

**TO:** Board of Directors**FROM:** Joint Recycled Water Committee (City of Palo Alto/SCVWD)**SUBJECT:** June 6, 2017, Joint Recycled Water Committee (City of Palo Alto/SCVWD) Meeting Summary**DATE:** June 27, 2017

The Joint Recycled Water Committee (City of Palo Alto/SCVWD) (Committee) met on June 6, 2017 and discussed the following topics:

Agenda Item 1 - Update on Memoranda of Understanding to Assess Feasibility of Water Reuse Alternatives

- A. District/City of Palo Alto Memorandum of Understanding
- B. District/City of Mountain View Memorandum of Understanding

Mr. Garth Hall, Deputy Operating Officer of Water Supply Division, Mr. Hossein Ashktorab, Recycled Water Manager, Mr. Gregg Hosfeldt of the City of Mountain View and Mr. Phil Bobel of the City of Palo Alto, presented to the Committee:

The purpose of this agenda item is to provide the Joint Recycled Water Committee (Committee) with updates on partnerships under development between the Santa Clara Valley Water District (District) and the City of Palo Alto (Palo Alto), and the District and City of Mountain View (Mountain View). Palo Alto has finalized a Memorandum of Understanding (MOU) with the District, and staff from Mountain View and the District are currently negotiating the terms of a MOU. The two MOUs will assess the feasibility and potential funding to develop potable water reuse options in Santa Clara County.

A. District/Palo Alto Memorandum of Understanding

The proposed MOU between the District/Palo Alto describes both agencies' commitments to identify the requirements, issues, activities, resources, costs, and funding necessary to implement potable and non-potable water reuse alternatives. The terms of this MOU cover important assumptions and considerations such as source water availability, permitting, reverse osmosis concentrate management, land requirements, and governance. These assumptions and considerations will be negotiated by the District and Palo Alto in the future under a comprehensive agreement. Palo Alto is not currently discussing or planning to discuss effluent transfers with other agencies outside of the Palo Alto Regional Water Quality Control Plant (RWQCP) partner agencies during the term of this MOU. Terms of the draft MOU were presented at the most recent Joint Recycled Water Committee meeting, on December 13, 2016. The final MOU was brought to the District Recycled Water Committee on May 30, 2017, recommending the full Board of Directors approve execution of the MOU by the District's CEO.

B. District/Mountain View Memorandum of Understanding

During the development of the District/Palo Alto MOU, staff from both agencies and Mountain View determined that a separate MOU between the District and Mountain View would be necessary to better address the agencies' different commitments. Staff from the District and Mountain View are currently negotiating MOU terms, and expects to have a draft MOU ready to present to this Committee by September 2017. Commitments related to pursuing any water reuse alternatives, will be formalized in a comprehensive agreement to be negotiated by the District and Mountain View in the future.

Agenda Item 2 - Update on Northwest County Recycled and Purified Water Efforts

- A. Advanced Water Purification System Feasibility Study
- B. Northwest County Recycled Water Strategic Plan

Mr. Garth Hall, Deputy Operating Officer of Water Supply Division, Mr. Henry Barrientos, Associate Engineer (Civil), and Mr. Phil Bobel of City of Palo Alto, presented to the Committee:

The Santa Clara Valley Water District (District), continues to partner with the cities of Palo Alto and Mountain View to work on several recycled and purified water planning and expansion projects in Northwest County. This agenda memo provides updated information on the Northwest County Recycled Water Strategic Plan.

A. Advanced Water Purification System Feasibility Study Project.

The Advanced Water Purification Feasibility Study (Feasibility Study) will determine how to improve recycled water quality from the Regional Water Quality Control Plant (RWQCP). Deliverables in this effort include: an evaluation of the different treatment options to reduce total dissolved solids concentrations; treatment facility layout options within the existing RWQCP property; and additional storage and instrumentation needed to blend purified water with tertiary treated recycled water.

The Feasibility Study consultant submitted the Final Feasibility Study Report on April 4, 2017, outlining possible locations for the microfiltration, reverse osmosis, and concentrate treatment systems at the RWQCP. Staff from the District, Palo Alto and Mountain View have reviewed the submittals and have authorized the consultant to proceed with work on additional optional services. The optional services include the completion of a conceptual design for a 2.25 MGD Advanced Water Purification Facility (AWPF) within the existing RWQCP footprint, and a white paper to evaluate the use of land adjacent to the RWQCP for an additional AWPF capable of treating up to 6.7 MGD. This site is referred to as the Measure E Site, for future potable reuse projects. Completion of this effort is expected by September 2017.

B. Northwest County Recycled Water Strategic Planning Effort.

The Northwest County Recycled Water Strategic Plan (Strategic Plan) includes the expansion of recycled water from Palo Alto RWQCP to recycled water customers in Stanford, Los Altos, Los Altos Hills, Mountain View, East Palo Alto, and Menlo Park. Key deliverables include: a financial plan, preliminary design, funding strategies, and a study of groundwater in Northwest County. The purpose of the groundwater study is to compile baseline information on localized aquifer conditions including sources and quantities of recharge, groundwater pumping and water quality. This information will be used to evaluate the feasibility for potable reuse of advanced treated recycled water.

The Strategic Plan consultant is on track and has submitted several workplans for the major components including Phase III expansion to Stanford Research Park, Potable Reuse Feasibility, and External Funding strategies. The findings from the Strategic Plan will provide the basis for key elements of the District/Palo Alto and District/Mountain View comprehensive agreements.

Agenda Item 3- Update on Countywide Recycled and Purified Water Master Plan

Mr. Garth Hall, Deputy Operating Officer of Water Supply Division and Mr. Luis Jaimes, Senior Project Manager, presented to the Committee:

The purpose of this agenda item is to provide an update to the Joint Recycled Water Committee (Committee) on the Countywide Recycled and Purified Water Master Plan (Master Plan).

On January 27, 2017, District staff hosted a stakeholder workshop that brought together leadership from local producers, wholesalers, retailers, environmental groups, and stakeholders of water reuse systems to develop a vision statement and identify key components for the Master Plan. The workshop consisted of facilitated exercises focusing on visioning, opportunities, and challenges analysis. Participants from thirteen agencies provided feedback on ten proposed components of the Master Plan, including, stakeholder engagement, governance, regional planning and integration, water treatment and contributing sewersheds, economics and funding, water quantity and quality, environmental permitting and regulations, public perception and engagement, infrastructure and land, and schedule. Attending organizations were also asked to assign a representative from their agency to participate in a Technical Working Group, which will support development of the technical efforts of the Master Plan.

Additionally, staff developed a request for proposal (RFP) to support development of the Master Plan. The scope of services includes hydraulic modeling and economic analysis to assess feasible alternatives. The RFP was published on March 9, 2017. Staff is working through the procurement process to complete the consultant contract by June 2017.

Agenda Item 4- Update on Reverse Osmosis Concentrate Management Project

Mr. Garth Hall, Deputy Operating Officer of Water Supply Division and Hossein Ashktorab, Recycled Water Manager, presented to the Committee:

The purpose of this agenda item is to update the Joint Recycled Water Committee on the Reverse Osmosis Concentrate Management (ROCM) Project currently underway by Santa Clara Valley Water District. The overall objective of the ROCM Project is to evaluate viable alternatives for managing reverse osmosis (RO) concentrate generated from advanced water purification facilities to be potentially built in various locations in the County, such as in the Cities of San José, Sunnyvale, Palo Alto, Gilroy and/or Morgan Hill.

This project is critical because it will address one of the key challenges in potable water reuse: proper management of the concentrated stream with high salt content generated by the process of water purification using advanced technologies. In addition, the scope of work includes testing of contaminants of emerging concern (CECs) that may be present in the RO concentrate, as well as pilot treatment of identified CECs by advanced oxidation processes and/or by engineered wetlands. The testing and piloting portion of the project will be carried out in partnership with the Bay Area Clean Water Agencies, the San Francisco Estuary Institute (SFEI), and professors from the University of California at Berkeley (UC Berkeley) and the Leland Stanford Junior University (Stanford). SFEI, UC Berkeley, and Stanford are sub-consultants to the project.

Agenda Item 5- Next Meeting and Tentative Items

Next meeting is September 19, 2017, 11:00 a.m. at the Silicon Valley Advanced Water Purification Center (SVAWPC). There will be a tour for anyone prior to meeting.

Board member comments and suggestions can be forwarded to Ms. Glenna Brambill, Management Analyst II, at 1-408-630-2408 or by email to gbrambill@valleywater.org.

Thank you.

Gary Kremen

Director, District 7

Joint Recycled Water Committee (City of Palo Alto/SCVWD) Chair