



Santa Clara Valley Water District Board of Directors Meeting

Silicon Valley Advanced Water Purification Center
4190 Zanker Road, San Jose, California 95134

SPECIAL JOINT MEETING WITH CONTRA COSTA WATER DISTRICT AGENDA

**Friday, May 3, 2019
10:00 AM**

District Mission: Provide Silicon Valley safe, clean water for a healthy life, environment and economy.

DISTRICT BOARD OF DIRECTORS

Linda J. LeZotte, Chair, District 4
Nai Hsueh, Vice Chair, District 5
John L. Varela, District 1
Barbara Keegan, District 2
Richard P. Santos, District 3
Tony Estremera, District 6
Gary Kremen, District 7

All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at the Office of the Clerk of the Board at the Santa Clara Valley Water District Headquarters Building, 5700 Almaden Expressway, San Jose, CA 95118, at the same time that the public records are distributed or made available to the legislative body. Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities wishing to attend Board of Directors' meeting. Please advise the Clerk of the Board Office of any special needs by calling (408) 265-2600.

NORMA CAMACHO
Chief Executive Officer

MICHELE L. KING, CMC
Clerk of the Board
(408) 265-2600
Fax (408) 266-0271
www.valleywater.org

Note: The finalized Board Agenda, exception items and supplemental items will be posted prior to the meeting in accordance with the Brown Act.

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**Santa Clara Valley Water District
Board of Directors
SPECIAL JOINT MEETING WITH CONTRA COSTA WATER DISTRICT
AGENDA**

Friday, May 3, 2019

10:00 AM

Silicon Valley Advanced Water Purification Center
4190 Zanker Road, San Jose CA 95134

CALL TO ORDER:

Roll Call.

Pledge of Allegiance/National Anthem.

Time Open for Public Comment on any Item not on the Agenda.

Notice to the public: This item is reserved for persons desiring to address the Board on any matter not on this agenda. Members of the public who wish to address the Board on any item not listed on the agenda should complete a Speaker Card and present it to the Clerk of the Board. The Board Chair will call individuals to the podium in turn. Speakers comments should be limited to three minutes or as set by the Chair. The law does not permit Board action on, or extended discussion of, any item not on the agenda except under special circumstances. If Board action is requested, the matter may be placed on a future agenda. All comments that require a response will be referred to staff for a reply in writing. The Board may take action on any item of business appearing on the posted agenda.

DISCUSSION AND INFORMATION:

1. Los Vaqueros Reservoir Expansion Project Update.

[19-0344](#)

Recommendation: That the Santa Clara Valley Water District (Valley Water), and Contra Costa Water District (CCWD) Boards of Directors receive an update from CCWD staff, on the Phase 2 Los Vaqueros Reservoir Expansion Project.

Manager: Marguerite Patil, CCWD Special Assistant to the General Manager
Gerald De La Piedra, Valley Water Assistant Officer

Attachments: [Attachment 1: Project Map](#)

Est. Staff Time: 15 Minutes

2. Silicon Valley Advanced Water Purification Center Presentation.

[19-0345](#)

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.

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

Attachments: [Attachment 1: PowerPoint](#)

Est. Staff Time: 10 Minutes

ADJOURN:

Adjourn to a joint Santa Clara Valley Water District and Contra Costa Water District tour of the Silicon Valley Advanced Water Purification Center, and to the next regularly scheduled meeting of the Santa Clara Valley Water District Board of Directors at 1:00 p.m. on May 14, 2019, in the Santa Clara Valley Water District Headquarters Building Boardroom, 5700 Almaden Expressway, San Jose, California.



Santa Clara Valley Water District/Contra Costa Water District Joint Meeting



File No.: 19-0344

Agenda Date: 5/3/2019

Item No.: 1.

BOARD AGENDA MEMORANDUM

SUBJECT:

Los Vaqueros Reservoir Expansion Project Update.

RECOMMENDATION:

That the Santa Clara Valley Water District (Valley Water), and Contra Costa Water District (CCWD) Boards of Directors receive an update from CCWD staff, on the Phase 2 Los Vaqueros Reservoir Expansion Project.

SUMMARY:

Background

Los Vaqueros is an off-stream reservoir, located in the foothills west of the Delta in Contra Costa County. Initially constructed in 1998 with a capacity of 100,000 acre-feet (AF), it was expanded to 160,000 AF in 2012. The original reservoir and first expansion were completed on time and within budget, without opposition. The Los Vaqueros Expansion (LVE) Project would increase the reservoir to 275,000 AF and add a new pipeline, the Transfer-Bethany Pipeline, connecting CCWD's system to the California Aqueduct at Bethany Reservoir. Regardless of whether the Santa Clara Valley Water District (Valley Water) stores water in the expanded Los Vaqueros Reservoir, imported water could be moved from CCWD's intakes in the Delta to Valley Water's system without relying on the South-of-Delta pumps.

Project Participants

The LVE Project started with 14 Local Agency Partners (LAP); since then Eastern Contra Costa Irrigation District has dropped out, and some members have consolidated under the San Luis & Delta-Mendota Water Authority, including Byron Bethany Irrigation District, Del Puerto Water District, Panoche Water District, and Westlands Water District. Therefore, there are currently nine (9) LAPs not including CCWD.

The current LAP participants are:

1. Alameda County Water District
2. Bay Area Water Supply & Conservation Agency
3. City of Brentwood
4. East Bay Municipal Utility District
5. Grassland Water District

6. Santa Clara Valley Water District
7. San Francisco Public Utilities Commission
8. Zone 7 Water Agency
9. San Luis & Delta Mendota Water Authority
 - 9.1. Byron Bethany Irrigation District
 - 9.2. Del Puerto Water District
 - 9.3. Panoche Water District
 - 9.4. Westlands Water District

Total Project Cost

The total project implementation cost of the LVE Project in constant 2015 dollars is roughly \$980 million based on assumptions made in the Proposition 1 Water Storage Investment Program (WSIP) application. LVE Project costs have come down due to the elimination of project elements no longer needed (such as the East Contra Costa Irrigation District interconnection pipeline) and a more cost-efficient alignment for the Transfer-Bethany Pipeline. CCWD received the maximum eligibility award of \$459 million from the California Water Commission (CWC) as part of the WSIP funding. CWC authorized \$13.65 million in early funding for planning and design. CCWD received an eligibility award of \$2.15 million in federal funding for planning and design through the Water Infrastructure Improvement for the Nation Act (WIIN Act).

In 2016, Valley Water Board authorized the CEO to execute an agreement to participate in the LVE Project and contributed \$100,000 to support CCWD's Proposition 1 WSIP application. In 2019, the Board authorized the CEO to execute an agreement to continue its participation in the LVE Project and contributed \$315,000 to continue various planning, permitting and design efforts. Additionally, some of these funds will be used as matching local funds required by WSIP and the WIIN Act.

Project Governance

The LVE Project currently is being led by CCWD. CCWD's financial consultant will work with the LAPs to develop a JPA agreement, anticipated to be established in 2020. The LAPs are planning to hire independent counsel to represent them during JPA formation. Once the JPA is in place, responsibilities such as project financing and executing agreements will transition from CCWD to the JPA.

Potential Valley Water Benefits

The LVE Project water supply and operational benefits could be realized by diverting State Water Project (SWP), Central Valley Project (CVP), and/or surplus water without relying on the South-of-Delta pumps for direct delivery or pumped into an expanded Los Vaqueros Reservoir for later delivery. Staff anticipates the LVE Project could provide the following benefits to Valley Water:

- An increase in water supply, primarily in dry years;
- The ability to bank SWP and CVP contract supplies in an expanded Los Vaqueros Reservoir;
- The LVE Project's expanded storage and conveyances may provide alternate points of diversion for Valley Water during periods when SWP and CVP exports are restricted by regulatory requirements that do not apply to CCWD diversions;
- Imported water could be routed from CCWD to the California Aqueduct through a new Transfer-Bethany Pipeline; and

-
- Transfer-Bethany Pipeline could support other regional projects (e.g., desalination, refinery recycled water exchange, Bay Area Regional Reliability water market).

The extent to which these benefits can be realized depends on several issues that have yet to be resolved, including the level of participation (i.e., with or without storage), permit requirements, regulatory conditions, adequate conveyance capacity in the South Bay Aqueduct, and integration of operations with the SWP and CVP projects.

Next Steps

Key near-term meetings and decision points on the LVE Project include:

- Summer 2019 - Third party consultant review of user fees
- Spring 2019 - Form committee to select outside counsel to form JPA
- Spring 2019 - GM briefing at ACWA conference
- 2019/2020 - Conduct and review various financial model scenarios
- 2020 - Formation of JPA

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:

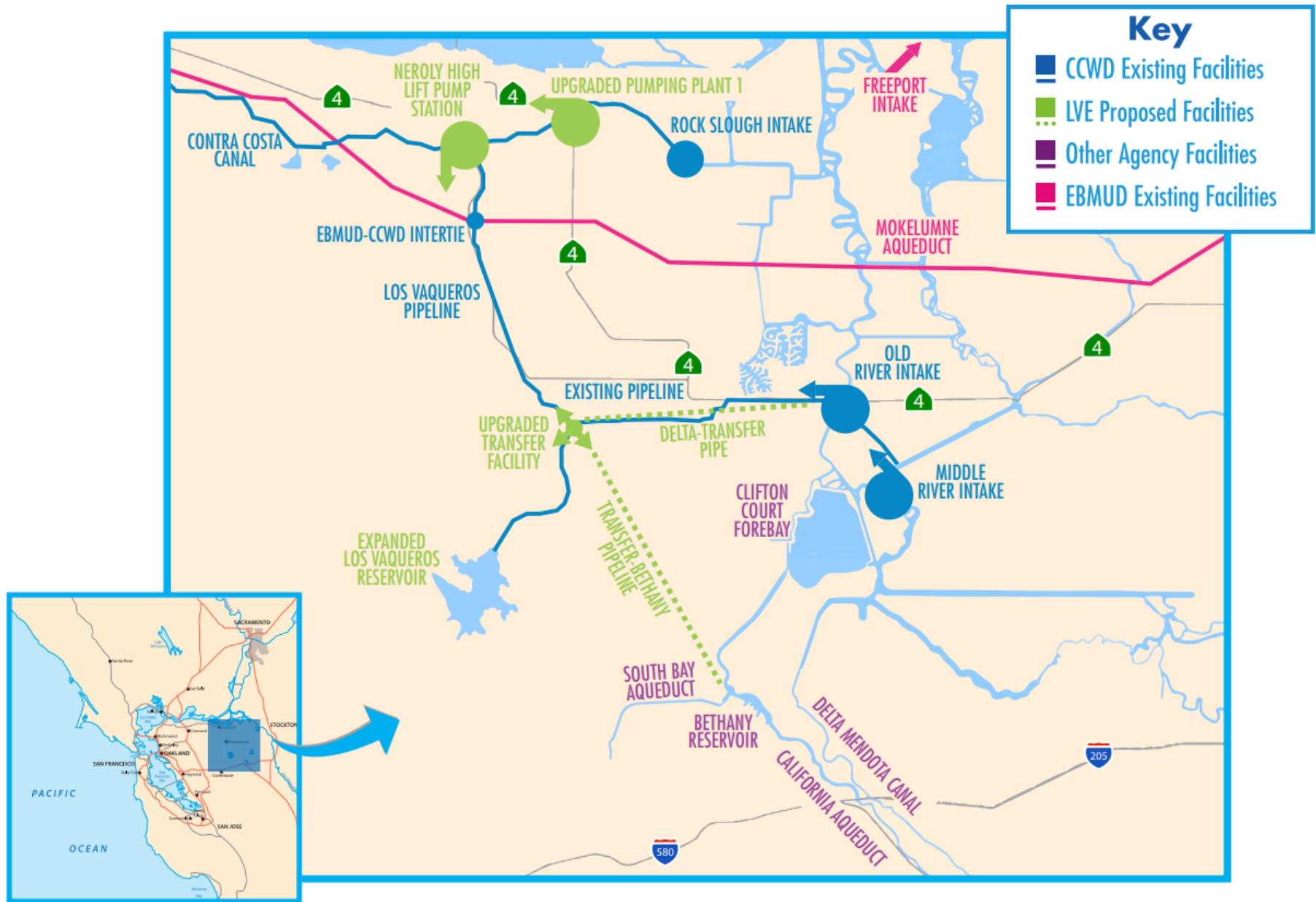
Attachment 1: Project Map

UNCLASSIFIED MANAGER:

Marguerite Patil, CCWD Special Assistant to the General Manager
Gerald De La Piedra, Valley Water Assistant Officer

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ATTACHMENT 1: PROJECT MAP



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Santa Clara Valley Water District/Contra Costa Water District Joint Meeting



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



Advancing Water Reuse in Santa Clara County

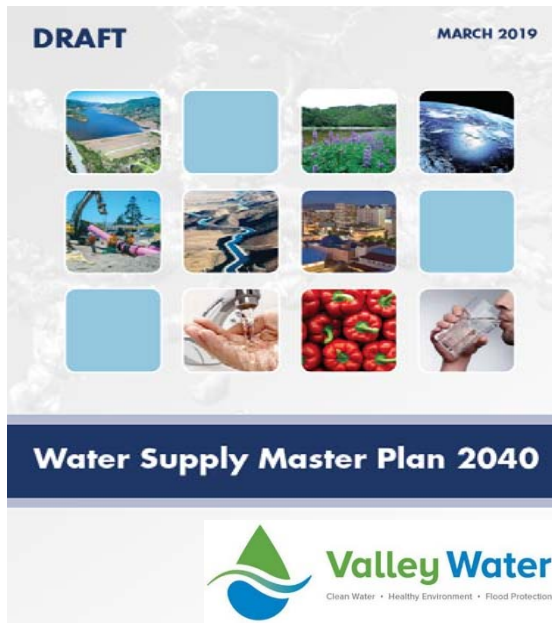


Valley Water

Clean Water • Healthy Environment • Flood Protection

siliconvalley 
ADVANCED WATER PURIFICATION CENTER

Water Supply Master Plan



Imported water



Local surface & groundwater



The Master Plan is Valley Water's strategy for providing a reliable and sustainable water supply for Santa Clara County

Conservation



Recycled Water



Water Reuse: A Resilient Water Supply

Benefits

- Not hydrologically dependent
- Locally controlled
- Efficient use of existing supplies
- Consistent with “One Water” approach
- Supports “Ensure Sustainability” Strategy¹ #2 – Expand Reuse

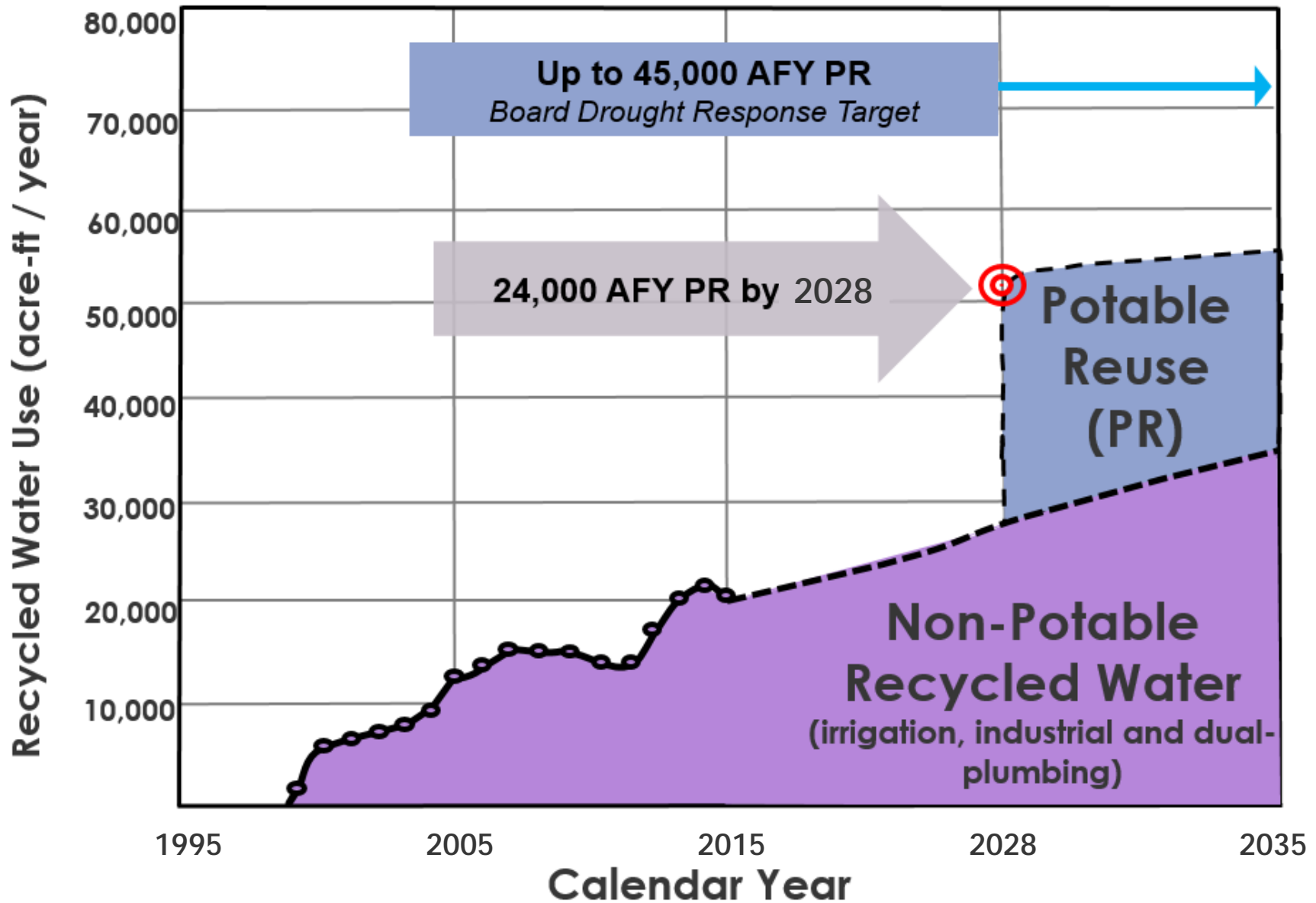
Board Policy

- 10% of water supply portfolio met through potable and non-potable reuse



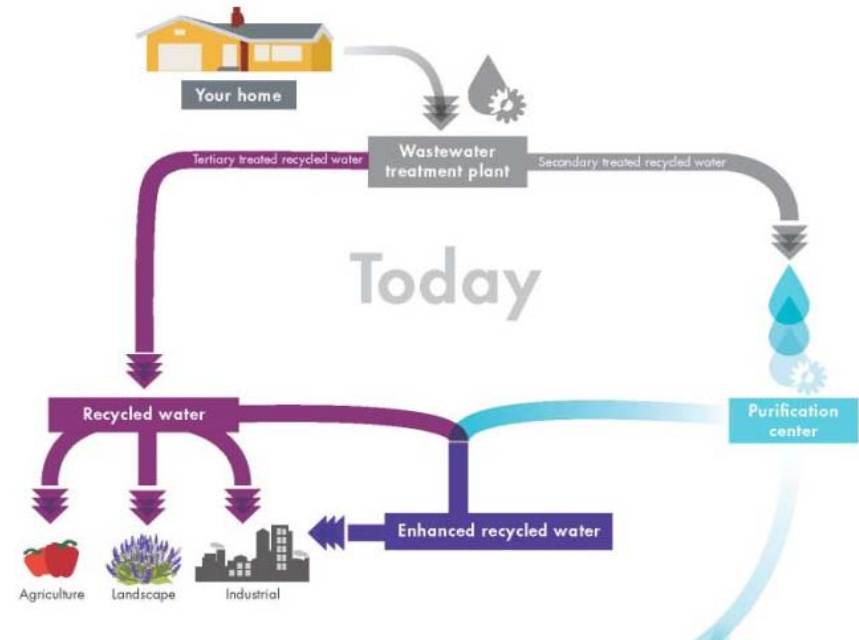
¹ From the Water Supply Master Plan.

Recycled and Purified Water Goals



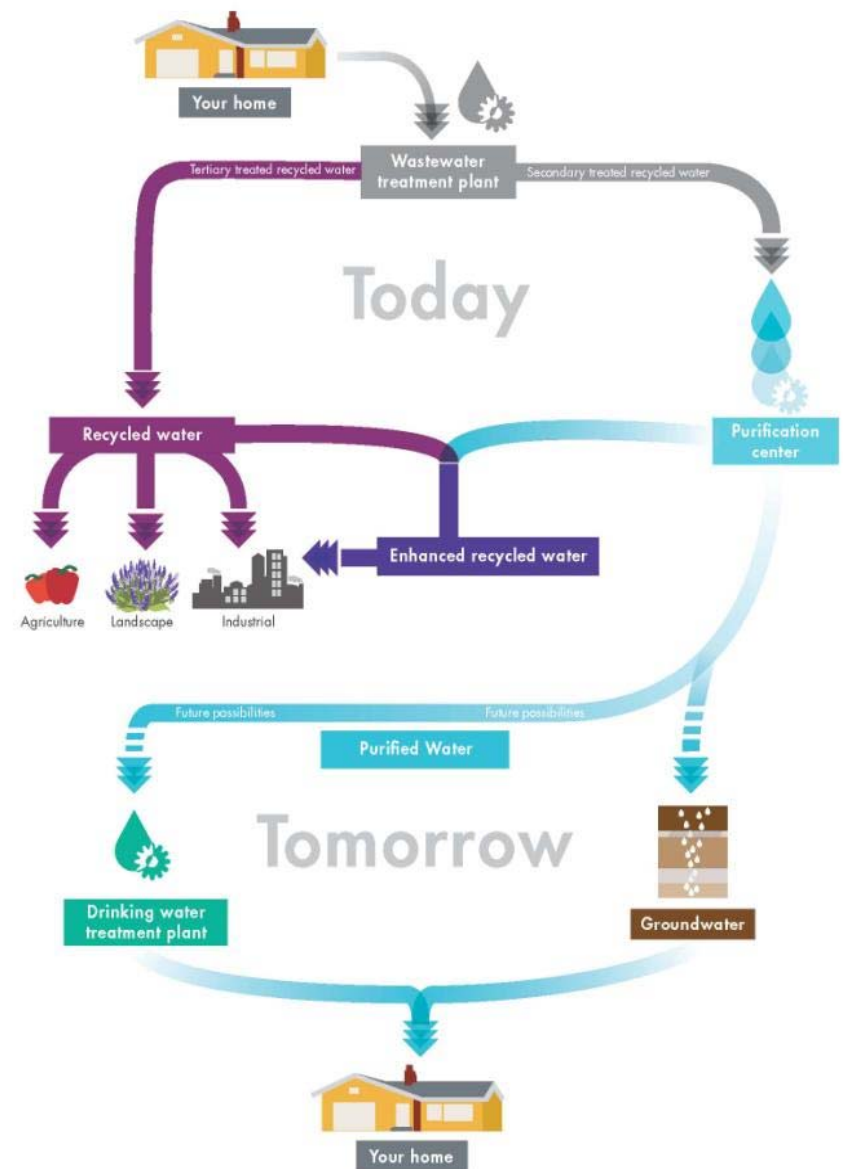
Silicon Valley Advanced Water Purification Center

- Online in March 2014, the Center produces up to 8MGD of purified water from secondary effluent.



Path Forward to Potable Reuse

- Demonstrate the technology
- Educate the public
- Engage regulators
- Research and pilot projects
- Validate treatment processes
- Train future potable reuse operators



Path Forward to Potable Reuse



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ADVANCED WATER PURIFICATION CENTER

Thank You. Now, let's start our journey...



Visit: www.purewater4u.org

Email: info@purewater4u.org

