



Water Commission
7:00 p.m. – February 6, 2017
Council Chambers
809 Center Street, Santa Cruz

Water Department

Minutes of a Water Commission Meeting

Call to Order Chair W. Wadlow called the meeting to order at 7:04 p.m. in the City Council Chambers.

Please be advised that the February 6, 2017, Water Commission meeting was videoed and can be viewed online [here](#).

Roll Call

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

Absent: D. Schwarm with notification

Staff Present: R. Menard, Water Director; H. Luckenbach, Deputy Director/Engineering Manager; David Kehn, Assistant Engineer; A. Poncato, Administrative Assistant III.

Others: 9 members of the public.

Commissioner Wadlow introduced and welcomed new Water Commissioner Jim Mekis.

1. Election of Officers

Chair Wadlow opened the floor for nominations for Water Commission Chair.

Commissioner Baskin nominated Commissioner Wilshusen.

Commissioner Schiffrin moved to close nominations and by acclamation elect Commissioner Wilshusen as Water Commission Chair for 2017. Commissioner Baskin seconded.

VOICE VOTE: MOTION CARRIED

AYES: All.

NOES: None.

ABSENT: D. Schwarm.

Chair Wilshusen opened the floor for nominations for Water Commission Vice-Chair.

Commissioner Baskin nominated Commissioner Engfer.

Commissioner Wadlow moved to close nominations and by acclamation elect Commissioner Engfer as Water Commission Vice-Chair for 2017. Commissioner Baskin seconded.

VOICE VOTE: MOTION CARRIED

AYES: All.

NOES: None.

ABSENT: D. Schwarm.

Presentation: There was one presentation by Scott McGilvray.

Statements of Disqualification: There were no statements of disqualification.

Oral Communications: Oral Communications provided by one member of the public.

Announcements: There were no announcements.

Consent Agenda

2. City Council Actions Affecting Water

4. 2017 Water Supply Outlook

Commissioner Schiffrin moved the Consent Agenda as amended. Commissioner Engfer seconded.

VOICE VOTE: MOTION CARRIED

AYES: All.

NOES: None.

ABSENT: D. Schwarm.

Items Removed from the Consent Agenda

3. Approve the January 9, 2017, Water Commission Minutes

- Update vote to show that both D. Baskin and D. Schwarm abstained from voting on consent agenda item 2. Approve the December 5, 2017, Water Commission Minutes.
- Correct Call to Order to reflect that the meeting was held at the Police Department Community Room.
- Add that under Announcements, Ms. Menard indicated that D. Baskin would be serving on behalf of the City of Santa Cruz on the Santa Cruz Mid-County Groundwater Agency board.
- Remove 2. Approve the December 5, 2016, Water Commission Minutes from Consent Agenda portion because they were removed from the Consent Agenda.

Commissioner Schiffrin moved approval of the January 9, 2017, minutes. Commissioner Baskin seconded.

VOICE VOTE: MOTION CARRIED

AYES: All.

NOES: None.

ABSTAIN: J. Mekis was not a Commissioner at the time.

ABSENT: D. Schwarm.

6. 2nd Quarter FY2017 Financial Report

Please explain why the last time we saw the CIP Projects Overview, the Gravity Trunk Main Valve Replacement project was in Project Wrap-Up with an estimated total project cost of \$250,000 and now it is back in Construction with an estimated total project cost of \$640,000.

- It is back in Construction because we are beginning the second phase the project. The first part of the Gravity Trunk Main Valve Replacement project was to replace the valves, which was completed in September 2015. The second part involves a condition assessment of the inside of the pipe. It is probably clearer to say Phase One is in Wrap Up and Phase Two is in Construction.

Commissioner Schiffrin moved the Consent Agenda. Commissioner Baskin seconded.

VOICE VOTE: MOTION CARRIED

AYES: All.

NOES: None.

ABSENT: D. Schwarm.

General Business

7. Recycled Water Workshop

Ms. Menard explained that the following workshop is the second forum on a major element of the City's Water Supply Advisory Committee (WSAC) recommendations, the first being the Aquifer Storage and Recovery workshop on November 7, 2016. Ms. Menard then introduced Ms. Luckenbach who introduced the workshop presenters as follows. Presentations can be found on the Water Department website [here](#)¹²³.

1. Mr. David Kehn, Assistant Engineer, City of Santa Cruz Water Department.
2. Ms. Dawn Taffler, P.E., LEED® AP Kennedy/Jenks Consultants
3. Mr. Brian Pecson, Ph.D., P.E. Trussell Technologies Inc.

Before turning things over to Mr. Kehn, Ms. Luckenbach was asked whether the analysis of recycled water alternatives will include providing information on various metrics of each alternative that highlight similarities and differences. E.g., energy consumption, yield, etc.?

- Yes, we will use the metrics developed in the WSAC process as a starting point to evaluate the alternatives, and add others if necessary.

David Kehn, Assistant Engineer, City of Santa Cruz Water Department Presentation

Mr. Kehn is the Project Engineer for the City of Santa Cruz Recycled Water Feasibility Planning Study (RWFPS). He provided an overview of the study's scope of work, the process of developing and evaluating the recycled water alternatives, and the collaborative efforts with other agencies that are helping to inform the study.

¹ Mr. Kehn's presentation is on pages 1-27.

² Ms. Taffler's presentation is on pages 28-57.

³ Mr. Pecson's presentation is on pages 58-115.

Commissioners had the following comments and questions.

The County is not responsible for the collection of wastewater. A separate district, called the County Sanitation District, is responsible for collecting wastewater.

- Comment noted.

Who are the stakeholders?

- Stakeholders are anybody who has a part of either the supply or potential demand infrastructure, service area, and those are financially contributing.

So the stakeholders are representatives of these agencies?

- Yes, the City of Santa Cruz Water Department, City of Santa Cruz Public Works, County of Santa Cruz, Santa Cruz County Sanitation District, Soquel Creek Water District, and Scotts Valley Water District.

Does the Wastewater Treatment Facility need to be expanded to provide a recycled water building and if so, has there been any discussion with the Coastal Commission about the potential impact to Neary Lagoon?

- Some of the alternatives would involve facility changes or new structures. However, these modifications would occur within the footprint of the existing facility. There has been no discussion of a potential project with the Coastal Commission, but again at this time, we do not anticipate extending beyond the existing facility footprint.

Does your analysis indicate that there would be a sufficient amount of wastewater to meet the City's needs as well as the needs of Soquel Creek Water District?

- Yes. And this has been a critical element of our analysis and Dawn will cover this in more detail during her presentation.

What is the context of the second to the last slide: NEXT STEPS Water Supply Advisory Committee Recommendations? Are you talking about this in the context of this being the WSAC's plan or that the WSAC actually being involved in making decisions?

- This slide relates to the implementation of the Final Agreements and Recommendations of the Water Supply Advisory Committee rather than the WSAC as a group. The WSAC has completed its work no longer exists as an active Council advisory body.

Final Comments and Requests for Follow Up

Update second to last slide title to state: NEXT STEPS Implementation Supply Advisory Committee Recommendations.

- Comment noted.

Dawn Taffler, P.E., LEED® AP Kennedy/Jenks Consultants Presentation

Ms. Taffler is the Consultant Team Leader for the RWFPS. She provided a brief background on recycled water treatment technologies, uses, and nomenclature to establish some context for her presentation. She also discussed the recycled water alternatives being evaluated. Following a brief overview, Ms. Taffler introduced Mr. Dan Estranero, Assistant Engineer, City of Santa

Cruz Public Works Department (PWD), who discussed Alternative 1a – Centralized Non-Potable Reuse, Santa Cruz PWD Phase 2 Project.

Commissioners had the following comments and questions.

Is this alternative [as described on slides 7-10 of the presentation], including the pilot program, already underway?

- The City of Santa Cruz Public Works Department has a Request for Proposals out for this work. Proposals will be evaluated in February and March, and a consultant will be hired to provide design options and cost estimates.

Is non-potable reuse also known as purple pipes?

- Yes, that is correct. Purple pipe refers to non-potable water.

In Alternative 1a, will there be purple pipes extended beyond the Wastewater Treatment Plant or will it be centralized within the plant?

- The treatment will be centralized within the Wastewater Treatment Facility, but there will be some purple pipe required to extend to the irrigation of the park and the fill station.
- SCWD staff added: To clarify further, the alternative being described here, Alternative 1a, involves an expansion to an existing tertiary treatment facility at the WWTF. The current project would look into irrigation of the La Barranca Park and installation of a bulk water fill station using the recycled water.

Who owns the influent to the plant?

- Mr. Dan Seidel, Superintendent of Wastewater Collection and Treatment Facility, City of Santa Cruz Public Works, provided the following: Once the water is treated at our facility, the water becomes the property of the City of Santa Cruz.

Mr. Estranero turned the presentation back over to Ms. Taffler. Commissioners had the following comments and questions.

Alternative 1b is maximizing the treatment of wastewater to tertiary standard and distribute it throughout the City's water service area for irrigation. This can be seen on slide 11 of Ms. Taffler's presentation. How many miles of pipe are needed for this alternative?

- Approximately 18 miles of pipeline.

Why are we spending time and money analyzing alternatives that will not be completed by 2024?

- The Recycled Water Facilities Planning Study is looking at alternatives to 1) meet the objectives of the WSAC and 2) find additional beneficial uses of the existing treated wastewater.

During WSAC process we were told the absence of final regulations for Direct Potable Reuse (DPR) would not be a limitation to getting a project approved and that projects being proposed in Southern California would demonstrate this. Is that not the case?

- The current regulatory status of DPR is that it can be approved on a case by case basis. The focus in Southern California right now is on indirect potable reuse in the form of surface water augmentation. The regulations for surface water augmentation should be published in the next few months. An expert panel concluded that it is feasible to create uniform regulations for DPR; the schedule for these is unknown.

Some of these projects were studied and rejected by WSAC. How much are you researching what was studied during the WSAC process?

- The study is not duplicating WSAC efforts. It is providing more detailed analysis of some options that were considered by the WSAC but have evolved as a result of updated information and project concepts. For example, the surface water augmentation alternative has changed substantially since the WSAC process.

As we consider all of these alternatives, are we going to be updating all of the data for all the different alternatives? Are we going to be updated on desal? Are we going to be updated on recycled water so that we can make effective comparisons?

- Yes. By the end of the year, in addition to finalizing the Recycled Water study, we will have an updated concept to the alternative desalination project. We will be able to update the cost and other metrics previously discussed.

Can DPR and IPR treatment reduce components of emerging concern?

- Yes, DPR and IPR can reduce components of emerging concern.

Brian Pecson, Ph.D., P.E. Trussell Technologies Inc. Presentation

Mr. Pecson is a subconsultant to Kennedy/Jenks for the RWFPS. He went in to greater detail on the regulatory framework of water reuse, treatment technologies and potential end-uses.

Commissioners had the following comments and questions.

You've made several references to DDW. What is DDW?

- Division of Drinking Water, which is a state agency under the State Water Resources Control Board.

What is the trend line in terms of effectiveness and the cost effectiveness of recycled water technologies over the last 5-10 years and where do you see the improvements coming in the next 5-10 years?

- The effectiveness of these technologies is improving constantly to achieve greater water quality and removal effectiveness at a lower cost.

In terms of cost, is the treatment of recycled water cheaper than seawater desalination?

- Yes. The salinity concentration is much greater in seawater than wastewater: ~37ppt (parts per thousand) as compared with 0.5ppt. The removal of salinity and other dissolved minerals is what drives the energy requirement up.

What criterion is DDW willing to consider when looking at DPR on a case by case basis?

- The Surface Water Augmentation concept can be evaluated as either an IPR project or a DPR project. The difference is what is happening between the point of discharge of the advanced treated wastewater into the system and where this water enters an existing surface water treatment plant. IPR regulations (which, as stated above, are expected in early 2017) contain dilution, retention time, and treatment requirements. If these requirements cannot be met (because dilution water is unavailable or the blending reservoir is too small for example) the project would be considered a DPR project. DDW would likely want to start with an alternative like Alternative 5 – Surface Water Augmentation in Loch Lomond Reservoir where IPR requirements could be met before pursuing it as a DPR project. The DPR the RWFPS is evaluating, Alternative 7, basically removes the reservoir and pipe system between the point of discharge of the advanced treated wastewater and the point where the water enters the Graham Hill (Surface) Water Treatment Plant.

When will we get another update on the Recycled Water Study?

- Staff responded: Currently staff anticipates a preliminary recommendation on feasible recycled water projects in April, and a draft of the final report in June. These may slip however due to the level of analysis still needed to vet some of the alternatives.

Final Commissioner Comments and Requests for Follow Up

- (During his presentation Mr. Pecson referenced the energy required to move water from Northern California to Southern California as context for the energy required for the recycled water alternatives being considered.) Commissioners noted that, as staff present this material to the local community, comparisons with other agencies might not hold up well. Providing context by other examples will likely be more meaningful, and staff should think carefully about what examples to use.
- Given that the DDW is very cautious to create criteria for DPR, it seems like the DPR alternative still under consideration, (e.g., not flange to flange but rather blending of the advanced treated water upstream of the raw water entering the GHWTP) is a very prudent approach.
- Distribute copies of all presentations to Commissioners.

Public comment made by Becky Steinbruner.

5. Presentation Items on the Water Commission Agendas

Ms. Menard and Commissioners discussed a proposal for modifying the Commission's use of the Presentation agenda item to make it match the way the City Council uses it.

Public comment made by Becky Steinbruner.

Commissioner Schiffrin moved the recommendation to modify the use of Presentation agenda items as proposed in the staff report. Commissioner Mekis seconded.

VOICE VOTE: MOTION CARRIED

AYES: J. Mekis, A. Schiffrin, L. Wilshusen, W. Wadlow

NOES: D. Baskin, D. Engfer.
ABSENT: D. Schwarm.

8. Proposed Memorandum of Agreement with the San Lorenzo Valley Water District and the Scotts Valley Water District for Collaborative Work on Potential Supply Augmentation Projects.

Ms. Menard summarized the discussion draft of a potential Memorandum of Understanding with Scotts Valley and San Lorenzo Valley water districts was summarized for the Commission. She indicated that the Commission will see a final draft in the next two months after all agencies have vetted the memo. Please forward all comments and questions to Rosemary in an email.

When this item comes back, will there be a work plan included?

- Yes.

The reason why the San Lorenzo Valley Water District doesn't take its share of water out of Loch Lomond is because there is no pipe and they don't want to pay for the pipe. Is that correct?

- It is a little more complicated than that. The San Lorenzo Valley Water District was taking the water via a surface water diversion before the federal Surface Water Treatment Rule was adopted in 1989. After that time they could no longer take that water without sending it to a treatment plant, so they abandoned the systems that they were using, put in wells. Since then they have not been able to take their 314 acre feet of water.

Is this process going to threaten the City's water supply?

- The San Lorenzo Valley Water District has a contractual right to take their share of water out of Loch Lomond. In the various supply modeling work the City did for the WSAC process, the water that is contractually available to the San Lorenzo Valley Water District has been taken into account and does not result in adding more volume to the 1.2 billion gallon worst year gap.

9. Draft Agenda for the March 14, 2017, Joint Meeting of the Santa Cruz City Council and the Water Commission.

Do you have any expectations of the Water Commission having a Commission based comment on that or are you equally comfortable with individual observations?

- There really isn't a need for a Commission statement (in the form of a specific recommendation, for example) because the WSAC's work plan is a work in progress. If the Commission feels they want to provide the Council with specific feedback on the Department's work on implementing the WSAC recommendations that would be fine and certainly appropriate. However, it would also be appropriate and acceptable for individual Commissioners to share their perspectives.

Final Comments and Requests for Follow Up

- Please be clear that the main topic of this joint meeting is water supply.
- It is important to focus on decision making, what we are doing, where we are going, and invite them to any of our meetings.

- Indicate which projects are WSAC recommendations on the CIP list.
- With new members joining the City Council, they need to be reminded that we absolutely do need a supplemental supply project by repeating factual findings such as the 1.2 billion gallon worst year water supply gap.

Subcommittee/Advisory Body Oral Reports No items.

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

- There is a third leak on the Newell Creek pipe, located on Pipeline Road.
- The surface water situation in the conditions we have right now is extremely challenging and we have been relying on the Laguna Creek, Liddell Creek and the new Tait Well.

Adjournment Meeting adjourned at 11:21 p.m. The next meeting of the Water Commission is scheduled for March 6, 2017, at 7:00 p.m. in Council Chambers.

Respectfully submitted,

**Amy
Poncato**

Digitally signed by Amy Poncato
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Staff