



Water Department

**Water Commission**  
7:00 p.m. – February 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:** H. Luckenbach, Deputy Director/Engineering Manager; N. Dennis, Principal Management Analyst; T. Goddard, Conservation Manager; K. Crossley, Sr. Professional Engineer; D. Kehn, Assistant Engineer; T. Ronne, Associate Professional Engineer; S. Perez, Planner; D. Valby, Associate Professional Engineer; M. Kaping, Management Analyst; P. Daniel, HDR; M. Zeman, Engineering Associate; K. Fitzgerald, Administrative Assistant III

**Others:** 7 members of the public.

**Presentation:** None.

**Statement of Disqualification:** None.

**Oral Communications:** Three public comments; Becky Steinbruner, Terry Maxwell, Peter Ventura

**Announcements:** Katy Fitzgerald was announced as the new staff to the Water Commission.

**1. Election of Water Commission Officers**

The floor was opened for nominations for the 2018 Water Commission Chair. Commissioner Baskin nominated Commissioner Wilshusen to remain Chair for 2018.

VOICE VOTE: MOTION CARRIED

AYES: All  
NOES: None  
ABSENT: None

The floor was opened for nominations for the 2018 Water Commission Vice Chair. Commissioner Baskin nominated Commissioner Engfer to remain Vice Chair for 2018.

VOICE VOTE: MOTION CARRIED

AYES: All  
NOES: None  
ABSENT: None

**Consent Agenda**

- 2. City Council Items Affecting Water
- 3. Approve December 4, 2017 Water Commission Minutes

4. 2<sup>nd</sup> Quarter FY 2018 Financial Report
5. Water Commission Workplan for 2018

Commissioner Schiffrin moved the consent agenda. Commissioner Baskin seconded

VOICE VOTE: MOTION CARRIED

AYES: All

NOES: None

ABSTAIN: Commissioners Wilshusen and Commissioner Schwarm abstained from the December 4, 2017 Water Commission Minutes due to excused absences.

## **General Business**

### 6. Award from the Alliance for Water Efficiency

A presentation of the Award from the Alliance for Water Efficiency was given by T. Goddard, Conservation Manager.

How many cities in the United States have received the Platinum level award?

- None. The City of Santa Cruz is the first utility in the nation to be recognized with Platinum status with this organization. Although the AWWA G480 is fairly new, the Alliance for Water Efficiency aims to encourage other cities to achieve the same goals of water conservation and water efficiency.

Is there a plan to publicize this award with the community?

- Yes. We plan to announce our award on the City and Department social media platforms. In addition we plan to use the logo in our publication. We also plan to make a similar presentation to the City Council at an upcoming meeting.

Commissioners remarked that the award recognizes the City's values and reflects the City's customers' work and commitment.

### 7. Presentation of the Capital Improvement Projects

A presentation and staff report on the Capital Improvements Projects were introduced by H. Luckenbach, Deputy Director/Engineering Manager.

There were no comments or questions following this portion of the presentation.

Presentations on the North Coast System Rehabilitation and Tait Wells Replacement projects were provided by K. Crossley, Senior Professional Engineer.

Please comment on the source water quality that is coming from the Tait Wells.

- It is consistently meeting drinking water standards with the exception of dissolved iron which is removed during treatment at the Graham Hill Water Treatment Plant.

Where does the responsibility lie within the Department for the multi-year maintenance and monitoring regulatory requirement for revegetation, as stated in the staff report for the North Coast Pipeline project?

- The Department maintains a spreadsheet that captures all of the regulatory requirements including those for this project. The Department has entered into a long term agreement with an outside contractor for the management of weed growth in the revegetation zones. This was included in the mitigation program due to the work being done in red-legged frog and red herring habitats which have specific revegetation requirements.

A presentation on the Graham Hill Water Treatment Plant Filter Rehabilitation project was provided by M. Zeman, Engineering Associate.

Does this improvement increase the ability to treat turbid water from the river?

- That was not the goal of this project. One of the limiting factors with higher turbidity water is the solids that are coming out of it during the initial phases of the treatment process. Solids removal is being considered for the tanks project and other process improvements at the plant. The filters are robust and capable of handling intense conditions,-on a short term basis, like those witnessed during the past winter storm events.

A presentation on the Bay Street Reservoir Replacement project was provided by D. Valby, Associate Professional Engineer.

There were no comments or questions following this portion of the presentation.

A presentation of the Emergency projects was provided by D. Valby, Associate Professional Engineer.

Were the curtailment objectives requested and not met during these events evaluated?

- There are different theories as to why demand did not change after calls for curtailment. One of them being that in the peak of winter, no one is watering or other non-essential water uses so there is not a lot of room to conserve. It is difficult for the public to understand the need to conserve water when there is substantial flooding.

Is there a plan to improve communication with the community on the importance of water conservation/curtailment during extreme water emergencies?

- Yes, improved methods are being considered for future incidents. If this situation had continued, restrictions on water usage would have had to be implemented. The Department kept a close eye on water use and storage and would have increased active engagement in the community via sign, press release, TV, radio, and even bullhorns if needed.

A presentation of the Newell Creek Dam Inlet/Outlet was provided by H. Luckenbach, Deputy Director/Engineering Manager.

Please elaborate on the operational flexibility of the replacement. What is the hydraulic capacity of the pipeline feeding the reservoir, the Newell Creek Pipeline?

- This pipeline is being designed for 13MGD, which is consistent with the water rights of the Felton Diversion. That said, the hydrology of the river is being examined to further understand the water quality and quantity to determine if a 13 MGD pipeline is the best design parameter for the capacity of the reservoir or if it should be upsized.

What is the current capacity of the pipeline?

- It is 13MGD, but there are concerns about the pressure rating of the pipe depending on the varying levels of water in the reservoir.

A presentation of the U5 Reservoir Tank Replacement project was provided by T. Ronne, Associate Professional Engineer.

What is a jurisdictional wetland?

- Jurisdictional wetlands are regulated by the CA Department of Fish and Wildlife and U.S. Army Corp of Engineers. Areas receive this designation due to the nature of the soil and wildlife habitability. The wetland was unintentionally created during the grading of a large flat area where the tank was originally built. This caused the exposure of the groundwater and thus created a wetland in that area. It now provides habitats to the surrounding vegetation and wildlife.

Where is the tank being shipped from?

- It is being shipped from Oklahoma.

A presentation on the Loch Lomond ADA improvements was provided by M. Zeman, Engineering Associate.

There were no comments or questions following this portion of the presentation.

A presentation on the annual water main replacements was provided by D. Kehn, Assistant Engineer II.

Can an update on the Union Locust Building Expansion Project from the Capital Improvement Projects list be provided at this time?

- This is a remodel to the existing department's downtown offices to accommodate existing staff that we do not have space for, as well as the Program Management group, HDR. Approval of the plans and specs is scheduled for the March 13 City Council meeting.

How is the bladder replacement at Felton Diversion being scheduled; is there consideration being taken regarding for the potential dryness that may occur the in fall of 2018?

- The schedule is being driven by the amount of time it will take to acquire the materials and time required to meet permit requirements. It is being planned for a time when the river will presumably be at its lowest. The construction schedule should be short enough so as not to impact raising the dam as needed next winter.

Why was it necessary to expand the Graham Hill Water Treatment Plant tank replacement project to include UV Treatment and sludge dewatering?

- A condition assessment was conducted several years ago that resulted in a recommendation for replacement of these tanks. UV treatment and solids handling were added during the design phase of the project in response to the likelihood that there will be increased amounts of solids to manage in the future and to the potential opportunity for controlling disinfection byproduct formation by reducing chlorine use through the treatment process and replacing some of that disinfection with inactivation using ultraviolet light. And permit limitations for discharge to our waste-water treatment plant also need to be taken into account. As design proceeds, these two possible treatment process changes will continue to be evaluated.

Becky Steinbruner and Peter Ventura spoke as members of the public and relevant points have been included in the summary above.

#### 8. Update on the HDR Contract for Program Management Services

A presentation on the HDR Contract for Program Management Services was provided by K. Crossley, Senior Professional Engineer and P. Daniel, HDR.

Is the accumulated spending for this project going to literally reach \$10 billion dollars as indicated in the presentation?

- No, that is for illustrative purposes only and does not represent actual figures or costs.

The upsides of integrating expanding numbers of consultants have been presented. What other factors are worth mentioning that affect the outcomes of projects and any downsides of this approach?

- Historically, project delays have been caused by issues such as disproportionate project load and staffing, and unforeseen permitting and right of way issues. Program management and the staff and tools they bring will improve this. Examples of tools include the development and use of risk registers, more sophisticated forms of scheduling and resource analysis, and use of other forms of project delivery, such as design build. These are intended to deliver projects on schedule and budget.

Is there a parallel project decision-making model for alternative project delivery approaches?

- Yes, there will be separate project delivery models for projects that may be suitable for delivery through approaches such as Construction Manager (CM) at Risk or design-build. The Department is working through the City Attorney's office to obtain and approve different contract documents for CM at risk and design-build projects.

Which projects are being considered for alternative project delivery?

- The treatment plant is at the top of list for the Alternate Project delivery model due to the complexity of the project.

What does it mean to have a blended staff consisting of HDR and City personnel per the reference to Program Management Office page 8.18 for "Program Mobilization"?

- Thus far, there are four engineering staff members working nearly full time on projects within the program that will be designated as Project managers or technical leads. The idea is to have HDR and existing staff work closely on projects to share skills and learn new tools as described above.

Does HDR have previous experience in providing direct day to day training support and seminars to city staff, as referenced under section 8.22 Task 3.9 from the master service agreement?

- Yes, HDR has worked with multiple agencies where blended sets of staff were utilized and where they were tasked with provided similar training, seminars and support.

What is the potential size of the group that is being developed per the reference under section 8.56 under task 3.9? What area within the Department is being considered for PMP certifications through Project Management Institute?

- The size of the group is not finalized and a final workforce development plan has not been developed. The PMP certification is an example of a specific goal set to achieve a certain training objective.

Is there a plan for the information that is compiled using these methods to be transferred to the methods currently used by the City?

- Yes. The IT systems assessment does not singularly focus on documentation management. It examines the varieties of software being used by the entire organization from financial management to record keeping. The objective is to build on what is already in use instead of updating or replacing software. The Department is avoiding costly customization and specialization. The goal is to establish better practices that can be utilized to benefit the Department for future project delivery.

Will the ability to use HDR's internal project control software, referenced under section 8.35 of the master service agreement, remain after the life of the contract without future subscriber or user fees?

- HDR is not recommending the use of additional of proprietary software. Yes, any software will be available to the City without long-term expenses payable to HDR after the end of the project. However, if the City installs non-HDR software, it may incur associated costs.

Is an assessment of the feasibility of drawing down Loch Lomond during the Newell Creek Inlet/Outlet work necessary, as referenced in section 8.45 of the master service agreement?

- Yes. Assessments have already been conducted in order to manage water levels during the Newell Creek Inlet/Outlet project to allow for construction of the new tunnel and outlet systems.

What are the goals of the "value engineering" exercise in section 8.51?

- The goals of Value Engineering are to develop cost savings, schedule savings and/or other efficiencies for a project. A value engineering study is conducted at key milestones and decision points in a project's development, following 50% design for example. It is a focused opportunity to adjust course to realize savings and efficiencies.

If two projects currently comprise a third of the CIP, how does that percentage change when supplemental supply projects are presented?

- The percentage will not shift much for a large portion of the funds that are currently in the water supply augmentation project are allocated for projects that fall in the yet-to-be-defined supplemental supply project category.

What is the SRF?

- SRF stands for "State Revolving Fund" and is an infrastructure financing source administered by states through a combination of federal and State funds. The Department is currently pursuing a Drinking Water State Revolving Fund (DWSRF) for the GHWTP Concrete Tanks Project.

Becky Steinbruner and Peter Ventura spoke as members of the public and relevant points have been included in the summary above.

#### 9. 2018 Water Supply Outlook – First Look

A presentation on the 2018 Water Supply Outlook – First Look was provided by T. Goddard, Conservation Manager.

Is a break from rainfall going to affect the analysis on the cumulative total of the difference between a dry and critically dry year?

- After these long periods without rain, the cumulative runoff is a reflection of all the variables of rain and evaporation that affects the water system.

Will that be tempered by measuring actual water levels in the river?

- Yes. It is based on the flow measurement of the San Lorenzo River at the USGS stream gauge in Felton.

Is it a million gallons per day measurement?

- The average daily flow, in cubic feet per second, is converted to discharge, measured in acre feet.

How does that measurement tie into the habitat conservation standards we have to meet?

- That has to do with flowing sources; a minimum amount of water must be left in the stream for the surrounding habitats. These minimums are in effect all year long, especially during fish rearing seasons.

What is the useful range of flows that can be made into water for customers?

- The useful range depends on the levels of demand and average rainfall.

Can water not be taken from the river when it becomes overly turbid?

- It depends on the turbidity of the water that is flowing at the time of the high flow. Now that the Tait Wells are functional, the water that is drawn from the river via these wells has low turbidity, which is very helpful when the river is turbid.

Is there a realistic risk of water shortage due to the high flow (which can equate to high turbidity) of the river?

- Yes. During the winter of last year, the river water was unusable due to turbidity for about 60 days and other sources such as the coast, wells, and the lake had to be utilized.

Low customer demand and the reliability of the other water sources do lower but do not entirely eliminate the risk of a shortage.

Becky Steinbruner spoke as a member of the public and relevant points have been included in the summary above.

### **Subcommittee/Advisory Body Oral Reports**

#### **10. WSAS Ad Hoc Committee – Project Evaluation Framework**

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

#### **11. Santa Cruz Mid-County Groundwater Agency**

Commissioner Baskin reported the MGA Board Members are in the information gathering stage and learning the regulatory framework under which all groundwater agencies will operate. Commissioner Baskin also announced that Commissioner Engfer will be his alternate, in case of absence, to the MGA.

#### **12. Santa Margarita Groundwater Agency**

Commissioner Engfer reported the SMGWA Board is in the start-up stage, following the path of the MGA, and that the next meeting will be held on February 28, 2018. Commissioner Engfer also announced that Commissioner Baskin will be his alternate, in case of absence, to the SMGWA.

**Directors Oral Report:** None.

#### **Final Comments and Requests for Follow up.**

1. Provide an update on the Water Supply Outlook in March 2018.
2. Provide an update on the HDR Contract in May 2018.

**Adjournment** Meeting adjourned at 10:08 PM.

Respectfully submitted,

*Katy Fitzgerald*  
Staff