



SANTA CLARA VALLEY WATER DISTRICT

NON-AGENDA

September 13, 2024

Board Policy EL-7 Communication and Support to the Board
The BAOs shall inform and support the Board in its work.

Page	<u>CEO BULLETIN & NEWSLETTERS</u>
	CEO Bulletin: None
2	Water Tracker- September 2024
	<u>BOARD MEMBER REQUESTS & INFORMATIONAL ITEMS</u>
5	BMR/IBMR Weekly Reports: 09/11/24
6	Memo from Marta Lugo, Deputy Administrative Officer to Rachael Gibson, Chief of External Affairs, dated 08/28/24, providing a letter from Chair Hsueh to San Jose Mayor Matt Mahan on collaborating with the City of San Jose on recycled and purified Water.
	<u>INCOMING BOARD CORRESPONDENCE</u>
9	Board Correspondence Weekly Report: 09/11/24
10	Email from Nestor de la O Vargas to the board, dated 09/05/24, providing Keep Coyote Creek Beautiful flyers for their upcoming BioBlitz and Coastal Cleanup up day events. C-24-0215
	<u>OUTGOING BOARD CORRESPONDENCE</u>
15	Email from Chair Hsueh to Jim Kuhl, dated 09/06/24, replying to their email regarding the Water use Projection, Water Demand Elasticity and Customer Affordability Study.
24	Email from Chair Hsueh to Libby Lucas, dated 09/09/24, replying to their email regarding groundwater, subsidence, and the Valley Transportation Authority (VTA) project in downtown San Jose.

A monthly assessment of trends in water supply and use for Santa Clara County, California

Outlook as of September 1, 2024

On June 25, 2024, the U.S. Bureau of Reclamation (Bureau) announced an increase to the 2024 south-of-delta Central Valley Project (CVP) agricultural allocation from 40% to 50%; however, the Bureau kept the Municipal and Industrial (M&I) allocation at 75% of historic M&I. Earlier this year, on April 23, 2024, the California Department of Water Resources increased the State Water Project (SWP) allocation from 30% to 40% of contract amount for 2024. On June 13, 2023, the Board of Directors adopted a resolution to support water conservation as a way of life and an ordinance with a set of permanent water waste prohibitions for Santa Clara County.

Weather

- Rainfall in San José:
 - » Month of August, City of San José = 0 inches
 - » Rainfall year total = 0 inches (rainfall year is July 1 to June 30)
- San José average daily high temperature was 83.8 degrees Fahrenheit in August, which is lower than the five-year average for August (84.1 degrees Fahrenheit)

Local Reservoirs

- Total September 1 storage = 48,967 acre-feet

Reservoir Storage	All Ten Valley Water Reservoirs	All Reservoirs Except Anderson
Storage as % of unrestricted capacity	29%	59%
Storage as % of restricted capacity (1)	78%	76%
Storage as % of the 20-year average for September 1	63%	128%

(1) Per the Federal Energy Regulatory Commission’s order, the capacity of Anderson Reservoir was restricted to the deadpool storage as of October 1, 2020

- Approximately 350 acre-feet of imported water was delivered into Calero Reservoir during August 2024
- Total estimated releases to streams (local and imported water) during August were 3,950 acre-feet (based on preliminary hydrologic data)

Treated Water

- Below average demands of 10,300 acre-feet were delivered in August
- This total is 92% of the five-year average for the month of August
- Year-to-date deliveries are 53,210 acre-feet or 82% of the five-year average

Groundwater

- Groundwater conditions remain healthy throughout the county. Groundwater levels in most regional monitoring wells are lower than last month as typical seasonal declines continue. While half of the water levels are lower relative to August 2023, all are the same or higher than the prior five-year average for August. The end of 2024 groundwater storage is projected to be in Stage 1 (Normal) of the Water Shortage Contingency Plan

	Santa Clara Subbasin		Llagas Subbasin
	Santa Clara Plain	Coyote Valley	
August 2024 managed recharge estimate	4,300	1,400	2,600
YTD managed recharge estimate	43,300	10,700	15,900
YTD managed recharge as % of five-year average	127%	122%	121%
July 2024 pumping estimate	7,500	1,600	5,700
YTD pumping estimate	38,100	7,500	18,000
YTD pumping as % of five-year average	102%	111%	91%
Current index well groundwater levels compared to August 2023	4 Feet Lower	7 Feet Lower	1 Foot Higher

All volumes are in acre-feet. All data is for 2024 except where noted. YTD = Year-to-date.

Imported Water

- In August (through August 31st), the SWP operated Banks pumping plant with an average daily export of 12,209 acre-feet, resulting in a total export of 378,465 acre-feet from the Sacramento-San Joaquin Delta for the month
- In August (through August 31st), the CVP operated Jones pumping plant with an average daily export of 7,913 acre-feet, resulting in a total export of 245,290 acre-feet from the Sacramento-San Joaquin Delta for the month
- Multiple fish protection thresholds and outflow requirements were triggered at the Sacramento-San Joaquin Delta export facilities this winter/spring. Project facilities, including delta exports, were operated to maintain water quality requirements in the delta for the month of August

WY 2024 Imported Water Allocations	Allocation	Allocation (acre-feet)	Details
SWP	40%	40,000	Allocation increased on 4/23/24
CVP	50% Ag 75% M&I	Approximately 110,000	Allocation increased on 6/25/24
State-wide Reservoir Storage	Capacity	Current Storage (acre-feet)	Average for Date (as of 9/3/24)
Shasta Reservoir	66%	2,986,533	110%
Oroville Reservoir	66%	2,277,368	111%
San Luis Reservoir	46%	941,596	120%
Semitropic Groundwater Bank	Capacity	Current Storage (acre-feet)	Date of Data
	87%	300,694	7/31/24
Estimated SFPUC Deliveries	July 2024 (acre-feet)	2024 Total to Date (acre-feet)	Five-Year Annual Average (acre-feet)
	4,538	25,779	47,000

Conserved Water

- Saved 83,174 acre-feet in FY23 through Valley Water’s long-term conservation program (baseline year is 1992)
- Long-term program goal is to save nearly 100,000 acre-feet by 2030, 110,000 acre-feet by 2040, and 126,000 acre-feet by 2050
- On June 13, 2023, the Board of Directors adopted a resolution to support water conservation as a way of life in Santa Clara County and an ordinance with a set of permanent water waste prohibitions

Recycled Water

- Estimated August 2024 production = 2,178 acre-feet
- Estimated year-to-date through August = 11,878 acre-feet or 103% of the five-year average
- Silicon Valley Advanced Water Purification Center produced an estimated 1.5 billion gallons (4,493 acre-feet) of purified water in 2023. Since the beginning of 2024, about 3,482 acre-feet of purified water has been produced. The purified water is blended with existing tertiary recycled water for South Bay Water Recycling Program customers

CONTACT US

To find out the latest information on Valley Water projects or to submit questions or comments, email info@valleywater.org or use our **Access Valley Water** customer request system at <https://deliver.com/2yukx>.



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BOARD MEMBER REQUESTS and Informational Items

Report Name: Board Member Requests

Request	Request Date	Director	BAO/Chief	Staff	Description	20 Days Due Date	Expected Completion Date	Disposition
I-24-0012	08/09/24	Eisenberg	Orellana	Hopper	Can Valley Water implement a match charitable donation program like many other employers in the Bay Area? If so, how?	08/29/24		



MEMORANDUM

FC 14 (08-21-19)

TO: Rachael Gibson, Chief of External Affairs

FROM: Marta Lugo, Deputy
Administrative Officer

SUBJECT: Letter from Chair Nai Hsueh to San Jose
Mayor Matt Mahan on Collaboration with the
City of San Jose on Recycled and Purified
Water

DATE: August 28, 2024

Attached to this memorandum is the letter from Chair Nai Hsueh to San Jose Mayor Matt Mahan, reiterating Valley Water's commitment to collaborating with the City of San Jose on the development of purified water and expansion of recycled water.

The letter was sent to the Office of Mayor Matt Mahan on August 21, 2024.

A handwritten signature in blue ink, appearing to read "Beckie Zisser".

Beckie Zisser
Acting Deputy Administrative Officer, Offices of Government Relations and REDI



August 20, 2024

The Honorable Matt Mahan
City of San José
200 E. Santa Clara Street
San José, CA 95113

Dear Mayor Mahan,

On behalf of the Santa Clara Valley Water District (Valley Water), I am writing to thank you for your support and reiterate our commitment to collaborating with the City of San José (City) on the development of purified water and expansion of recycled water. As of July, Valley Water has included funding for a first phase of a potable reuse project in San José in our Capital Improvement Program. As long-standing partners in sustainable water supply resiliency, we value the effective collaboration that has been established between our two agencies over the years.

Valley Water staff is partnering with City staff to develop the necessary interagency agreements, including a City staff funding agreement, land lease and water availability agreements, potential collaboration with SFPUC, and private activity analysis, as well as addressing regulatory issues for Direct Potable Reuse (DPR) and management of Reverse Osmosis Concentrate. With the current timeline to implement the demonstration facility within three to five years, assuming agreements can be executed quickly, we would like to see what can be done to expedite the process.

We wish to express the importance of advancing the expansion of purified water as a key component of our long-term water supply strategy in the face of climate change threats, and as such, we would like to move expeditiously to implement both a demonstration and full scale facility. We remain open to having additional meetings of the Joint Recycled Water Policy Advisory Committee (JRWPAC) to facilitate necessary discussions to achieve meaningful progress and help expedite decision making processes. It would be to the benefit of all parties to have the process be moved along quicker to avoid the increased inflation costs due to an extended project timeline as well as being able to take advantage of current potential grant funding opportunities.

There is an increasingly urgent need to develop and secure resources for existing and future water needs, particularly in light of the challenges posed by climate change. It is critical that we work together to ensure a sustainable and reliable water supply for the residents of San José and the surrounding areas.

Thank you for your leadership and continued support for our collaborative purified water expansion efforts.

Sincerely,

Nai Hsueh
Chair, Board of Directors

gy:cg
0814a-l

BOARD OF DIRECTORS

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[Rick L. Callender, Esq.](#)

CLERK OF THE BOARD

[Michele L. King, CMC](#)



INCOMING BOARD CORRESPONDENCE

Board Correspondence (open)

Correspond No	Rec'd By District	Rec'd By COB	Letter To	Letter From	Description	Disposition	BAO/ Chief	Staff	Draft Response Due Date	Draft Response Submitted	Writer Ack. Sent	Final Response Due Date
C-24-0211	08/28/24	08/28/24	All	DOUG MUIRHEAD	Public Comment from Doug Muirhead to the BPMC regarding EL-3 Succession Planning.	Refer to Staff	Yoke	Mcelroy	09/05/24	-	n/a	09/11/24

From: [Néstor De la O Vargas](#)
To: [Board of Directors](#); [Linh Hoang](#); [Meghan Azralon](#); [Barbara Keegan](#)
Cc: [Aja Yee](#)
Subject: KCCB 10/6 BioBlitz
Date: Thursday, September 5, 2024 10:22:05 AM
Attachments: [241006-BioBlitz-IG Post.png](#)

***** This email originated from outside of Valley Water. Do not click links or open attachments unless you recognize the sender and know the content is safe. *****

Hello,

Keep Coyote Creek has set up a BioBlitz in October on the 6th!

BioBlitz at Coyote Creek Trail near McCarthy Road
Location: Ranch Dr. and Alviso Milpitas Rd., Milpitas, CA, 95035
Sun Oct 6th
9AM-11:30AM

Celebrate World Animal month by participating in a BioBlitz!

Join Keep Coyote Creek Beautiful, BioBlitz Club, Santa Clara Valley Bird Alliance, and San Francisco Bay Bird Observatory in cataloging and documenting all of the living things that reside there. We will have experts in various fields to help guide participants through all the cool plants and wildlife.

Located in Milpitas, we will explore Coyote Creek Trail near McCarthy Boulevard. We will start at the Coyote Creek Trail - Ranch Drive entry, and explore north and south along the trail.

The best part? All you need to participate is a smart phone with the iNaturalist app!

So bring your family and prepare for an in-depth tour of this great trail.

Community service hours available

Hosted by Keep Coyote Creek Beautiful, Bioblitz Club, Santa Clara Valley Bird Alliance, and San Francisco Bay Bird Observatory

RSVP: <https://241006-bioblitz.eventbrite.com/?aff=vw>

Sincerely,
Néstor De la O Vargas
Event Assistant
Keep Coyote Creek Beautiful
408.660.3339
KeepCoyoteCreekBeautiful.org

CALIFORNIA COASTAL CLEANUP DAY

4TH
ANNIVERSARY

YOU
ARE
BIGGER
THAN
YOU
THINK

Saturday, 9.21.24

9AM-12PM

SELMA OLINDER PARK - 1132 WOODBOROUGH DR, SAN JOSE, CA 95116



SAN JOSE
PARKS, RECREATION &
NEIGHBORHOOD SERVICES
Building Community Through Fun



CALIFORNIA
COASTAL
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WWW.KEEPCOYOTECREEKBEAUTIFUL.ORG

COMMUNITY
SERVICE HOURS!!



COYOTE CREEK TRAIL BIOBLITZ

MILPITAS NEAR MCCARTHY BLVD

OCTOBER 6TH | 9AM-1130AM



BECOME A COMMUNITY SCIENTIST



JOIN EXPERTS TO EXPLORE NATURE
& DOCUMENT WHAT LIVES IN THIS PARK!





**COYOTE
CREEK TRAIL
BIOBLITZ**
OCTOBER 6: 9AM-1130AM



OUTGOING BOARD CORRESPONDENCE

From: [Candice Kwok-Smith](#) on behalf of [Board Correspondence](#)
To: [Darin Taylor](#)
Cc: [Michele King](#); [Board of Directors](#)
Subject: FW: Water Use Projection, Water Demand Elasticity and Customer Affordability Study
Date: Friday, September 6, 2024 1:39:13 PM
Attachments: [image001.png](#)

Hi Darin,

C-24-0216 has been approved, sent and closed.

Thanks,
Candice

From: Candice Kwok-Smith **On Behalf Of** Board of Directors
Sent: Friday, September 6, 2024 1:38 PM
To: [REDACTED]
Subject: Re: Water Use Projection, Water Demand Elasticity and Customer Affordability Study

Sent on Behalf of Chair Hsueh:

Dear Jim Kuhl,

Thank you for your email regarding the Water use Projection, Water Demand Elasticity and Customer Affordability Study topic (agenda item 3.5) at the 8/27/24 Board meeting. In that email you asked 5 questions. Below are the responses to those questions:

1. **For the proposed study methodology, how accurate will it be in forecasting water demand long-term (i.e., 10 and 20-year outlooks)?**

Answer: The Consultants will incorporate the best information available at the time to develop recommendations that will help Valley Water better forecast water demand. There is no way to give a more definitive answer to this question. Forecasts by definition are predictions of future events that are inherently uncertain.

1. **Will 10 and 20-year water demand requirements be forecasted for two population growth scenarios?**

1. **Association of Bay Area Government's ≈1% growth per year and**
2. **US Department of Census' declining population followed by California's Department of Finance's Demographics Research Unit's projection that population is flat after 2036.**

Answer: It is common practice for water agencies to conservatively assume lower growth demand forecasts for purposes of shorter term water rate and revenue projections versus conservatively assuming higher growth demand forecasts for purposes of longer term water supply planning. The consultants are aware that the draft regional growth forecast for the Plan Bay Area 2050+ expects lower

population growth than prior versions of this Plan. The information you provided related to the US Department of Census and the California Department of Finance's Demographics Research Unit is much appreciated, but it should be noted that for purposes of projecting water demand, housing and jobs data are more relevant than population, because water use patterns are different for different types of housing (i.e. single-family vs multi-family housing).

1. **How will the study's results be employed to select the best WSMP 2050 Strategy option and stimulate pruning of inefficient projects thereby keeping water as affordable as possible?**

Answer: The goal of the WSMP 2050 is to recommend the best strategy to meet water demand and to keep water rates as affordable as possible. The WSMP 2050 includes an adaptive management framework, which is necessary due to the significant uncertainty related to forecasted future supply and demand conditions as well as uncertainty regarding the success of future WSMP-related projects. The framework includes a roadmap and annual reporting intended to define a consistent methodical approach to making investment decisions. The results of this study will be a helpful input as the Board considers potential investment options and adjustments to the roadmap each year under the adaptive management framework.

1. **Since the Hazen 5/28/21 study (i.e., "Water Demand and Forecast Development") provides a standard analysis methodology basis, why is it taking almost a year to generate this study?**

Answer: The consultant engagement is multi-faceted and more than a demand forecast, it includes 3 separate but interrelated studies, including a water use projection study, a water demand elasticity study and a customer affordability study. It takes time to do all of the work proposed under this engagement including collecting recent data from the water retailers, performing benchmarking analyses with other similar wholesale water supply agencies and developing the report.

1. **What will be VW's plan to monitor and prevent price demand downward spirals caused by retailers' progressive 'Billing' structures?**

Answer: Demand monitoring occurs continually, and demand forecasts are updated annually as part of the annual water rate setting process. However, Valley Water can only control the wholesale water rate projection, which pays for the cost of ensuring that water supply is reliable in Santa Clara County. Valley Water does not control or co-manage the water retailer's billing structure. However, Valley Water and its retailers meet on a quarterly basis to work collaboratively on a myriad of issues related to serving our mutual customers in the best way possible.

Thank you again for your interest in this effort.

Sincerely,



Nai Hsueh

Chair, District 5

C-24-0216

From: [REDACTED] <[REDACTED]>
Sent: Wednesday, August 21, 2024 4:08 PM
To: Darin Taylor <DTaylor@valleywater.org>; Clerk of the Board <clerkoftheboard@valleywater.org>; Board of Directors <board@valleywater.org>; John Varela <jvarela@valleywater.org>; Barbara Keegan <BKeegan@valleywater.org>; Richard Santos <rsantos@valleywater.org>; Jim Beall <JBeall@valleywater.org>; Nai Hsueh <NHsueh@valleywater.org>; Tony Estremera <TEstremera@valleywater.org>; Rebecca Eisenberg <Reisenberg@valleywater.org>
Cc: Rachael Gibson <rgibson@valleywater.org>; Aaron Baker <ABaker@valleywater.org>; Kirsten Struve <KStruve@valleywater.org>; Peter Drekmeier <peter@tuolumne.org>
Subject: 8/27/24 Board Meeting - Agenda Item 3.5 - Water Use Projection, Water Demand Elasticity and Customer Affordability Study - Comment

*** This email originated from outside of Valley Water. Do not click links or open attachments unless you recognize the sender and know the content is safe. ***

Email Date: 8/21/24

To: Darin Taylor and Valley Water Board

Cc: Valley Water select Staff Members

From: Jim Kuhl

Meeting: Tuesday, 8/27/24 Valley Water Board Meeting

Agenda Item: 3.5

Topic: Water Use Projection, Water Demand Elasticity and Customer

Affordability Study - Comment

Reference: Darin Taylor’s Power Point Presentation titled: ‘Water Use Projection, Water Demand Elasticity and Customer *Affordability Study*’ included in the published agenda. See agenda item 3.5 on link: [Agenda \(legistar1.com\)](http://Agenda.legistar1.com)

Study Presentation Comment

Valley Water (VW) Board and Staff must ensure the public they are following a logical path, investing prudently in projects required for future water supply resiliency plus they are doing their upmost to keep water *affordable* to the end consumer.

Please answer these questions:

1. **For the proposed study methodology, how accurate will it be in forecasting water demand long-term (i.e., 10 and 20-year outlooks)?**
2. **Will 10 and 20-year water demand requirements be forecasted for two population growth scenarios?**
 1. **Association of Bay Area Government’s ≈1% growth per year and**
 2. **US Department of Census’ declining population followed by California’s Department of Finance’s Demographics Research Unit’s projection that population is flat after 2036.**
3. **How will the study’s results be employed to select the best WSMP 2050 Strategy option and stimulate pruning of inefficient projects thereby keeping water as *affordable* as possible?**
4. **Since the Hazen 5/28/21 study (i.e., “Water Demand and Forecast Development”) provides a standard analysis methodology basis, why is it taking almost a year to generate this study?**

Reference the presentation topic Expected Study Outcomes [See page 22]

The presentation statement “*Affordability* of water costs within VW’s Control” limitation is unacceptable because it allows VW to decouple itself from any responsibility in tracking, co-managing the outcome of retailers’ ‘Billing’ structures having unintended but potential dire consequences. San Jose Water Company’s (SJWC) ‘Billing’ socioeconomic structure is being employed to drive urban water conservation, a worthy objective. However, this ‘Billing’ structure improperly managed could trigger a downward water demand ‘Billing’ increase spiral with potential significant adverse financial

consequences to SJWC, VW and ultimately the consumer. A close working relationship must be established and maintained between VW and their water utility retailers carefully monitoring the public's water consumption given a projection of $\approx 200\%$ increase in retail water prices by 2044 in constant economics due to the planned $\approx \$30B$ infrastructure investment.

1. What will be VW's plan to monitor and prevent price demand downward spirals caused by retailers' progressive 'Billing' structures?

Best regards,

Jim

Jim Kuhl, Civic Issue Activist and Environmental Advocate

-

Comment Background Information

Valley Water (VW) is a California Water District governmental nonprofit monopoly responsible for managing the supply of fresh water for Santa Clara County (SCC). VW is projected to raise the north county groundwater wholesale water 'Charge' an unprecedented $\approx 620\%$ between 2023 and 2044 due to a planned $\approx \$30B$ infrastructure investment program designed to improve water supply resiliency. Almost all water retailer utilities in SCC, with only a few exceptions, obtain their fresh water supply by way of VW. **There are no other fresh water supplier options**, excepting private wells. VW has unimpeded ability to raise the wholesale price of water within a geographic area only limited by - their 'Charge' can't exceed actual costs for providing water within that area.

Elasticity of water demand is how the consumers will respond to the change in quantity of water demanded due to a change in its price. **In this monopolistic world, retailers' 'Billing' simply passes through VW's higher wholesale 'Charges'. The consumer's choice is to either pay the retailer's higher 'Bill' containing VW's higher 'Charges' or reduce their water demand or leave the geographic area.** The urban consumers' options to reduce water demand, without leaving the area, are: eliminate landscaping irrigation, install water saving appliances and change personal habits (e.g., navy showers).

Using the proposed microeconomics supply/demand/price model outside a free-market system is atypical and a stretch in the proposed ‘Water Use Projection, Water Demand Elasticity and Customer Affordability Study’ given the monopolistic water utility market environment and the water supply volatility due to droughts and wet periods.

In microeconomics, as the price of a good goes up, consumers demand less of it and more supply enters the market. If the price is too high, the supply will be greater than demand, and producers are stuck with the excess. Conversely, supply rises while demand declines as the price drops.

However, in the monopolistic water utility world, the annual costs of VW and the ‘cost+profit’ of SJWC must be recovered independent of the amount of water supplied. If the water supply is plentiful, VW doesn’t reduce their AF ‘Charge’. California Water Commission and VW operational directives result in storing the excess water in reservoirs and aquifer banks as a reserve against future drought periods or releasing the excess ultimately to the ocean. If the water supply is constrained by an extended drought, the water consumed is driven down by VW emergency directives to consumers coupled with high consumption surcharges and/or fines by SJWC. In droughts, SJWC obtains ‘Billing’ rate increases if revenue is insufficient to them remain profitable through the California Public Utilities Commission. In addition, SJWC has implemented a socioeconomic artificial changeable ‘Billing’ structure, authorized under California law, designed to drive water conservation further distorting supply/demand/price model derivation and water demand projections using historical data.

VW has been and continues to promote and generously fund an ambitious urban water conservation program that is projected to reduce urban water demand over time. This VW program will also distort and diminish statistical derived projections using historical data.

In short, analysis of past historical water demand changes is unlikely to be provide an accurate long-term forecast to price and supply changes.

Additional Background Information, Presentation Recommendations and Questions:

It is recommended that Darin Taylor and Raftelis Financial Consultant, Inc and Hazen and Sawyer read the attached ‘Water *Affordability* White Paper’ pages 1 through 15 for additional insight on the water *affordability* topic.

What is the VW web link to the Hazen 5/28/21 document titled: “Water Demand Model and Forecast Development” as the document doesn’t surface using VW’s web site search engine? The document is needed to enable public review and research.

-

Darin Taylor Power Point Presentation

-

1. What is the acronym in ‘CIP prioritization and funding sources’? – [page 6]
2. What does ‘Should models be harmonized’ mean and why significant? [page 9]
3. What is the acronym in ‘OLS with price “instrument’ mean? – [page 12]
4. What is the difference and significance between ‘Pooled data vs individual time series’? – [page 12]
5. What is meaning of ‘Instrumental variables/2SLS’? – [page 12]
6. What does acronym ‘CI’ mean? - [page 13]
7. **Regarding ‘Future driver Units (N) based on ABAG Bay Area Plan 2040 Projections** – [page 14]
 1. **ABAG employs 2010-40 projections of population growth of $\approx 1\%/Y$ and household growth of $\approx 0.7\%/Y$ appear to be overly optimistic. As an example, ABAG projects Bay Area population will grow 33% by 2040.**
 2. **The Cost-of-Living crisis in the Bay Area has caused and is expected to continue causing population loss.**
 3. **According to the US Census Bureau, San Jose’s population declined 4.3% since 2020. Independent researcher, Gaeton Lion, predicts it will be flat till 2060. The California Department Demographic Research Unit (DRU) official population forecast for California is flat after 2036.**
 4. **Two water supply scenarios must be established for the 2050 Master Supply Plan followed by judgmentally selecting the best WSMP 2050 Strategy weighing all factors:**
 1. **Optimistic ABAG Growth Case – ABAG’s 1%/Y population growth assumption and projected water demand requirement.**
 2. **Realistic Zero Growth Case - A population no growth assumption and projected water demand requirement.**
8. Explain ‘Macroeconomic index’ use in context of the study and its importance? = [page 14]
9. Defining *Affordability* [page 16]
 1. **The water utility *affordability* topic is much more complex than the**

superficial treatment this presentation appears to propose for the study under the term ‘water utility’. Assessing *affordability* of water must be done in the context of the Bay Area’s Cost-of-Living crisis and housing for essential workers.

10. US Department of Housing and Urban Affairs state that if household is paying over 30% of their income they are considered housing ‘cost-burdened’ and 50% ‘severely cost-burdened.’ 38% of households are minimally ‘cost-burdened’.
11. California Department of Housing and Community Development (HCD) has established income limits and rent standards for *affordable* housing. The amount in rent that the *affordable* housing landlord can charge for utilities comes from a table using the rent plus utility based (e.g., electricity, gas and water) adders. The amount for water that can be included in the rent has been extracted from the table is shown below.

Water utility allowance based on unit type	SRO	0BR	1BR	2BR
Semi-detached, Rowhouse & Townhouse	\$47/mo	\$63/mo	\$64/mo	\$79/mo
Low-Rise & High Rise (5 or more units)	\$47/mo	\$63/mo	\$64/mo	\$79/mo
Single-Family Detached & Manufacture Home	\$47/mo	\$63/mo	\$64/mo	\$79/mo

1. County v Retailer / Agencywide v Class [page18]
 2. **Primary focus should San Jose Metropolitan Area for North County where the groundwater cost is projected to be highest in Santa Clara County coupled with retailer SJWC whom has the highest retail price countywide and serves the most, over a million, retail customers.**
3. Expected Study Outcomes [page 22]
 1. Goal - Don’t understand presentation text – “baseline informing future policies” – what does this mean?
 2. Measurement – **In 2023, SJWC employed a socioeconomic ‘Billing structure to drive water conservation.**
 1. VW’s north county groundwater ‘Charge’ is captured within SJWC’s retail ‘Billing’ as a cost. As the customer’s consumption of water increases above 11 CcF, their SJWC ‘Bill’ grows ≈250% faster than the associated groundwater ‘Charge’ cost. See the attached ‘Water Affordability White Paper’ for more information.
 3. **The proposal statement: “Affordability of water costs within VW’s Control” is unacceptable because it allows VW to totally decouple itself from any responsibility in tracking, co-managing the outcome of SJWC’s ‘Billing’ structure potential in causing a downward demand increasing price spiral with potential significant adverse financial consequences to SJWC, VW and the consumer.**
 4. **The Goal needs to include the additional objectives:**
 1. **Assessing the impact on water *affordability* of different WSMP 2050 Strategies to facilitate selecting the best project set**

considering water *affordability* given the ABAG and the Zero population growth scenarios.

From: [Candice Kwok-Smith](#) on behalf of [Board Correspondence](#)
To: [Gina Adriano](#); [Emelia Lamas](#); [Aaron Baker](#)
Cc: [Michele King](#); [Board of Directors](#)
Subject: FW: Santa Clara Aquifer and BART tunnel complex
Date: Monday, September 9, 2024 3:45:57 PM
Attachments: [32244 CA HSR Draft EIR EIS.pdf](#)
[image001.png](#)

Good afternoon,

C-24-0213 has been approved, sent and closed.

Thanks,
Candice

From: Candice Kwok-Smith **On Behalf Of** Board of Directors
Sent: Monday, September 9, 2024 3:45 PM
To: [REDACTED]
Subject: Re: Santa Clara Aquifer and BART tunnel complex

Sent on Behalf of Chair Hsueh:

Dear Libby Lucas:

Thank you for your email regarding groundwater, subsidence, and the Valley Transportation Authority (VTA) project in downtown San Jose. As Santa Clara County's groundwater sustainability agency, principal water resources manager, flood protection agency, and watershed steward, Valley Water engages on numerous proposed projects that may impact local water resources. This includes major transportation projects like BART and the High-Speed Rail.

Valley Water provided comments to VTA on the BART Silicon Valley Phase II Extension Project Supplemental Environmental Impact Statement/Subsequent Environmental Impact Report (SEIS/SEIR). Among other topics, we identified key water supply aspects needing additional evaluation, including shallow aquifer dewatering operations and potential impacts to the deeper aquifer. Valley Water comments and the VTA response can be found on the VTA website at https://www.vta.org/sites/default/files/2022-04/Chapter_ResponsesCommentsRegionalAgencies.pdf.

Valley Water also commented on the California High Speed Rail Project Draft Environmental Impact Report/Environmental Impact Statement (DEIR/DEIS) for the San Jose to Merced Project Section. Like BART, this project includes construction and tunneling in downtown San Jose. In our comments (attached), we expressed concern that the DEIR did not adequately evaluate potential project impacts to water supply and requested more detailed analysis of potential impacts to groundwater.

Major Valley Water investments in imported water, surface water treatment, and groundwater recharge halted permanent subsidence in Santa Clara Valley by the early 1970s. We continue to operate an extensive monitoring network that helps ensure permanent subsidence does not resume. To learn more about our groundwater and

subsidence management activities or to see recent monitoring data and analysis, please see our:

- 2021 Groundwater Management Plan at: <https://www.valleywater.org/your-water/where-your-water-comes/groundwater/sustainable>
- Annual Groundwater Report at <https://www.valleywater.org/your-water/groundwater>

Valley Water staff continue to rely and build upon Tom Iwamura's foundational work and share his unwavering commitment to protecting local groundwater resources.

Thank you again for your communication with Valley Water and your continued interest in protecting local groundwater supplies.

Sincerely,



Nai Hsueh
Chair, Board of Directors

C-24-0213

From: Jack Lucas [REDACTED]
Sent: Thursday, August 29, 2024 6:12 PM
To: Board of Directors <board@valleywater.org>
Subject: Santa Clara Aquifer and BART tunnel complex

***** This email originated from outside of Valley Water. Do not click links or open attachments unless you recognize the sender and know the content is safe. *****

Valley Water Board of Directors,
August 29, 2024

In regards the City of San Jose and Valley Transportation Authority recent decision to excavate a 54 foot diameter BART tunnel deep in the Santa Clara Valley, I can't help but wonder what impacts this will have on your Santa Clara Valley drinking water aquifers. The destination of the Diridon Station is the very heart of the prime percolation zone of Los Gatos Creek's confluence with the Guadalupe River.

Tom Iwamura was most protective of this unique deep drinking water aquifer that supplies Santa Clara County and I would hope that you would have contacted him for his assessment of the safety of the deep aquifer from this excavation. Did he believe that sufficient protective measures could be incorporated into engineering designs for this rather massive tunnel project? Have they been implemented to his satisfaction?

I continue to be amazed by the lack of knowledge of Santa Clara Valley aquifer geology and of irreversible impacts that subsidence continues to cause in percolation potential and watershed runoff. Please ensure that this BART tunnel does not do

damage to County's fragile water resources that can never be replicated.

Thank you,

Libby Lucas

[REDACTED]

Los Altos, CA 94022



File: 32244
Various

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California High-Speed Rail Authority
Northern California Regional Office
Attn: Draft San Jose to Merced Project Section EIR/EIS
100 Paseo de San Antonio, Suite 300
San Jose, CA 95113

Subject: San Jose to Merced Project Section: Draft EIR/EIS

Dear California High-Speed Rail Authority:

The Santa Clara Valley Water District (Valley Water) has reviewed the San Jose to Merced Project Section: Draft Environmental Impact Report/Environmental Impact Statement (DEIR/DEIS) for the California High Speed Rail Project (Project). Valley Water is a special district with jurisdiction throughout Santa Clara County. Valley Water acts as the county's groundwater management agency, principal water resources manager, flood protection agency and is the steward for its watersheds, streams and creeks, and underground aquifers.

This letter transmits comments that focus on the areas of interest and expertise of Valley Water.

General Comments:

Water Supply

Valley Water is concerned that the DEIR does not adequately evaluate potential project impacts related to water supply, including effects of dewatering and reduced natural recharge as described below and further detailed in specific comments.

Impact HYD#9 describes dewatering and subsurface structures that could impact both water supply and water quality, and the DEIR notes that "Local groundwater management agencies and the RWQCBs would review the project design plans to determine whether the project would affect the groundwater basin, existing remedial operations, and downstream water resources". While Valley Water agrees this coordination is needed, Valley Water believes the Authority should conduct the preliminary analysis of potential impacts based on project design plans, for review by groundwater management agencies and RWQCBs.

Many of the project alternatives will create impervious surface areas or decrease natural recharge in other ways. Valley Water is concerned that the DEIR does not provide a sufficient analysis of the impact the project will have on recharge. This is of particular concern in the Coyote Valley and Llagas Subbasin, which are less developed and are highly dependent on local groundwater supplies. See several of the specific comments below that support this comment.

Groundwater Quality

The majority of the project alignment in the Santa Clara and Llagas subbasins overlies aquifers that supply 100% of the drinking water for the local community. Therefore, protection of groundwater quality



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is a significant concern for the project. The DEIR should provide a detailed analysis of the potential impacts and additional studies that should be performed. The analysis of impacts on groundwater quality should include both permanent and temporary impacts due to tunnel construction, dewatering, and operational impacts.

Wells

The project is likely to impact both public and private wells. These impacts may include direct impacts to those wells located in the immediate vicinity of the alignment and temporary or permanent indirect impacts to other nearby wells due to dewatering or other project related activities. While the DEIR focuses on public water wells, there are many privately-owned domestic, agricultural, and industrial wells that also need to be considered, especially since the project area includes communities that rely almost entirely on groundwater. A detailed analysis should be completed of the potential impacts on any water supply wells within the project area, not just the wells that may need to be re-located.

Due to the long agricultural history of the Santa Clara and Llagas subbasins, and subsequent land development, there are likely many abandoned wells. While some of these abandoned wells may have been sealed prior to well permitting requirements, many have open casings and may be discovered during construction. It is not uncommon for these wells to have significant artesian flow, which may impact dewatering and construction activities. If encountered, abandoned wells must be properly destroyed, with related work permitted by Valley Water.

Data Analysis and Regulatory Agency Review

Valley Water has decades worth of water level and quality data in the Santa Clara and Llagas subbasins that would be beneficial to the analyses that should be completed. Valley Water would be happy to work with the project team to share the necessary information to help achieve a successful project that also helps to protect the groundwater supply and quality.

Impact to Valley Water's Watersheds Operations and Maintenance

Valley Water prefers alternatives that do not require creek crossings. In general, the Project should not negatively impact Valley Water creeks and watersheds nor Valley Water's ability to conduct operations and maintenance activities along creeks and other watershed assets over which Valley Water has responsibility.

This project should not induce encouragement of encampments in creeks (e.g. bridge crossings over creeks and waterways). If anticipated, the project should determine methods for discouraging such activity.

Specific Comments:

Volume 1, Fact Sheet, Page 5, Permits, Approvals, and Consultations: Local approvals should be listed. Valley Water's Water Resources Protection Ordinance require that a Valley Water encroachment permit be obtained prior to any modification of or encroachment onto a Valley Water facility. Valley Water is a Responsible Agency under the California Environmental Quality Act when the project requires permitting under the Water Resources Protection Ordinance. All four alternatives involve a modification of at least one Valley Water facility. Additionally, Valley Water is a local agency partner with the United States Army Corps of Engineers, the United States Department of Agriculture, Natural Resource Conservation Service (NRCS) and the United States Bureau of Reclamation for flood protection and water supply projects which will be affected by all four alternatives. Please note that NRCS approvals are required for any modifications to the PL-566 constructed channels, including Llagas Creek and West Branch Llagas Creek, not just for Alternative 3 impacts to Llagas Creek in Gilroy (this should also be corrected on Page 2-157 in Chapter 2).

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Additionally, the local floodplain administrators within each community participating in the National Flood Insurance Program must approve modifications to the Federal Emergency Management Agency floodplains regulated in each community.

Page 3.6-50 and 3.6-51, Impact PUE #1: Planned and Accidental Temporary Interruption of Utility Service—This section refers to utility impacts identified in Appendix 3.6-A. Valley Water provides wholesale water supply to Santa Clara County. Appendix 3.6-A is missing some Valley Water facilities, including the Central Pipeline in the Diridon Station approach segment and the Pacheco Conduit (also a US Bureau of Reclamation Facility) in the Pacheco Pass segment. As a water wholesaler, Valley Water's pipeline infrastructure is much different than that of a water retailer. Valley Water pipelines are very large diameter pipelines which bring water to and from major water treatment plant and storage facilities serving all of Santa Clara County. Relocating or shutting down any Valley Water facilities is a major endeavor which requires advance planning because shut downs have the potential to impact service or supply to large areas of the county, not isolated service areas or neighborhoods, particularly if shutdowns occur during peak water demand. Additionally, due to the large diameter infrastructure involved, construction complexity (including limited availability of materials) and site disturbance is much greater than that associated with water retail service utilities. A discussion of impacts to Valley Water's water supply infrastructure and service due to planned and accidental temporary service interruptions should be included and appropriate mitigation provided.

Page 3.6-55 thru 3.6-58, Impacts PUE #3: Reduced Access to Existing Utilities in the HSR Right-of Way and Impact PUE #4: Existing Major Utilities Requiring Relocation or Removal—As mentioned in comments for Impact PUE #1, Valley Water's infrastructure is much different than water retailer infrastructure. Pipeline failures on Valley Water facilities may be catastrophic due to their large diameter and potential for high pressure. Access to our pipeline infrastructure must be maintained and access to our facilities must not be impeded. Shutdowns to any Valley Water conveyance facility has the potential to impact water supply availability to large portions of Santa Clara County. Additionally, due to the close proximity of the water treatment plants, storage facilities and/or source of supply, these facilities cannot be relocated outside of High Speed Rail right of way since all alternatives require crossing Valley Water water supply facilities. Please amend this discussion to include impacts to Valley Water facilities and provide appropriate mitigation for those impacts.

Page 3.6-88, Section 3.6.7, PUE-MM#1 first paragraph: The first sentence states "...the contractor would construct percolation ponds on existing SCRWA-owned agricultural land adjacent to the existing percolation ponds or on other land owned or acquired by the SCRWA to replace the net percolation capacity of the percolation ponds taken by project construction". Moving these ponds require significant study and review and approval by the groundwater management agency and Regional Water Board for potential impacts on groundwater quality and nearby well owners.

Page 3.8-6, Rivers and Harbors Act of 1899 (33 U.S.C. § 401 et seq.): This section should include Valley Water's role in the approval process as the local sponsor with operation and maintenance responsibilities over Guadalupe River and Llagas Creek.

Page 3.8-6, Watershed Protection and Flood Prevention Act (16 U.S.C. 1001 et seq.): This section should be revised to include West Branch Llagas Creek as a NRCS facility constructed as part of PL-566, along with Llagas Creek in Gilroy. The other three alternatives will impact the portion of West Branch Llagas Creek improved under PL-566.

Page 3.8-8: The second paragraph correctly states that SCVWD (now known as Valley Water) is the designated GSA for Santa Clara and Llagas subbasins and references the 2016 Groundwater

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Management Plan. However, this paragraph omits that Department of Water Resources (DWR) approved the Valley Water's GWMP as an Alternative to a GSP for the Santa Clara and Llagas subbasin in 2019. Valley Water suggests adding this information about the approval as an Alternative.

Page 3.8-10, first sentence: The text states "The Authority is not required to comply with local land use and zoning regulations..." Please provide the background reference to the California Codes supporting this statement and clarify if the Authority does not have to comply with any local regulations, including flood plain management regulations required by FEMA for communities participating in the NFIP or with ordinances such as Valley Water's Water Resources Protection Ordinance.

Table 3.8-8: In this table, please revise the Santa Clara and Llagas Area subbasins area with the latest DWR Basin boundary areas. The Santa Clara and Llagas subbasin areas are 189,564.6 and 47,371.4 acres as of DWR Basin modification date of 06/30/2016 and 06/27/2016, respectively. This information is available on the DWR Bulletin 118 CA groundwater basin GIS coverage at: <https://water.ca.gov/Programs/Groundwater-Management/Bulletin-118>.

Page 3.8-15, Table 3.8-3 Summary of Data Sources: Under the groundwater section in this report, Santa Clary Valley Water District (Valley Water) 2016 GWMP is listed as one of the groundwater data sources. Valley Water recommends in addition to this list of data sources Valley Water's Annual Groundwater Report (<https://www.valleywater.org/your-water/where-your-water-comes-from/groundwater/groundwater-quality>), which is an important groundwater data source and includes all the most current groundwater data for each calendar year. See general comment.

Page 3.8-29, first paragraph: Similar to the unconfined area in Llagas Area, a number of percolation ponds and in-stream managed (artificial) recharge facilities also exist in the unconfined area of the Santa Clara Subbasin. Please consider making these additions to this paragraph.

Valley Water also suggests adding text about confining layers and artesian conditions within portions of the Santa Clara Subbasin. As noted previously, abandoned wells may be encountered during excavation, which can produce very high flow rates and need to be properly destroyed.

Page 3.8-29, under the Llagas Area Subbasin: That following statement is not entirely correct "The Llagas Area subbasin is in the southern portion of Coyote Valley that drains toward Monterey Bay." The Llagas area subbasin is not in the Coyote Valley, but it does drain toward Monterey Bay. Valley Water suggests revising the sentence as follows: "The Llagas Area subbasin is located south of the Coyote Valley and drains toward Monterey Bay."

Valley Water also suggests adding text about confining layers and artesian conditions within the Llagas Subbasin. As noted previously, abandoned wells may be encountered during excavation, which can produce very high flow rates and need to be properly destroyed.

Page 3.8-31, under the Hollister Area Subbasin: Please note the recent name change of the Hollister Subbasin to the North San Benito Subbasin (3-003.05) due to a basin boundary modification approved by DWR that consolidated the Hollister Area and Bolsa subbasins, along with several others outside the project area. See the DWR SGMA Basin Prioritization dashboard. We suggest that the DEIR be updated to reflect the current basin name and boundary throughout.

Table 3.8-9: In this table, please include a geologic unit for alluvium and corresponding groundwater conditions.

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Table 3.8-11: In the Llagas area, groundwater is the existing and sole drinking water supply source and also supplies more than 95% of all beneficial uses. It is not clear what is the distinction between existing and suitable. Please consider adding clarifying text about the meaning of “suitable”.

Page 3.8-33, section titled Municipal Water Supply, first paragraph, first sentence: Valley Water (formerly known as SCVWD) manages the Santa Clara and Llagas groundwater subbasins to provide water supply for all beneficial uses and is not limited to municipal water supply. Valley Water suggests revising this sentence.

Page 3.8-36, Table 3.8-14 Hydraulic Conditions of Existing Bridges and Overbank Areas in the Project Footprint: This table has a footnote referencing certain existing flood zone information is actually based on future conditions after completion of the Upper Llagas Creek Flood Protection project. While in relation to the current timeline for High Speed Rail construction and in consideration that Phase 1 of the Upper Llagas Creek Flood Protection Project is under construction, this evaluation may be considered reasonable for those watercourses whose flood zones will change upon completion of Phase 1. However, some or all of the Upper Llagas Creek Flood Protection watercourses will not provide flood protection benefits or have their flood zones modified until completion of the entire Upper Llagas Creek Flood Protection Project, which is currently not fully funded or authorized yet, and a LOMR or Physical Map Revision is filed and accepted by FEMA. Therefore, it is possible that the existing condition at the time when High Speed Rail construction begins that the existing condition flood zones and flood conditions will be as they currently exist without the Upper Llagas Creek Flood Protection Project.

Page 3.8-46, Impact HYD#2: Permanent Impacts on Drainage Patterns and Stormwater Runoff during Construction: The discussion should include possible changes to floodplains or flood patterns due to the wildlife crossings in areas where there is currently no path for flood flows to cross existing railroad embankments. HYD-IAMF#2 does not discuss the potential for the Project, including wildlife crossings, to induce flooding where there is currently no floodplain and provide appropriate mitigation measures to ensure existing floodplains are not expanded. Additionally, allowing up to 1 foot of flooding in areas where existing structures may have first floor elevations at the existing base flood elevation may subject those structures to flooding they otherwise may not have incurred. This section should also clarify the intent to evaluate the capacity of the receiving stormwater drainage systems. Many municipal stormwater drainage systems are designed to handle a 10-year event. These municipal stormwater drainage systems then discharge into surface waters, such as streams and creeks, which may have a different capacity. Valley Water’s flood protection purview covers the receiving streams and creeks, and the Project should ensure that changes in runoff timing or quantity do not increase 100-year flows or runoff volume in receiving streams and creeks or exceed the existing capacity of receiving streams and creeks.

Section Impact HYD#8 – Temporary Impacts on Groundwater Quality and Volume during Construction, starting on page 3.8-72: The document states that “...most excavations that may require dewatering would be widely spaced throughout the project corridor and relatively shallow such that dewatering large volumes of groundwater is generally not anticipated. Additionally, the impacts of dewatering would be temporary....” Shallow groundwater occurs in portions of the Santa Clara Subbasin, especially in downtown San Jose. Depending on the location, dewatering could be required permanently or frequently, and with large volume. For example, CalTrans has essentially permanent dewatering at various locations in San Jose because of the shallow groundwater. Shallow groundwater is also known to occur in the Coyote Valley and Llagas Subbasin. Valley Water recommends that a more detailed analysis of dewatering be conducted, including estimating dewatering volumes/durations and evaluating related impacts, including those on nearby wells.

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Page 3.8-73, Section Impact HYD#8 – Temporary Impacts on Groundwater Quality and Volume during Construction, first complete paragraph of the page: This paragraph describes treating water if it would substantially affect surface water quality. However, what would be done to treat groundwater that is contaminated with the commingled construction material, particularly if that groundwater does not affect surface water quality? This section does not adequately describe treating contaminated groundwater and we suggest adding additional clarification.

Page 3.8-73, Section Impact HYD#8 – Temporary Impacts on Groundwater Quality and Volume during Construction, second complete paragraph of the page: This paragraph describes potential impacts on public drinking water supply wells, but neglects to mention the potential affect or remedy on the many domestic and agricultural wells in the project path. This paragraph also describes "...or permanently relocated..." public supply wells. Valley Water's concern is that relocating either public drinking water supply wells or domestic and agricultural wells could be very problematic in terms of finding suitable replacement locations and the considerable cost and potential reduction in water supply at the new locations. This specific comment supports Valley Water's general concerns above about wells.

Page 3.8-73, Section Impact HYD#8 – Temporary Impacts on Groundwater Quality and Volume during Construction, third complete paragraph of the page: The statement "...the contractor would remediate known subsurface contamination in the project footprint that would be encountered by construction activity" does not seem realistic given the complexity and long time periods that may be required to remediate known contaminated groundwater sites.

Page 3.8-74, Section Impact HYD#8 – Temporary Impacts on Groundwater Quality and Volume during Construction, third complete paragraph of the page: This paragraph describes a potential method of managing construction effects on groundwater by reinjecting collected tunnel inflows back into local aquifers. Any potential reinjection should be discussed with groundwater management agencies, RWQCBs, and others to ensure adequate groundwater protection.

Page 3.8-76, Table 3.8-23: Valley Water notes some large increases in impervious surface in this table, especially for the Santa Clara and Llagas subbasins. As stated in the major comments, Valley Water has concerns that the large increases in impervious surfaces could have a substantial reduction to natural recharge, particularly in groundwater dependent areas. In particular, how much area in the Coyote Valley would be impacted? See general comments above.

Page 3.8-76, first complete paragraph: The phrase "...providing managed groundwater recharge services for the Llagas Area subbasin" is not correct. These ponds are permitted discharge locations for the wastewater treatment plant and are not managed recharge facilities. Additionally, these ponds overlie a confining layer. Valley Water suggests correcting this text.

Page 3.8-76, first complete paragraph: The sentence states "...a reduction in treatment capacity of the plant could potentially reduce the availability of recycled water, resulting in increased groundwater pumping in the Llagas Area groundwater subbasin." Valley Water suggests adding text to estimate the approximate magnitude of increased groundwater pumping that would occur.

Page 3.8-76, first complete paragraph: The sentence states "...Alternative 1 and 2, these alternatives would impede sustainable management of the Llagas Area groundwater subbasin." The current percolation ponds overlie a confining unit and do not provide recharge to deeper, principal aquifers.

Page 3.8-77, first paragraph: The EIR states "...the total area of impervious surfaces that would be built in recharge zones is minimal compared to the overall groundwater recharge zones." What is the

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estimated percentage of reduction in the recharge zone? See the general comment above about water supply. Valley Water is concerned about incremental losses of natural recharge due to the cumulative effects of development in groundwater recharge areas.

Page 3.8-77, second complete paragraph: The EIR states "...longitudinal earthen drainage ditches along at-grade and embankment profiles would provide additional opportunities for groundwater recharge." These drainage ditches should be designed to minimize the potential for pollutants to infiltrate to groundwater and have a negative effect on groundwater quality.

Page 3.8-77, third complete paragraph: The EIR states: "The project would require the construction of subsurface structures that would permanently obstruct or impede groundwater flow..." but notes that "impacts from shallow subsurface structures are anticipated to be minimal." However, the EIR does not provide any analysis to support this. Valley Water believes the Authority needs to conduct additional study to evaluate if the depth or area of these subsurface structures would affect groundwater flow and potentially negatively impact public supply or agricultural wells or groundwater flow to streams or other groundwater dependent ecosystems. This specific comment supports our general comments above.

Page 3.8-78, first complete paragraph: The DEIR states: "All four alternatives would require the protection of public drinking water supply wells during construction, as described in Impact HYD#8, and potentially the relocation of public drinking water supply wells." Given the high density of private wells in many project areas, this needs to be expanded to include the protection of privately owned wells used for domestic, agricultural, or industrial uses.

Page 3.8-79, first complete paragraph: The DEIR states: "Prior to construction, the contractor would prepare a technical memorandum describing how construction activities would be coordinated with public utility providers, such as drinking water suppliers, to avoid or minimize service interruptions (PUE-IAMF#4)." The DEIR and the memo referenced should also address privately owned wells.

Page 3.8-80, first two bullets under the section Statement of Incomplete of Unavailable Information Regarding Tunneling Effects: It appears that some of the tunneling would occur within lands overlying the Santa Clara and Llagas subbasins. If so, Valley Water has a lot of available data about aquifer conditions and existing hydrology information that may facilitate related analysis. This specific comment supports Valley Water's general comments above.

Page 3.8-82, Table 3.8-25: This table is missing unconsolidated sediments. What is the expectation of groundwater conditions in the unconsolidated sediments? Valley Water recommend adding this to the table.

Page 3.8-90, first complete paragraph under the section Monitoring and Adjustment in Tunnel Design and Construction Methods: The subsurface investigations and modeling described in this paragraph should be reviewed by groundwater management agencies. Valley Water has a lot of data and models that may support this effort. See general comments.

Page 3.8-90, first complete paragraph under the section Effect Evaluation Using Theoretical Approaches: The DEIR states "...it is expected that the proposed HSR tunnel construction is likely to affect groundwater and surface water resources within a maximum distance of approximately 1 mile from the tunnel alignments. ...with the most effects occurring within 0.25 to 0.5 mile of the tunnel alignment...". Even with a radius of 0.25 to 0.5 mile, this could affect a lot of wells (potentially on the order of hundreds), especially in the Coyote Valley and Llagas Subbasin, and requires further evaluation. This specific comment supports Valley Water's general comments above about wells.

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Page 3.8-91, Table 3.8-28: Under Tunnel 1 (first row of the table), the Relative Risk of Effect is currently listed as 'Low'. The risk to privately owned wells (typically shallower and of much lower yield) could be more significant, even in areas with lower potential for inflow. Therefore, Valley Water suggests considering a higher ranking than 'low'.

Page 3.8-92, Figure 3.8-12: It is difficult to see where the groundwater RSA is on this map and if it is correctly drawn. Valley Water suggests zooming this figure out to better see the groundwater RSA.

Page 3.8-99, last paragraph on the page: This paragraph makes a statement about using stormwater treatment BMPs "...that reduce the quantity and improve the quality of stormwater runoff before runoff is discharged into a surface waterbody, where it would percolate into the groundwater table." To ensure that the stormwater is not contaminating the groundwater quality, the project should implement approved stormwater BMPs that address the protection of groundwater quality.

Page 3.8-102, HYD #15 Permanent Impacts on Floodplain Hydraulics During Construction and Table 3.8-29: In accordance with the NFIP, a permit is required for all proposed construction or other development in the community...so that it may determine whether such construction or other development is proposed within floodprone areas. The NFIP defines "Development" as any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. This section should include discussion of all aspects of the Project that will entail "Development" as defined by the NFIP in a floodprone area, not just within watercourses subject to flooding and then identify the impact of those developments to the floodprone areas, especially FEMA flood hazard areas and floodways.

Page 3.8-104: The text states "Phase 2 of the PL-556 is planned to be advertised in mid-2020." However, there is currently a funding shortfall to complete Phase 2. Valley Water has plans to construct portions of Phase 2, but until additional funding is identified, projected completion of the entirety of Phase 2 is uncertain.

Page 3.8-113 and 3.8-114, Table 3.8-30 Specific Design Elements that would Minimize Permanent Floodplain Impacts: Most of the mitigation identified in this table states that fill and cut in the floodplain will be balanced. This strategy may be valid for balancing flood plain storage volumes, but may not necessarily mitigate for adverse impacts to the floodplain or floodway resulting in increased water surface elevations, increases in the lateral extent of the floodplain or increases in the frequency of flooding (i.e. for example, increased runoff from the Project causes a 10-year flood to increase in severity from 200 cfs to 300 cfs). Refined hydraulic analysis must be performed when Project grading and infrastructure plans are refined to ensure there are no adverse impacts to the floodplain.

Page 3.8-115 and Table 3.8-31: The text must be modified to include West Branch Llagas Creek as a PL-566 constructed channel that will require NRCS and Valley Water approval for modifications under Alternatives 1, 2 and 4. Any appropriate mitigation measures should be included, similar to those identified for the projects requiring Section 408 approval from the US Army Corps of Engineers.

Page 3.8-119: Valley Water is pleased to read this statement that the GAMMP would be submitted and reviewed by various federal, state, and local agencies, including Valley Water. However, please note that in other sections of the DEIR, a similar statement is made, but does not include Santa Clara Valley Water District (Valley Water). For example, in section 3.7, under the Mitigation Measure BIO-MM#9, on page 3.7-138, Valley Water is not included as one of the listed agencies that the Authority would submit the GAMMP. Please add Valley Water to the list on page 3.7-138.

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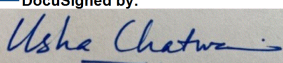
Page 3.8-120, Baseline Inventory and Monitoring of Groundwater and Surface Water Resources:

As mentioned previously, Valley Water has extensive information on groundwater resources (as well as surface water). Valley Water suggests that the Authority consult with groundwater management agencies, such as Valley Water, to take advantage of existing information and data for this baseline inventory. See general comments.

We appreciate the opportunity to comment on the DEIR. Please provide a copy of the Final Environmental Impact Report (FEIR) to Valley Water when available.

If you have any questions, please contact Ms. Yvonne Arroyo at (408) 630-2319 or Mr. Kevin Thai at (408) 630-3157.

Sincerely,

DocuSigned by:

FA950AD6E49F4B7...

Usha Chatwani, P.E.
Community Projects Review Unit Manager
Community Projects Review Unit

cc: U. Chatwani, N. Nguyen, R. Blank, V. Gin, L. Bankosh, V. De La Piedra, D. Mody, T. Sexauer, Y. Arroyo, C. Haggerty, K. Thai, File