



Santa Clara Valley Water District

File No.: 19-0345

Agenda Date: 5/3/2019

Item No.: 2.

BOARD AGENDA MEMORANDUM

SUBJECT:

Silicon Valley Advanced Water Purification Center Presentation.

RECOMMENDATION:

That the Santa Clara Valley Water District (Valley Water) and Contra Costa Water District (CCWD) Boards of Directors receive a presentation from Valley Water staff on the Silicon Valley Advanced Water Purification Center.

SUMMARY:

The Water Supply Master Plan (Master Plan) is Valley Water's strategy for providing a reliable and sustainable water supply in a cost-effective manner. It informs investment decisions by describing the type and level of water supply investments Valley Water is planning to make through 2040. The Master Plan analysis continues to indicate that droughts are our greatest challenge and that demand management, stormwater capture, and water reuse are vital to the long-term sustainability of water supply reliability in the county.

Water recycling makes efficient use of existing supplies and is sustainable and consistent with a "One Water" approach (a roadmap for integrated water resource planning). Water recycling provides local supplies that are not dependent on local, regional, or state hydrology. This resiliency is very important during extended droughts when Valley Water's imported supplies are curtailed and local supplies may be limited. In addition, water recycling projects are broadly supported by stakeholders.

One goal of Valley Water is that 10 percent of the county's water supply portfolio be met through potable and non-potable reuse projects by 2025. In December 2017, the Board of Directors approved the development of up to 24,000 AFY of potable reuse. As such, Valley Water has embarked on developing a comprehensive Countywide Water Reuse Master Plan, which will evaluate a variety of water reuse projects, including expansion of non-potable reuse; indirect potable reuse (e.g., groundwater recharge); and direct potable reuse (both raw water augmentation and treated water augmentation). This effort is scheduled for completion in 2020 and is being developed in coordination and engagement with wastewater agencies, and other stakeholders and interested parties in the county.

In addition to the above-described planning efforts, Valley Water ushered in a new era in water reuse

in Northern California with the construction of the Silicon Valley Advanced Water Purification Center (SVAWPC). This state-of-the art 8 MGD facility became operational in 2014 and serves several important purposes. One important function of the SVAWPC is to enhance the quality of non-potable (recycled) water served to approximately 850 customers in the cities of San Jose, Santa Clara, and Milpitas. This is achieved by blending the purified water from the SVAWPC with the tertiary-treated wastewater produced by the San Jose/Santa Clara Regional Wastewater Facility and delivered to the South Bay Water Recycling (SBWR) system. This blending lowers the Total Dissolved Solids in the SBWR distribution system. Another important function of the SVAWPC is serving as a center for educating the public about water reuse and technical research related to potable reuse, and as a training ground for operators and maintenance workers in the potable reuse field.

FINANCIAL IMPACT:

There is no financial impact associated with this item.

CEQA:

The recommended action does not constitute a project under CEQA because it does not have a potential for resulting in direct or reasonably foreseeable indirect physical change in the environment.

ATTACHMENTS:

Attachment 1: PowerPoint

UNCLASSIFIED MANAGER:

Garth Hall, Valley Water Deputy Operating Officer
Jerry Brown, CCWD General Manager