



Water Department

Water Commission
7:00 p.m. – Monday, March 2, 2015
Council Chambers
809 Center Street, Santa Cruz

Minutes of a Water Commission Meeting

Call to Order –Vice-Chair W. Wadlow called the meeting to order at 7:02 p.m. in the City Council Chambers.

Roll Call

Present: G. Mead, D. Schwarm, A. Schiffrin, D. Stearns, W. Wadlow, and L. Wilshusen.

Absent: D. Baskin (with notification)

Staff: R. Menard, Water Director; T. Goddard Administrative Services Manager; G. Rudometkin, Administrative Assistant III; I. Rivera, Associate Civil Engineer; D. Valby, Associate Civil Engineer; K. Crossley, Associate Civil; K. Dodd, Associate Civil Engineer and M. Zeman, Assistant Engineer.

Others: Approximately 1 member of the public.

Presentation –There were no presentations.

Statements of Disqualification –There were no statements of disqualification.

Oral Communications –There were no oral communications.

Announcements –There were no announcements.

Consent Agenda

1. City Council Items Affecting Water
2. Approve the February 2, 2015 Water Commission Minutes
3. Future Items Calendar
4. Correspondence from R. Longinotti dated 2.17.15
5. City Council Item on the February 24, 2015 Agenda: Contract Amendment No.1/Task Order 3, Stratus Consulting –Multidisciplinary Work Effort: Economics, Policy, Environmental Sciences, Natural Resources - Budget Adjustment

Items Removed from the Consent Agenda

3. Future Items Calendar
5. City Council Item on the February 24, 2015 Agenda: Contract Amendment No.1/Task Order 3, Stratus Consulting –Multidisciplinary Work Effort: Economics,

Policy, Environmental Sciences, Natural Resources - Budget Adjustment

Commissioner L. Wilshusen moved the Consent Agenda as amended. Commissioner G. Mead seconded.

VOICE VOTE: MOTION CARRIED

AYES: All.

NOES: None

ABSTAINED: A. Schiffrin abstained from item 2 due to absence from the February 2, 2015 meeting.

ABSENT: D. Baskin

Item 3: Future Items Calendar

Commission discussed the following:

- Recommendation was made regarding when capital projects are brought forth to the Commission that financial analysis be provided for evaluation and better understanding.

Commissioner A. Schiffrin moved the staff recommendation on item 3 with the recommended changes. Commissioner G. Mead seconded.

VOICE VOTE: MOTION CARRIED

AYES: All.

NOES: None

Public Comment:

S. McGilvray discussed his seminar regarding water supply that he held on Monday, March 9, 2015 and on Tuesday, March 10, 2015 at the Next Space Conference room located at 101 Copper Street.

Item 5: City Council Item on the February 24, 2015 Agenda: Contract Amendment No.1/Task Order 3, Stratus Consulting –Multidisciplinary Work Effort: Economics, Policy, Environmental Sciences, Natural Resources - Budget Adjustment

Commission discussed the following:

- Concern that the Water Commission has been marginalized by the Water Supply Advisory Committee (WSAC) process due to the number of items that the consultant is going to work on with WSAC and because of the relevance of that work in regards to the Water Commission.
- What is the intention in terms of the various work this consultant is doing and how is it going to relate to what Water Commission is doing? Staff replied: The work mentioned in the contract will be going through WSAC and components of that work such as the Urban Water Management Plan will still come through to the Water Commission.

Commissioner A. Schiffrin moved the staff recommendation on Item 5. Commissioner D. Schwarm seconded.

VOICE VOTE: MOTION CARRIED

AYES: All.

NOES: None

Discussion:

- Work that the Water Commission is to be doing that was stated in the contract was brought to Commission's attention.

General Business

1. Major Projects Update 2015 (WT)

R. Menard, Water Director introduced I. Rivera, Associate Civil Engineer who provided the presentation and responded to Commission questions.

Commission Questions/Comments:

- Who participates in the risk optimization process? Staff Response: It involves staff from numerous sections of the Water Department such as Engineering, Customer Service, Production, and Distribution designed for multiple perspectives.

I. Rivera, Associate Civil Engineer presented on the Graham Hill Water Treatment Plant Rehabilitation and Upgrades

- Is filter to waste a requirement? Did we have a waiver for this? Staff Response: It is a requirement for new plants, if you are doing upgrades you can install a filter to waste system, if your facility allows you to and it is what the Department of Public Health prefers.
- Upgrades to the treatment plant have been a concern because it could take 20-40 million dollars to upgrade, is this upgrade going to take care of all the issues with the Treatment Plant? Staff Response: No, this only fixes the issues with the filters themselves; a few years ago the Department took the direction to phase the improvements of the Treatment plant, this phase is only addressing the issue with the filters themselves.
- If a customer asked how does this improvement benefit me how would you respond? Staff Response: This improvement addresses water reliability and quality.

D. Valby, Associate Civil Engineer presented on the Bay Street Reservoir Replacement Project and the Water Main Replacement Program

- What kind of tank is used at Bay Street? Staff Response: It is a pre-stressed concrete cylinder tank
- This project on track for completion in April of 2015
- The Bay Street Reservoir project improves the water quality of our stored drinking water. It also helps with smoothing out the production at the Treatment Plant which minimizes the potential for disruption there, the less you have to

change water flows the better. There is also the added reliability of this emergency storage facility.

- Is redoubling the effort our intent in regards to replacing water mains at 3 miles a year? Staff Response: Yes, it depends on how much we can stretch our budget and what mains we are replacing.
- Customer benefit of the water main replacement project is the improvement to water quality and having a major main break is far more disruptive and damaging than replacing one in a thoughtful and careful way.
- What about the belief that water storage was wasted at Bay Street Reservoir? Since the decision was made to replace the reservoir there has been confusion as to why less storage at this facility is good, considering our need to store water for a drought. For treated, ready to serve water we have to strike a balance between storing enough to fight a big fire or serious emergency but not so much that under normal conditions, the water sits around for so long that it falls below water quality standards. Treated water is best fresh, because its quality only degrades with time and temperature. The old reservoir was originally constructed to store raw untreated water from our north coast sources and later converted to store treated water from the Graham Hill Water Treatment Plant. With ever increasing water quality standards, we rebuilt the facility at the right size and configuration to meet modern needs.

K. Crossley, Associate Civil Engineer presented on the North Coast Rehabilitation Program – Phase 3 and Beltz Well No. 12

- How does the water get through various diversions down to the North Coast pipeline? Staff Response: By gravity.
- The North Coast Rehabilitation Program is a significant project because it will cut down on the amount of water that is lost through leaks.
- Beltz Well No.12 is set to begin operating in April or May of this year and is planned to run over the summer.
- The Beltz well No.12 project is important to the customer because it is the third treatment plant in Santa Cruz; it is also a backup supply in case of an emergency. Also, this is an inland pumping plant so there is less potential for saltwater intrusion.
- This well is 650 feet deep, twice as deep as the other wells in the system. It taps into a deeper formation referred to as the T-U zone and goes through both the Santa Margarita and Purisima formations.
- What is the pumping capacity of this well? Staff Response: When the well is fully operational it produces 800,000 gallons, which is the maximum capacity.

K. Dodd, Associate Civil Engineer presented on the Beltz Groundwater Treatment Plant Reclaim Tank Replacement and U4 & U5 Tanks Investigation

- Clarification was made the U stands for University.
- The importance to the customer is replacement of old infrastructure improves system reliability.

M. Zeman, Assistant Engineer presented on the Steel Tank Rehabilitation

- Is there a possibility to put solar on University Tank 2? Staff Response: It is certainly possible, it is strong enough but there is much more solar potential at the Bay Street reservoir.
- Did any of the tanks have lead based paint? Staff Response: Yes, the Delaveaga tanks and the University Tank 2 both had lead based exteriors.
- Is there any security at these tanks? Staff Response: Yes, there are various security provisions in place.

Commission comments/questions

- What is the advanced metering infrastructure project? Staff Response: Due to issues with batteries with our current drive by system we have found a solution in the advanced metering structure in which you get a continuous send that allows people to access information through a portal to check what their meter reading is.
- What is a Ranney collector? Staff Response: Basically they are horizontal wells that extend out in an alluvial formation next to the river and you can pump water out of them with the added benefit of a filtration component of the porous media in the riverbed that knocks out some of the sediment. However, there are issues with iron and manganese and the ground river water that mixes together which gives pause on its feasibility so it is something the Department wants to study further.
- It looks like there is 500,000 dollars dedicated to the Photovoltaic Systems Evaluation/Construction project is that what the department is anticipating on spending or is that just a placeholder? Staff Response: That is just a placeholder for a future fiscal year.
- The costs that are listed in this report are being dealt with by the rate increase that is already in place, correct? Staff Response: Yes, in last year's CIP there was the rate model that created that rate increase requirement.

Subcommittee/Advisory Body Oral Reports No items.

1. WSAC Update (Oral Report)
 - At the last meeting we had a baseline interim forecast that showed quite a bit of lower demand in the future relative to what was in the 2010 Urban Water Management Plan. The major factors affecting that are fundamentally a shift in user patterns and additional conservation based on the 2014 data.
 - There was a presentation on the confluence model that shed some clarity on how a change in demand forecast affects our ability to reliably meet supply in years where there is significant drought.
 - The next couple of meetings will explore on climate change scenarios along with fish flows which are two major drivers that we would look into a supply project in the future.
 - As a member of both advisory bodies we all really get to see the same work and I remember before the start of WSAC that there was the question of what the Water Commissions role will be but I have learned that there really is a need for both.
 - As part of an enrichment series we are planning on bringing in a couple of focused conversations on climate change and its potential impact on our system

here, as well as fundamentally the shifts in hydrology as the results of climate change. We are also looking to talk about the water transfer project that John Ricker, Kim Adamson, and Piret Harmon will be participating in. We will also be looking at the hydrogeology in the area for opportunities to store water underground. The goal being to shed some light on those topics as well as inform at least the basic backdrop of kinds of issues we are looking at.

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

1. Monthly Status of Water Supply (to be distributed at meeting)
 - We have used the Felton diversion more than 50 days since Christmas, it has been the perfect scenario to use that facility to pump water up to Loch Lomond, we are about 80% full but the rest of the winter does not look promising.
 - The mean monthly Stream flow is below for the month of February, at about 90 cubic feet per second.
 - Our reservoir storage was at 68% percent full last year and this year it is about 80% full.
 - Water demand is down from last year.
 - The drought is not ending, we can't tell you tonight what stage we are going to recommend but that information will come to you at the next meeting in April.

Adjournment Meeting adjourned at 9:17. The next regular meeting of the Water Commission is scheduled for April 6, 2015 at 7:00 p.m. in Council Chambers.

Respectfully submitted,

Staff