credit is a strategy for short term borrowing at lower interest rates that could better manage current and future expenditures.

Is the requested amount between \$7 million - \$11 million needed to cover costs for this fiscal year?

- Yes, it is to cover expenditures through the end of this fiscal year.

Why does the Department need this additional funding?

- This additional funding will further advance the stages of the projects that are in the Capital Improvements Plan. For example, the work with consultants AECOM and HDR, Inc. to move Newell Creek Dam Inlet/Outlet project to 100% design.

How has the \$25 million loan from Ibank been spent?

- There was a reimbursement resolution that was approved in April of 2014. From April 2014 to the time the Ibank loan was finalized, the Department accumulated expenditures that had to be reimbursed when the loan funds were finally received. The money was absorbed into the system to replenish the Department's reserves, the 90 day cash reserve, and to prepare the fund balance for the future.

What is the range of the funding that can be borrowed from the Revolving Line Credit?

- The Department expects to establish a line of credit for between \$25 and \$50 Million.

When will the WSAC Annual Report be available?

- As of today, the report has gone to the printer and will be mailed to the customers first.

Final Comments and Requests for Follow up.

1. Provide an update on the Water Supply Outlook in April 2018.

2. Ensure the public access to the Trussell Technology report on Source Water Monitoring on the City website.

Adjournment Meeting adjourned at 9:06 PM.

Respectfully submitted,

Katy Fitzgerald
Staff