



Santa Clara Valley Water District

File No.: 24-0238

Agenda Date: 3/27/2024

Item No.: 4.4.

COMMITTEE AGENDA MEMORANDUM Recycled Water Committee

Government Code § 84308 Applies: Yes No
(If "YES" Complete Attachment A - Gov. Code § 84308)

SUBJECT:

Receive Update on the Recycled Water Goal for the Water Supply Master Plan 2050; and Recommend to Valley Water's Board a Potable Reuse Goal.

RECOMMENDATION:

- A. Receive information and provide feedback on potential water reuse goal update; and
- B. Recommend to Valley Water's Board a potable reuse goal of 24,000 Acre Feet per Year (AFY) by 2035 as well as a long-term vision to maximize water reuse in the county for inclusion in the Water Supply Master Plan 2050.

SUMMARY:

Water reuse is a locally controlled and drought resilient supply that will help ensure our county's water supply in the face of climate change. Valley Water's Board of Directors (Board) have set a goal to promote, protect, and expand potable and non-potable reuse within the county. Valley Water's Water Supply Master Plan (WSMP) is a guiding document for long-term water supply investments to ensure water supply reliability for the county. The WSMP is regularly updated to evaluate changing anticipated water supply demands and water supply and infrastructure projects.

Valley Water has consistently included goals to expand potable reuse as a part of a future diversified water supply portfolios. These goals are intended to be clear, measurable, and achievable. As such, the specific goals are included in water supply modeling to support development of the WSMP. While the goals provide guidance to staff and support Board decision making, they do not prevent staff from evaluating projects outside of the goal or prevent the Board from approving a larger project if one becomes feasible. Valley Water's 2012 WSMP included the goal to develop 20,000 acre-feet per year (AFY) of indirect potable reuse (IPR) by 2030 to be used to augment local groundwater supplies. In 2015, the Board directed staff to pursue 45,000 AFY of IPR by 2020 as part of the Expedited Recycled and Purified Water Program. In 2019, the WSMP 2040 included an updated goal to develop 24,000 AFY of potable reuse by 2028. In 2020, the Board directed staff to pursue a first phase project to meet the smaller goal of 11,200 AFY of potable reuse due to declining water supply demands. On

February 27, 2024, the Board directed staff to remove the Palo Alto Purified Water Project from the CIP and place it on the unfunded projects list.

Valley Water staff is currently updating the WSMP 2040 to assess future water supplies and anticipated demands through 2050 (WSMP 2050). Staff is recommending that an updated goal of 24,000 AFY of potable reuse by 2035 is an achievable goal that can be met with a project in collaboration with the Cities of San José and Santa Clara (referred to as the San José Purified Water Project). The San José Purified Water Project can meet this goal while balancing affordability and risk, while also taking into account project partners' plans to expand their non-potable recycled water systems and concerns over regulatory impacts of a larger project, including managing Reverse Osmosis concentrate.

In response to the Committee's previous comments to explore additional potable reuse, staff will include a long-term vision in the WSMP 2050 to maximize water reuse in the county and are committed to reevaluating the goal during future WSMP updates, which occur every five years, to determine if additional water is needed, and if Valley Water has made progress implementing the San José Purified Water Project. There are risks to setting a higher goal now, which include potential uncertainty of future wastewater flows, planning assumptions that conflict with our project partners' water supply planning, and the potential to underestimate the need for other water supply projects that are evaluated as part of portfolios to address future shortage.

The WSMP 2050 update will include modeling the 24,000 AFY San José Purified Water Project as a primary purified water project, with two project alternatives (24,000 AFY of local desalination and an 8,000 AFY DPR project) as potential backup projects. If water supply analysis indicates the need for additional supply to fill gaps under certain demand/supply conditions, the backup projects can be evaluated in conjunction with the 24,000 AFY San José Purified Water Project as part of portfolio analysis, to be compared with other alternative solutions. If the backup projects are found to be better and more cost-effective alternatives, they can be further evaluated and developed in future WSMP updates. Inclusion of the long-term vision promotes a phased approach that accounts for uncertainty with future demand, wastewater availability, and balances affordability and risk of overinvestment.

ENVIRONMENTAL JUSTICE AND EQUITY IMPACT:

There are no environmental justice and equity impacts associated with this agenda item. This action is unlikely to or will not result in adverse impacts and is not associated with an equity opportunity.

ATTACHMENTS:

Attachment 1: PowerPoint

UNCLASSIFIED MANAGER:

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