

**Water Supply Master Plan 2040 update
External Comments and Responses**

#	Organization/ Commenter	Page	Section	Comment	Valley Water Response
1	Open Space Authority	N/A	N/A	<p>Directly account for water demands of a healthy environment: The Draft Plan estimates that domestic, agricultural, and municipal demand for water is 350,000ac-ft/yr on average but does not estimate how much water managed by VW is necessary to meet environmental needs (e.g. sufficient creek base flows, shallow groundwater conditions for groundwater dependent ecosystems, etc.). Instead, the Draft Plan states that environmental needs are addressed in the supply side of VW's water supply system. Direct estimates of environmental demand of its water supply system would more fully account for environmental demands for water that is managed by VW. A specific recommendation would be to include the environmental needs in demand estimates in figures 2, 7, 8, 9, & 11.</p>	<p>Valley Water has several efforts under way to better understand and define environmental needs (e.g., Fisheries and Aquatic Habitat Collaborative Effort and compliance with the Sustainable Groundwater Management Act (surface water/groundwater interaction)). Once these efforts are complete, Valley Water will consider adding environmental needs to the supply side in future updates to the Water Supply Master Plan.</p>
2	Open Space Authority	N/A	N/A	<p>Identify and support conservation of critical natural groundwater recharge areas: The Draft Plan states, "The greatest risk to natural groundwater recharge is a reduction in pervious surfaces due to an expanded urban footprint. Activities that keep water onsite and protect open spaces on the valley floor will help maintain natural groundwater recharge." Mapping critical groundwater recharge areas and sharing this information with local land use authorities and conservation organizations could help avoid conversion of these critical recharge areas. Proactive conservation of these high functioning recharge areas would also help maintain areas for future recharge projects.</p>	<p>As part of the effort to develop and submit Valley Water's Alternative Groundwater Sustainability Plans (GSPs) to the State of California Department of Water Resources (DWR) in 2016, Valley Water did map out the groundwater recharge areas. This information was shared with the land use agencies throughout Santa Clara County and the Geographic Information System (GIS) shape-file is available on Valley Water's website.</p>
3	Open Space Authority	N/A	N/A	<p>Promote synergies between agricultural and open space land conservation and aquifer recharge projects: The Draft Plan includes agricultural land recharge on its February 2019 project List (Appendix D) and states,</p>	<p>Inconsistencies between the body of the draft plan and the appendices have been resolved. The Board approved planning for the Additional Conservation and Stormwater Projects and</p>

**Water Supply Master Plan 2040 update
External Comments and Responses**

				<p>"Locally, staff are working with the Open Space Authority and Santa Clara County Planning to develop a planning and piloting approach to explore the potential implementation of agricultural land recharge in Santa Clara County." We look forward to partnering with VW on this effort and hope to link it with activities identified in comment #2, which could also help offset VW staff's estimated costs of agricultural recharge projects in these areas. Additionally, there are some inconsistencies between project descriptions in the body of the Draft Plan and its appendices. We ask that section 4.1.2- 'Additional Conservation and Stormwater Projects and Programs directly include flood managed aquifer recharge and small-scale non-urban stormwater capture projects on open space and agricultural lands.</p>	<p>Programs (see 9/19/2017 Board agenda) which does includes flood managed aquifer recharge (on open space and agricultural lands) as a pilot project.</p>
4	City of Palo Alto		section 1.1	<ol style="list-style-type: none"> 1. Does the water use of 350,000 AFY apply to the entire county? 2. Does this include potable and non-potable demand? 3. It would be helpful to clarify those two points. 4. We would also suggest a note that Valley Water does not serve all demands in the county and that Valley Water's supply strategy does not present strategies for supplying agencies that do not currently receive Valley Water's water. 	<ol style="list-style-type: none"> 1. Yes, the long-term average water use in Santa Clara County (as a whole) is approximately 350,000 acre-feet per year (AFY). 2. This value includes both potable and non-potable water supply. Greater detail is provided in Section 2.1 Baseline Water Supplies and under Section 2.1.1 Local Water Supply Sources. 3. Valley Water demand projections include potable and non-potable demands. Valley Water modeling assumes that there is approximately 33,000 AF of non-potable recycled water supplies by 2040 to meet non-potable demands. In addition, certain retailers and customers have their own non-potable surface water supplies that are used to meet their non-potable demands. We appreciate this recommendation and aim to clarify this information in future updates to the Water Supply Master Plan. 4. As the Sustainable Groundwater Agency for the subbasins in Santa Clara County, Valley Water recognizes all sources of water supply to meet

Water Supply Master Plan 2040 update
External Comments and Responses

					demands (see Section 1.2 and Figure 5) and the “ensure sustainability” strategy guides Valley Water’s long-term water supply investments. The last paragraph under Section 1.2 also recognizes the other agencies and organizations that contribute to water supply reliability in Santa Clara County.
5	City of Palo Alto		section 1.2 paragraph 3	The SFPUC imports that began in the 1950s and became the sole water supply source for some agencies in the county in the 1960s played a vital role in mitigating subsidence. This history should be accurately reflected in this section.	The following text has been added to the second paragraph of Section 1.2 – “Beginning as early as 1939, the SFPUC began delivery of some water into the county. In 1952, they began delivering imported water to water retailers in northern Santa Clara County through what is now called the Regional Water System. “
6	City of Palo Alto		section 1.2 groundwater graph	SFPUC imports should be shown on the timeline but probably not at 1939. It was much later when SFPUC water was imported to the county in significant quantities – I believe around 1960.	A callout has been added to Figure 4.
7	City of Palo Alto		section 1.3 paragrph 1	Did the name of the act change or is it still the “Santa Clara Valley Water District Act”?	No, it did not change; however note the shorthand reference, Santa Clara Valley Water District (Valley Water) in Section 1 of the report. Text will be updated to reflect the full name of the act. More information about the act can be found under our external website valleywater.org, under the "How We Operate" tab.
8	City of Palo Alto		section 2.1.3	It’s a little confusing to see SFPUC water supplies in the graphs and tables when this strategy does not address the supply variability of that supply source – at least for agencies that don’t use any Valley Water’s water. A footnote may be enough to clarify.	While the SFPUC delivered water is not distributed through Valley Water’s system, it is included here to reflect its role in the water portfolio for Santa Clara County. The "ensure sustainability” strategy guides Valley Water's long-term water supply investments and is not intended to apply to any other agency.
9	Sierra Club Loma Prieta	2	section 1.1	In the discussion about the costs of water shortages, include actual data with the costs incurred during the recent 2013 – 2016 drought. This information should be	Valley Water is in the process of updating the Methodology for Estimating Cost of Water Shortage, this effort will be completed spring 2020 and will be included as part of the first Water

**Water Supply Master Plan 2040 update
External Comments and Responses**

				available and would be useful to ground truth the Methodology for Estimating Cost of Water Shortage.	Supply Master Plan Monitoring and Assessment Plan (MAP) report in summer 2020.
10	Sierra Club Loma Prieta	4	section 1.2	Additional information is needed to explain Figure 5. Valley Water’s Water Sources. State which year this data represents, and which projects it includes (does this include to-be-completed baseline projects?). Explain why this is different from the data shown for 2020 in Figure 13.	The title of this figure has been changed to “Santa Clara County Historical Water Sources”. This should resolve any confusion concerning the difference between Figures 5 and 13.
11	Sierra Club Loma Prieta	7	section 1.3	Include more information about population growth projections to allow for better evaluation of future demand growth estimates. Historically, the Association of Bay Area Governments (ABAG) has over-projected future population growth. Therefore, it is important to use more recent estimates from ABAG or California Department of Finance forecasts instead of the 2013 estimates used in the Draft WSMP. The ABAG 2013 forecast estimated 2020 total population in Santa Clara County would be 1,986,340. However, California Department of Finance forecasted lower than expected population growth in 2018 (only .3% growth). With that trend likely to continue, their 2020 population forecast for Santa Clara County will be 1,960,150, about 26,190 below the ABAG 2013 projections. This difference will increase substantially when calculated out to 2040.	Appendix B of the report provides the methodology for developing the water demand forecast for this report. Valley Water is in the process of developing a new demand model to support the Water Supply Master Plan Monitoring and Assessment Plan which includes providing annual updates on supplies, demands, and project/program updates to Valley Water's Board of Directors. The anticipated completion date of the new demand model is spring 2020.
12	Sierra Club Loma Prieta	9	section 2.1 (all charts/tables) figure 9 figure 10 figure 14 table 4	In general, the bucket of “Baseline Water Supplies” is confusing because it includes both actual current supplies and many other projects that will be completed over the next 20 years in parallel with the Ensure Sustainability Strategy projects. Separating existing supply, baseline projects (those that will happen no matter what like dam retrofits), and the more changeable Strategy projects would allow for better understanding and analysis of water supply over the next 20 years. Graphs, data and timelines should be updated to show these three categories of supply separately to allow for more realistic analysis of water supply plans and challenges.	All projects under the Water Supply Master Plan update are guided by the “ensure sustainability” strategy. Valley Water has already made commitments to implement the baseline projects and thus only two categories exists, baseline and recommended Water Supply Master Plan Projects. Figure 7 does identify the average water supply through 2040, assuming implementation of only the baseline projects, whereas Figure 10 identifies the average water supplies through 2040 with the baseline projects and recommended Water Supply Master Plan Projects. Additionally, Table 8.

Water Supply Master Plan 2040 update
External Comments and Responses

				<p>For example, in Figure 10 it would be useful include information about the to-be completed baseline projects in relation to the Strategy Projects – or at least to explain in more detail in the text how all these future projects will increase supply beyond 2020. For greater transparency, also provide a table of these projects like Table 6. Master Plan Project Costs and Risks. Include the “No Regrets Package” in the Baseline Water Supply System list. (Section 2.1, page 9)</p>	<p>Implementation Schedule, has been updated to reflect differentiating the baseline projects and the recommended Water Supply Master Plan Projects. Detailed information about the baseline projects is available in the Five-Year Capital Improvement Program (CIP) which is available on our website under the "How We Operate" tab, under the CIP link. The Additional Conservation and Stormwater Projects and Programs (formerly known as the "No Regrets Package") is not considered a baseline project and therefore is not reflected in Baseline Water Supply System graphic under section 2.1.</p>
13	Sierra Club Loma Prieta	9	section 1.2	<p>Provide more information about the concept and the impact of the “Environmental Water” segment of water demand. Include specific data in acre feet (AF) about the current demand for Environmental Water, and projected future demand in 2040. In the draft plan Environmental Water seems insignificant and therefore not worth including in the plan unless the significance is quantified.</p>	<p>See response to comment #1.</p>
14	Sierra Club Loma Prieta		section 3.3 section 2.3.2	<p>Move the discussion about the Delta Reform Act from Section 3.3 to Section 2.3.2 where other related information is provided.</p>	<p>The discussion about the Delta Reform Act has been added to the end of Section 2.3.2 as well. Section 2.3. discusses the other water supply challenges and uncertainties and section 2.3.2 highlights those challenges specific to the Delta. Section 3.3, describes how the various baseline and proposed Water Supply Master Plan projects support the “ensure sustainability” strategy and reduce the reliance on imported water supplies, which is consistent with the Delta Reform Act.</p>
15	Sierra Club Loma Prieta	21	section 3.1.3	<p>In the second paragraph under Optimize the Use of Existing Supplies and Infrastructure, change the first sentence to “... optimize the use of existing [imported] supplies and infrastructure ...”. The word adds significant clarity since the projects discussed here are all optimizing imported water supplies.</p>	<p>This strategy is not limited to imported supplies and therefore comment was not incorporated.</p>

**Water Supply Master Plan 2040 update
External Comments and Responses**

16	Sierra Club Loma Prieta	23	section 3.2	The following information from the most recent staff reports should be included in the WSMP. "The suggested Master Plan projects (Delta Conveyance Project (SWP and CVP),24,000 AFY of potable reuse, a package of additional water conservation and stormwater capture projects, South County Recharge, Transfer-Bethany Pipeline, and Pacheco Reservoir Expansion) exceed Valley Water's newly-adopted level of service goal."	A footnote was added with the following text (which matches the text in staffs recent report): "The Master Plan projects exceed Valley Water's newly-adopted level of service goal, however, it is unlikely that all the projects would be implemented and delivering their assumed benefit by Year 2040, the planning horizon for the Master Plan".
17	Sierra Club Loma Prieta	25	section 3.3	In the discussion on Maximizing Water Conservation and Water Use Efficiency, add goals for gallons per capita per day.	Valley Water has identified its Board adopted county-wide water conservation goal of 109,000 acre-feet a year (AFY) by 2040; we have not identified goals in gallons per capita per day (GPCD). Climate, land-use, economy, categories of water use, and seasonal residents and commuters can all significantly influence a GPCD calculation. For these reasons, many agencies, including the state, are moving away from a GPCD number for measuring compliance.
18	Sierra Club Loma Prieta	28	table 6	Remove outdated California WaterFix (CWF) information from the information about the Delta Conveyance. The Life Cycle Costs and unit costs should be changed to TBD rather than use old numbers from CWF cost estimates. During the August 13, 2019 presentation for Item 3.2 Update on Delta Conveyance Project, staff said environmental review and design will start in 2020 and run for two and a half years, and "as more information becomes available staff will carefully evaluate the project to assess benefits and costs." Furthermore, the preferred Delta Conveyance project alternative has not been identified and the preliminary level of participation has not been determined. Clearly, the CWF numbers currently used in the WSMP are not accurate and the Board and the community would be better informed of current reality if the values are shown as "to be determined."	The text describing the Delta Conveyance Project has been updated. The project costs are Board approved (see 10/17/17 Board agenda) and until given direction otherwise, will remain. However, Valley Water recognizes the numerous uncertainties and challenges many projects face moving forward, that's why the annual Monitoring and Assessment Plan (MAP) is such an important component of the Water Supply Master Plan (WSMP). The MAP is the mechanism to provide annual updates to the Board on demands, water supplies, project status, costs/funding, and how changes may impact achieving our level of service goal and water rates. The gives the Board an opportunity to make any necessary adjustments to the WSMP portfolio of projects.

**Water Supply Master Plan 2040 update
External Comments and Responses**

19	Sierra Club Loma Prieta	28	table 6	<p>Provide additional information about the cost for the Pacheco Reservoir Expansion Project. We suggest a separate graphic showing total cost and the portion of that cost anticipated to be covered by each funding source – Water Storage Investment Program, WIIN, WIFIA, partnerships, and ratepayers. This graphic should also show which funding sources still need to be acquired and an estimated timeline to acquire those funds. This is important information that is needed to assess and track the feasibility of this project going forward.</p> <p>Use the most recent cost estimate for Pacheco Reservoir from the Protection and Augmentation of Water Supplies 2019, which says planned funding with Inflation for the Pacheco Reservoir Expansion Project is about \$1.33 billion. It is also unclear why the cost per acre-foot has been reduced to \$2,000, down from \$2,700 in the Water Supply Master Plan 2040 Update that was presented to the Board of Directors on January 14, 2019. This significant reduction in unit costs should be explained. If the unit costs in Table 6 are being reduced to account for anticipated additional outside funding, a column should be added to this table "total unit cost" that gives the full cost per acre/foot. Together with a table showing funding sources, this would provide transparency about the cost to the public in general (including federal and state contributions), not only the cost to Valley Water.</p>	<p>Each recommended Water Supply Master Plan Project is given equivalent discussion. Pacheco costs are reflective of the \$1.3 billion costs described in the Protection and Augmentation of Water Supplies 2019 (PAWS) report. The text for footnote 3 under Table 6 has been updated to reflect the various funding sources and estimated amounts (see 10/8/19 Board agenda). The unit cost of the Pacheco project has come down as a result of additional funding sources (i.e., WIFIA loan, etc.) assumed. Unit costs are influenced by the total lifecycle costs and how much water supply yield the project provides can be utilized by Valley Water, which will depend on the select portfolio of projects being evaluated. Valley Water recognizes the numerous uncertainties and challenges many projects face moving forward, that's why the annual Monitoring and Assessment Plan (MAP) is such an important component of the Water Supply Master Plan (WSMP). The MAP is the mechanism to provide annual updates to the Board on demands, water supplies, project status, costs/funding, and how changes may impact achieving our level of service goal and water rates. The gives the Board an opportunity to make any necessary adjustments to the WSMP portfolio of projects.</p>
20	Sierra Club Loma Prieta	29	section 3.5	<p>When speaking of costs, the WSMP says “[t]he average annual increase in North County charges increases from about 2.6 percent to 4.6 percent. In South County, that average annual increase increases from about 4.9 percent to about 5.6 percent.” Explain how the to-be-completed baseline projects will impact rate increases in addition to the Strategy Projects and include those rate increases in Figure 14.</p>	<p>The baseline projects were already included in the rates. This section discusses the additional rate increases that would be necessary to fund the recommended Water Supply Master Plan Projects (see 01/14/19 Board agenda).</p>

**Water Supply Master Plan 2040 update
External Comments and Responses**

21	Sierra Club Loma Prieta	30	section 3.5	When discussing the opportunities to “reduce groundwater production charge impacts ... in the future,” include specific mention of the State Water Project Tax as a mechanism to reduce charges related to the Delta Conveyance Project.	Additional bullet added to mention the State Water Project Tax mechanism.
22	Sierra Club Loma Prieta		section 3.5	Add a discussion about the costs of financing projects through loans and bonds. For transparency, list the projects that will be funded using debt and estimate the cost of debt (interest and other overhead) for each project.	Currently, this information is provided as part of the Protection and Augmentation of Water Supplies (PAWS) report. However, staff appreciates your suggestion and will aim to include this information in the first annual Water Supply Master Plan (WSMP) Monitoring and Assessment Plan (MAP) update in summer 2020.
23	Sierra Club Loma Prieta		section 3.5	Add a discussion of Proposition 218, the Right to Vote on Taxes Act. Explain how the WSMP considers the “costs of service” requirements mandated by this legislation.	The following text has been added to this section: “This year’s groundwater production and surface water charge setting process will be conducted consistent with the District Act, and Board Resolutions 99-21 and 12-101. While recognizing the Supreme Court found Proposition 218 inapplicable to groundwater production charges, only the surface water charge setting process will mirror the process described in Proposition 218 for property-related fees for water services. Additional financial information may be found in Valley Water’s annual Protection and Augmentation of Water Supplies (PAWS) report, available at valleywater.org.”
24	Sierra Club Loma Prieta	31	section 4.1.1	When discussing monitoring and assessment of the Delta Conveyance Project, include “cost escalation” and a risk/uncertainty for that project along with permits, financing, etc.	The Water Supply Master Plan (WSMP) Monitoring and Assessment Plan (MAP) will review the cost escalation of any project listed in this section.
25	Sierra Club Loma Prieta	40	section 4.3	The Draft WSMP says the Monitoring and Assessment Plan (MAP) annual reports will consider “Demand trends based on actual use, climate change science, and policy and regulatory changes.” Add population growth to the	Comment incorporated

**Water Supply Master Plan 2040 update
External Comments and Responses**

				list of elements to consider in the MAP, especially because the current Draft WSMP uses ABAG 2013 population projections that appear to over-estimate population growth as described above. The 2020 MAP Annual Report should update future demand projections based on population forecasts using the latest data from ABAG and the California Department of Finance.	
26	Sierra Club Loma Prieta	40	section 4.3	Include changes to the cost benefit analysis in the MAP. Include energy/GHG emissions per acre/foot as a cost element for projects, including both direct and indirect costs associated with additional pumping and any additional treatment costs. Include ecosystem/environmental costs per acre/foot associated with large construction projects. Add a discussion of these costs to the section on “Balancing Risks and Costs.” (Section 4.3, page 40, and next year in Section 3.5)	Some of this data isn't currently available for all the Water Supply Master Plan projects (e.g., GHG) and if included would not allow for an apples to apples comparison of the benefit:costs of projects. As more information becomes available, we will aim to include it in the evaluation as part of the Water Supply Master Plan (WSMP) annual Monitoring and Assessment Plan (MAP) process.
27	Sierra Club Loma Prieta	20	section 3.1.1	Copy edit the Draft WSMP for typos and outdated references, especially any references to the California WaterFix (including in the appendices) unless discussed in a historical context. Remove the assumption that the Delta Conveyance will be “capable of diverting up to 9,000 cubic feet-per-second.”	Comment incorporated
28	Sierra Club Loma Prieta	N/A	N/A	Include a list of Acronyms.	Comment incorporated
28	Sierra Club Loma Prieta	N/A	N/A	Include a list of Definitions. We request the following terms be defined in the WSMP: a. Sufficient Water g. Emergency Supplies b. Environmental Water h. Baseline Infrastructure c. Delta Surplus Supplies i. Beneficial Use d. Excess Supplies j. Water Supply Shortage e. Existing Supplies k. Water Conservation Savings f. Baseline Supplies	We appreciate this recommendation, a list of definitions will be included in future updates to the Water Supply Master Plan.
29	SPUR	N/A	N/A	Unfortunately I can't make this stakeholder meeting on Monday night, but would it possible to talk to you or Tracy or someone else at Valley Water about a couple of questions I have based on this report? SPUR is working	Per the request, staff met with SPUR representatives on 7/18/19 and provided verbal responses to their questions.

Water Supply Master Plan 2040 update
External Comments and Responses

				<p>with Greenbelt Alliance and the Pacific Institute on a white paper this year that is about long term water supply, land use, and the Bay Area. (Kind of a follow up to this report we did in 2016). Here are some of the questions I wanted to ask after skimming the 2040 Master Plan draft:</p> <ol style="list-style-type: none"> 1. On the Model Water Efficiency New Development Ordinance (p.33) - where are you working on getting this adopted? Is it throughout the county? Are there any cities that you know of that have already adopted pre-plumbing for alternative water sources/greywater for SFH? (does not have to be in the Bay Area) Why does Valley Water want to support dispersed dual-plumbed development vs. additional potable reuse? Or, is it more 'all of the above' than a true tradeoff between the two? 2. On page 39, it says "In addition to working with land use agencies to implement the Model Water Efficient New Development Ordinance, Valley Water is developing a plan to better coordinate with jurisdictions on land use and water supply planning." Can you say more about what that plan/coordination looks like - or what you would ideally like land use planners to do better or differently, with regard to water sustainability and efficiency? 3. The draft discusses economic impacts of drought and water use restrictions generally. Do you know if there have been any economic impact studies of the 2012-2017 drought, either in the county, the Bay Area, or the state? <p>Thanks in advance. Email response would be okay but I would be happy to set up a call if that would be easier - sometime next week or the following, or at your convenience.</p>	
32	Stanford University		section 1.2	The discussions in this section about historic actions to recover groundwater should include a statement about	Please see response #5

**Water Supply Master Plan 2040 update
External Comments and Responses**

				the timing of delivery of water supplies by SFPUC, which had a significant impact on groundwater recovery in the northern portions of the county.	
33	Stanford University		section 1.2	It is relevant to mention the geographic extent of SFPUC and Valley Water deliveries, as Valley Water does not deliver treated or untreated surface water north of Mountain View.	There are retailers north of Mountain View who either currently pump groundwater or have emergency wells and therefore have the capacity to pump groundwater. As the Sustainable Groundwater Agency for the subbasins in Santa Clara County, Valley Water recognizes all sources of water supply to meet demands.
34	Stanford University		figure 6	Alternate colors should be used to illustrate the drinking water pipelines that do not belong to Valley Water (for example, Bay Division 3 and 4 of SFPUC). Currently, the figure is vague and misleading.	A call out has been added to figure 6 referencing the SFPUC facility.
35	Stanford University	Appendix A	Appendix A-1 footnote 5	These assumptions about Stanford University are inaccurate. Please reference the BAWSCA Annual Survey (http://bawasca.org/water/supply/survey) for information about water supplies and uses.	Thank you for noting this, we are currently updating the memo to account for the recent drought and will ensure the update includes accurate information about Stanford.
36	Stanford University	Appendix A	Appendix A-1 table 2	As mentioned above, the assumption of 100% institutional is incorrect. We have residential and industrial water users. The BAWSCA annual survey is a good source of information for SFPUC wholesale customers.	Thank you for noting this, we are currently updating the memo to account for the recent drought and will ensure the update include accurate information about Stanford.
37	Stanford University	Appendix C	Appendix C	Stanford University surface water rights will only serve the demands of the Stanford University service area. Currently, Stanford's surface water diversions are only used in the non-potable irrigation system on campus.	Demands include both potable and non-potable supplies, Stanford supplies are modeled to be utilized within their service area.
38	San Jose Water	19	1 paragraph	There is a description of three elements to provide a reliable supply of water to meet needs through 2040. Valley Water should consider adding a fourth element: Secure New Water Supplies.	The Water Supply Master Plan (WSMP) is the tool Valley Water uses to determine if any additional water supply investments are needed to meet current or future anticipated demands. If additional supplies are identified as needed by the WSMP, the "ensure sustainability" strategy is the mechanism that guides Valley Water's long-term water supply investments. Note, two of the three

Water Supply Master Plan 2040 update
External Comments and Responses

					strategies (# 1 & 2) are aimed at ensuring Valley Water secures new supplies.
39	San Jose Water		Appendix D	<p>The Water Supply Master Plan 2040 Project List (as of February 2019) found in Appendix D includes a project titled Lexington Pipeline. The project status is listed as inactive, with a lifecycle cost of \$85 million, an average annual yield of 3,000 AFY, a unit cost of \$1000/AF and a relative risk ranking of low. The project description notes that “An institutional alternative could include an agreement to use some of the District’s Lexington Reservoir water right at San Jose Water Company’s Montevina Water Treatment Plant.” SJW is interested in this institutional alternative, and recommends that it be broken out as a distinct public-private partnership project that would have zero lifecycle costs incurred by Valley Water, and would represent an incremental revenue source for water that may otherwise be lost during wet years. Under this alternative, the costs for constructing and operating the facilities to pump water from Lexington Reservoir would be borne by SJW, and Valley Water would collect revenue from SJW for the transfer of raw water when supplies in excess of what is needed for the managed recharge program demands are available. SJW would process the water and distribute it directly to customers, offsetting groundwater withdrawals which would allow for additional drought storage in the Santa Clara Plain Basin with less water loss. SJW would work cooperatively with Valley Water on the design, location and construction of a raw water intake, and agree to water transfer terms designed to maximize utilization of in-county water supplies, while maintaining the highest level of drought reserves possible in the groundwater basin. In addition to the water supply benefits, the reduction in pumping provides for increased sustainability through a reduction of energy use and associated carbon footprint. It is SJW’s belief that when considered as a</p>	<p>Valley Water will work with SJW to develop the proposed project and incorporate into future Water Supply Master Plan documents (i.e., Monitoring and Assessment Plan).</p>

**Water Supply Master Plan 2040 update
External Comments and Responses**

				project that is distinctly separate from the Lexington Pipeline project, it will meet the criteria to move from an inactive status to an active one.	
40	San Jose Water		section 4.1.3	Describes the Potable Reuse Program, noting challenges and uncertainties with securing a source of wastewater and managing the residuals from the reverse osmosis treatment process. Although there is some mention of non-potable reuse (purple pipe), the plan does not include a comprehensive discussion about the costs and benefits of purple pipe expansion versus potable reuse. There is reference to the Countywide Recycled Water Master Plan, but it is not clear if that planning process will determine the most economic deployment of recycled water in the county. SJW is concerned that the Los Gatos Ponds Potable Reuse project, with lifecycle costs of \$1.2 billion, has a status of Master Plan Project without any analysis or discussion on how non-potable recycled water fits into the plan, and if Valley Water plans to fund non-potable recycled water projects. SJW and other retailers continue to see customer demand for non-potable supplies, which can provide economic water supply in a relatively compressed time frame. SJW would like to see considerable expansion in this section of the plan to include all sources and uses of recycled water, and discussion of the most economic deployment of this water source.	The Water Supply Master Plan aims to provide a high level overview. Detailed information about the program, challenges, uncertainties, and discussion about non-potable and potable reuse will be provided in the Countywide Water Reuse Master Plan (CWRMP) report which is to be completed by summer 2020. As mentioned in the Water Supply Master Plan, the place holder project until the CWRMP has been completed is the Los Gatos Ponds, based on Board direction to proceed with Phase 1 of the Expedited Purified Water Program (see 12/12/17 Board agenda). However, the CWRMP preferred project, once approved by the Board, will replace this placeholder project.
41	San Jose Water		section 4.1.4	Describes the Pacheco Reservoir Expansion project, and notes that significant milestones must be met in order to remain eligible for State funding. What will happen to the project if the milestones are not met and State funding is withdrawn?	Valley Water recognizes the numerous uncertainties and challenges many projects face moving forward, that's why the annual Monitoring and Assessment Plan (MAP) is such an important component of the Water Supply Master Plan (WSMP). The MAP is the mechanism to provide annual updates to the Board on demands, water supplies, project status, costs/funding, and how changes may impact achieving our level of service goal and water rates. The gives the Board an

Water Supply Master Plan 2040 update
External Comments and Responses

					opportunity to make any necessary adjustments to the WSMP portfolio of projects. Changes could include, but aren't limited to, substituting projects (e.g., Sites Reservoir for a Delta Conveyance Project), accelerating the schedule of a project, stopping an existing project, or starting a new project, just to name a few. Valley Water will need to assess its current water supplies, demands, and progress of the portfolio of WSMP projects to evaluate next steps if milestones are not met for Pacheco or any other WSMP project.
42	San Jose Water	35	section 4.1.5	Discusses the Transfer Bethany Pipeline, which is described as an element of the Los Vaqueros Reservoir Expansion project. It's not clear what criteria Valley Water will use to determine if it will participate in the expansion portion of the project, and how and when those decisions will be made. SJW sees the ability to take State and CVP supplies through an alternate, north of Delta intake system along with additional storage as beneficial, and would like to see expanded discussion in the plan.	Valley Water continues to evaluate participating in the Los Vaqueros project at various levels. Regular updates are provided at the Water Storage Committee. Additionally, the following text has been added to this section: "Valley Water continues to evaluate the benefits of this project as more information becomes available. Evaluation includes performing water supply modeling, assessing the capital, operation and maintenance, and repair and rehabilitation costs, as well as investigating the appropriate governance structure. Regular project updates are provided at the Board's Water Storage Exploratory Committee."
43	San Jose Water	7	second paragraph	Change 399,000 AF to 399,000 AFY.	Comment incorporated
44	San Jose Water	10	table 1	Include an explanation why supplies do not equal demands in all years (i.e. conservation required even on average years without action)	Table 1 aims to demonstrate that Valley Water will see shortfalls between supplies and demands if we only invest in those Baseline Water Supply System projects, as demand continues to grow to 399,000 by 2040. This shortfall can be avoided through additional long-term water supply investments. Those new investments are being guided by Valley Water's "ensure sustainability"

Water Supply Master Plan 2040 update
External Comments and Responses

					water supply strategy. Additional explanation is provided on page 9.
45	San Jose Water			Throughout document change San José Water Company to San Jose Water.	Comment incorporated
46	San Jose Water	10	table1	SFPUC water of 58,000 AFY (in 2040) doesn't match page 11 3rd paragraph of 59,000 AFY.	Error corrected
47	San Jose Water	12-13		Consider explaining why 1977 and 1987-1992 were used as the worst case drought years although they were not worst historical droughts.	Based on available data (94 year history through 2015), the 1987-1992 is the worst case drought.
48	San Jose Water	20	second paragraph	"...Delta Conveyance Project (formally known as Delta Conveyance Project)" should say "(formerly known as California WaterFix)."	Error corrected
49	San Jose Water	20	second paragraph	Says Delta water could improve to 170,000 AFY with project but does not say how much without the project (i.e. what is the value of the project?).	The value (project yield, lifecycle cost, and unit cost) the Delta Conveyance project provides is identified in Table 6 and Appendix D.
50	San Jose Water	23	first paragraph	The last sentence is confusing.	Sentence restructured
51	San Jose Water	24	table 5	Explain what "Reserves" represents.	An asterisk has been added with an explanation.
52	San Jose Water	28	table 6	Consider a footnote that explains these are 100 year costs.	Comment incorporated
53	Patrick Ferraro	N/A	N/A	<p>Thanks, Metra, for sending the staff's PowerPoint slides and link to the full text of the final draft report of the 2040 Water Supply Master Plan.</p> <p>I did not attend the presentation on December 8, 2019, while I did place it in my calendar. After reading the final draft, I felt my time would be wasted in attending the presentation and my comments would be both ignored and unwelcome by the staff.</p> <p>My comments on the Water Supply Master Plan are not complimentary, but are based on nearly 50 years of institutional knowledge of Valley Water and personal experience in local water supply planning and policy making.</p>	<p>Valley Water stands by the reports first statement "A reliable supply of clean water is necessary for the environment, economic, and social well-being of Santa Clara County". Valley Water developed the Water Supply Master Plan internally and provided numerous opportunities for feedback through the stakeholder engagement process over the last two years, including but not limited to:</p> <ul style="list-style-type: none"> - 2017 conducted a level of service voter survey (conducted in English, Spanish, Chinese and Vietnamese) of over 400 Santa Clara County residents, covered topics such as water use reductions and water rates.

Water Supply Master Plan 2040 update External Comments and Responses

			<p>Starting with a statement that water shortages create economic displacement, we know this statement was disproven during our most recent five year drought, and thus begins a proposed master plan with an disingenuous statement that casts doubt upon the entirety of the information and data which follows.</p> <p>Having recently been a participant in the development of a new water supply masterplan for City of Santa Cruz Water Department, I experienced what a true public participation process looks like, with the advisory committee empowered to select consultants and a review committee to oversee the consultants work. Not surprisingly, the new plan developed found future water demand would increase only slightly after a drought and then would decrease as code-enforced water use efficiency was implemented in succeeding years. Future solutions to ensure reliability looked to increasing the use of pre-1914 water rights from their local watershed, with wastewater recycling as a Plan B for extended droughts in the future. Proposed groundwater banking with neighboring water agencies minimized new surface water conveyance and avoided costly surface storage projects, so minimal rate impact were achieved.</p> <p>These attributes of the Santa Cruz Water Supply Master Plan were neither the goals nor the resulting list of the projects developed for the Valley Water’s Master Plan. My guess is that any local support for this final draft comes mostly from the highly-(water-) subsidized agricultural sector in Santa Clara County or the Business/Industry sector, who mostly passes on their water costs to their customers. I’m hoping this email will expose more of the opposition from rate-payer groups and other local advocacy groups that may or may not</p>	<ul style="list-style-type: none"> - 2018 Stakeholder workshops: one for non-government entities and the public and one for the water retailers and city/county agencies. - 2019 Stakeholder workshops: one for non-government entities and the public and one for the water retailers and city/county agencies. - Additionally, staff has presented numerous updates at various Board and Board committee meetings. <p>Valley Water continues to evaluate various water supply and diversification opportunities to meet our demands (see Appendix D), investments are made in-line with the "ensure sustainability" strategy and approved by the Board. The Water Supply Master Plan (WSMP) update already utilizes a reduced demand than what is presented in retailers' 2015 UWMPs. Additionally, Valley Water is in the process of developing a new water demand model that will be used to produce updated water demand projections for long-term water supply planning and analysis efforts. The model will account for the resiliency of the drought savings and provide updated demand numbers for the 2020 annual WSMP Monitoring and Assessment Plan (MAP) update to the Board. The Board will then have an opportunity to adjust the portfolio of water supply projects within the framework of the "ensure sustainability" strategy. Staff continues to work diligently with the various stakeholders to move potable and non-potable projects forward, including developing the Countywide Water Reuse Master Plan, which is due to be completed next year. The current WSMP "reuse place-holder" project is the Los Gatos Ponds; however, as soon as the Countywide Water Reuse Master Plan is completed, the WSMP</p>
--	--	--	--	--

Water Supply Master Plan 2040 update External Comments and Responses

			<p>have already tried to influence the final Mater Plan, as presented.</p> <p>I believe that the water demand projections are inflated to justify that long list of new capital-intensive engineering projects, which result in doubling the M&I water rates in the next decade. Many of these projects are either un-needed or have lower cost alternative projects with higher reliability.</p> <p>While protecting our local aquifers remains the original and highest priority for Valley Water, adding costly surface storage in lieu of expanding remote groundwater banking in Kern County results in long lead times with nowhere to store water in wet years like 2017 & 2019. The decision to implement the groundwater bank in Kern County was made prior to 1995, when I left to Board of Directors and was the preferred alternative to costly and controversial New Pacheco Dam project. This was supported both by the Board and the staff at the time, and should have ended consideration for the new dam for all time. Unfortunately, 2014's Water Bonds authorized by Proposition 1, revived this project, with the lure of a half a billion dollar grant from the CA Water Commission, leaving local ratepayers to fund the balance. As it was in the early 90's, additional remote groundwater storage is available immediately and is cheaper and more reliable than adding or restoring local surface storage projects.</p> <p>Finally, I would like to protest the slow progress being made to implement local water recycling projects for both potable and non-potable projects. The exception, of course is the Sunnyvale extension to the new Apple campus, which was motivated and achieved by a unique confluence and coalition of public and private support.</p>	<p>will be updated with the Board's preferred alternative.</p>
--	--	--	--	--

Water Supply Master Plan 2040 update External Comments and Responses

			<p>The Indirect Potable Reuse Project being proposed is highly capital intensive. I feel that the project is unjustifiably delayed due to institutional impediments. I also find questionable the scientific concern over RO Brine discharge to the South San Francisco Bay, without changes in the existing mass emissions of salts or heavy metals.</p> <p>The upside of this delay might be that the State Water Resources Control Board may soon release the long-awaited regulations for Direct Potable Reuse (DPR). A green light by the State Board on DPR would allow for blending RO product water with Delta water. While being transmitted through the Central Pipeline. This would avoid spending millions in new transmission pipelines to reach the Campbell Percolation Ponds. This also justifies the 20 MGD expansion of the Rinconada Water Treatment plant.</p> <p>By copying this email to the Board of Directors, I ask that they do not approve nor accept this final draft of the 2040 Water Supply Master Plan and wait to instead finalize the Water Recycling Master Plan before the District proceeds to implement a Water Supply Master Plan.</p> <p>Thank you for your consideration of these comments.</p>	
54	Bill Sherman			See Steps 1 – 5 below
<p>Step 1 - Development of a Control Chart showing past and future County water Demand, Supply, and Population change per year:</p> <p>Start with Figure 1 shown on Page 1 of the draft plan:</p> <ul style="list-style-type: none"> - Expand the right side of Figure 1 to include the years up to and including 2040. Adjust the horizontal, (X) scale size so that plotted data from 1990 to at least 2040 can be shown on a single page. - The control chart you will develop is basically known as a line chart that is used to visualize a trend in data over intervals of time. You will be plotting three separate lines. From the top, line (1) represents the change in 				<p>While we understand the points you are making, we believe it would be more confusing to the reader to include these comments. However, to the overall point you are making on demands, Valley Water is in the process of developing a new water demand model that will be used to produce updated demand projections for long-term</p>

Water Supply Master Plan 2040 update External Comments and Responses

population over time; (2), the change in water supply over the same time; and (3) the concurrent change in demand for water. Each line will be plotted as solid representing actual historical data on the left side from 1990 to 2018 or the most recent available date, if earlier. All forecast or projected data will be shown to the right as dashed lines on all later years through 2040.

- To compare water demand growth with population growth, change the population range on the right X-axis from 1,400,000 on the bottom to 2,520,000 on the top. Re-plot line (1), as a solid line, through 2018. Using the most current ABAG projections, extend the plotted forecast as dashed lines through 2040. This completes line (1), the expected change in population over time.

- Line (2), in the middle, does not presently exist in appropriate form in this report, and will have to be developed, as follows. Use the most recent confirmed report to acquire historical actual supply data. This should be available from the 2015 UMWP or WSMP 2017. Plot this data in non-blue or non-green colors through 2018 or the last year available, if earlier, using solid lines. Generate the projected values for each 5 year point by using the data from Table 1 on page 10. One caution, however. Make sure expected future supplies do not include any yields from the proposed projects before they have been approved by the directors and incorporated in the 5 year CIP. Otherwise you will build in an unnecessary risk of failure.

If there is a relatively seamless transition from the latest actual supply point to the initial 2020 average supply of 352,000 annual acre-ft, (shown in Table 1 on page 10 of the 2040 Plan), use the values shown there and connect by dashed lines. If not, contact me and I'll suggest some ways to counteract this potential source of error, possibly yielding increased risk of failure. There are 3 sets of data presented that appear to be inconsistent and need to be understood and reconciled. Table 1 on page 10 shows the Average Baseline Water Supply through 2040. Table 6 on page 28 shows the Average Annual Yields of the Master Plan Projects. Table 4 on page 23 shows the Average Water Supplies with Master Plan Projects. Why do the totals in Table 6 promise improvements of 82,5 annual acre-ft, while Table 4 only shows an improvement of 34 annual acre-ft (24,000 increased supply, 10,000 reduced demand) by 2040? This deviation needs to be understood and clarified.

This finishes line (2), the history and expected change in water supply over time.

- Line (3) on the bottom, can be developed by duplicating the blue demand line on Figure 1 of the 2040 Plan, then attaching the projection at that point. Projected growth is an increased 1700 acre-ft of demand annually for the next 22 years, as described at the end of section (c), above, yielding a 2040 projected demand of 339,400 annual acre-ft. This completes line (3).

You now have a basic line chart showing past performance and future expected growth in population, water supply, and water demand. Because all lines are plotted against similar scales of % increase, they can be visibly compared. The demand line shows a target for 2040 representing your best current estimate of expected future growth. In step 2, we'll add control limits to aid you in assuring that future supplies continue to exceed the actual

water supply planning and analysis efforts. The model will account for the resiliency of the drought savings and will provide updated demand numbers for the 2020 annual WSMP Monitoring and Assessment Plan (MAP) update to the Board. The Board will then have an opportunity to adjust the portfolio of water supply projects within the framework of the "ensure sustainability" strategy.

Regarding Tables 4 and 6. Valley Water uses both average yield (how much water supply a project can bring into the county) and effective yield (how much of the project's water supply brought into the county can be utilized when evaluated as part of a portfolio of projects) in our assessments and calculations. We have added a footnote to Table 4 providing this explanation which accounts for the differences in supplies.

Water Supply Master Plan 2040 update External Comments and Responses

<p>county water demand by enough to meet your currently approved drought service levels. Meanwhile, several conclusions can be reached at this point from the line chart that's been developed:</p> <ul style="list-style-type: none"> - There are four different periods showing distinctly different usage trends and correlations to population growth. - From 1990 through 1997, water use grew faster than population growth. - From 1997 through 2007, water use was constant while population grew moderately. - Between 2007 and 2016 there was a steep reduction in use and a complete disconnect from continued population growth. This was the period in which Valley Water promoted conservation projects and county residents were subjected to voluntary and mandatory drought conservation actions due to the extended drought. - Since 2016, the slow trending increase in water use appears to mirror population growth again after the previous disconnect, but the duration of data is too short to confirm. - Use of average actual historical water usage alone to project future trends is useless, under these circumstances. - Data since 2016 suggests strongly that future actions to restrain the growth rate of water use after the extensive reductions caused by recent conservation actions are best served by encouraging customers to maintain the conservation behaviors they had incorporated. <p>In the next step, we'll add upper and lower control limits and a neutral range (null band) to avoid continued revisions due to normal variations but provide action alerts quickly when destructive trends start to appear.</p>	
<p>Step 2 - Add null band plus upper and lower control limits to the plot.</p> <ul style="list-style-type: none"> - Locate the upper control limit, by first referring to Section 3.2, Figure 10, and Table 4 on page 23 of the draft 2040 plan. In section 3.2, you identified your approved level of service goal as the ability to meet "at least 100 percent of of annual water demand... during non-drought years and at least 80 percent of annual water demand in drought years". Figure 10 and table 4 use incorrect demand data identified by the calculations in sections (b) and (c) above. You need to correct the incorrect demand projections, remove any unapproved supply inclusions if present, and recalculate the projected demand by 2040 that will just achieve your approved level of service goal. That value will be the ending terminus of your upper control limit where it intersects with the year 2040 Y-axis. - The lower control limit boundary is less important, but nevertheless offers an excellent option to improve future focus, re-allocation of resources, and cost-benefit performance. To place the ending terminus of the lower control limit on the 2040 year Y-axis, consider that the original demand target line is generally about midway between the upper and lower boundaries. I'd suggest initially plotting the lower control limit to achieve that positioning. - You are now ready to finish your control chart by adding a small cross-hatched null area where trends that deviate from your planned target are not yet seen, but normal variations may be. The larger the area, the riskier 	<p>See response to Step 1 comment from Mr. Sherman.</p>

Water Supply Master Plan 2040 update External Comments and Responses

<p>it becomes to actually meet your objective. The smaller the area, the more time you will spend on unnecessary adjustments of normal variations that typically self-correct. without damage. In this case I'd suggest using about a +/- 3% allowable variation between the upper limit and the plotted projected trend line and between that line and the lower control limit. Mark those points on the year 2020 Y-axis where the upper and lower control limits intersect. You now have your expected trend line and 2040 target for demand plus your upper and lower control limits to alert you to action when they are breached. Step 3 will provide information on how the current information is updated over time and how it is used to assure meeting your approved level of service goal.</p>	
<p>Step 3 - Updating and Using the Control Chart.</p> <ul style="list-style-type: none"> - Updating is easy. Using existing sources, annually plot new actual population, actual demand, and recalculated water supply availability, connecting them to the previous year's actual plot point with solid lines. Add any new average annual yields associated with all identified Master Plan projects that have been approved by the directors during the previous years. - Annually the new data added to the plot needs to be reviewed. That review is brief if all of the new demand data is within the null area. If an individual data point is above the upper control limit or if 3 annual data points are within the control limits but deviating significantly from the previous plotted trend line, analysis and action are needed. Barring a different Valley Water need, the overall Water Supply Master Plan needs to be fully updated every 5 years, to forecast a new rolling 20 year plan, preferably concurrently with the new UWMP. By having this type of visibility, you can focus your effort on management by exception when you get advanced signals that your water demand is deviating from plan and trending closer to supply 	<p>See response to Step 1 comment from Mr. Sherman.</p>
<p>Step 4 - Updating and Correcting all Sections of the 2040 Plan. Sections that appear to need changes due to the material change in future water demand described in the comments include:</p> <p>Major Changes - Sections 1.1*, 2, 2.1, 2.2, 3.1.2, 3.1.3, 3.2, 3.4, 3.5, 4, 4.1, 4.2, and 4.3. Minor Corrections - Sections 1.3, 1.4, 2.3.3, 3, 3.1.1, and 3.3</p> <p>* Specific Needs -</p> <ul style="list-style-type: none"> - 1.1 Figure 1 in section 1.1 must include, as a minimum, the expectations for water use (Demand) in 2019 and the projected demand for 2020 now shown separately in Figures 7 and 10, based on data in Tables 1 and 4. If this information had been shown in Figure 1 of the draft 2040 Plan, you could not have possibly overstated future water demand by almost 20%. - 1.3 Shows incorrect future demand and should eliminate the statement about the current long term average as explained above in section (e), Step 1. The last portion of the last paragraph needs to be corrected. - 1.4 Chapter2 - Delete 'Develop', replace with 'Assure Adequate' - 2, 2.1, 2.2, Extensive rewrite is needed. I will be glad to work with applicable staff in a working meeting to point out specific areas that need to be changed based on correcting the present forecast showing a need for additional supplies by 2040. 	<p>See response to Step 1 comment from Mr. Sherman</p> <ul style="list-style-type: none"> - Section 1.4: Comment incorporated - Section 2, 2.1, 2.2: see response to Step 1 comment from Mr. Sherman - Section 3: Earlier this year (1/14/19) the Board reaffirmed the “ensure sustainability” strategy which consists of three elements, which are accurately described in the text. Therefore no changes are incorporated. - Section 3.1.1: Sentence removed because it is unnecessary. - Section 3.1.2, 3.1.3, 3.2, and 3.3: See response to Step 1 comment from Mr. Sherman

Water Supply Master Plan 2040 update External Comments and Responses

- 3 Rephrase point 2 as it is inaccurate.

- 3.1.1 Correct use amounts.

- 3.1.2, and 3.1.3 Sections are based on adding presently unnecessary projects to meet non-existent, delayed, inaccurate demands by 2040. They need to be rewritten completely to focus on continuing evaluation of feasibility and preplanning of selected projects that have other justifications instead of only immediate reduction in demand or increase in supply. A selected few low risk, moderate reward projects appear to fit this characteristic. Preplanning is still necessary so a few projects are ready for timely implementation if the need suddenly arises. Most proposed projects can be deferred for a decade or more based on the new control charts.

- 3.2 Figure 10 needs to be recalculated with correct demands to determine the 2040 point of the upper control limit as described in Step 2 of section (e) above. Figure 11 must be replotted using accurate, corrected, demand data to develop the shortfalls in Table 5.

- 3.3 Review and adjust, if necessary, based on the modified objective due to using correct demand forecasts.

- 3.4 This heading is misleading. If you look at the supposed stakeholders that did or may have provided input, you will find one group conspicuously absent: the 1.9 million water customers who pay for your decisions and subsequent actions. There are no signs of success in getting knowledgeable residential consumers involved to an extent that anyone could have pointed out this incorrect forecast of water demand which has been projected since the 2010 UWMP. I have been attending Valley Water Committee meetings for over a year and did not see the opportunity for Plan involvement until just before the July presentation of the Draft 2040 Plan which led to these comments.

Section 3.4 needs to include a plan and method to gain customer stakeholder input of value in a collaborative effort for the mutual benefits of both Valley Water and the 1.9 million individuals who have to pay for your mistakes.

- 3.5 contains inaccuracies, misleading costs and risks, especially for the seven unique additional "no regrets" conservation & stormwater projects included in line 2 of Table 6. AND NONE OF THEM ARE NEEDED BY 2040 TO ACHIEVE YOUR APPROVED LEVEL OF SERVICE GOAL!!! The specific "no regrets" list of individual projects have vastly different reported costs per acre-ft, total lifecycle costs, and risk profile. Since they will be approved individually, they need to be broken out individually in Table 6 for transparency. Furthermore, you need to add the easiest, least risky, and probably most cost-effective conservation effort of all, for customers to maintain as much of the improved water use behavior that your efforts helped drive before 2017. The cost is miniscule, only expanded communications with customers to encourage consistency (not change) in behavior in lieu of Valley Water having to pursue the expensive and risky new projects on your list. This option must be included on your list of Projects so the CIP Committee can validate and get Director approval or defeat it because it "doesn't ensure that the District invests in the right solutions or projects at the right time for the right costs for the right reasons". Non-transparency on this request for the last two years is no longer acceptable in light of this Demand error.

- Section 3.4: The stakeholder engagement includes but isn't limited to:

- 2017 conducted a level of service voter survey (conducted in English, Spanish, Chinese and Vietnamese) of over 400 Santa Clara County residents covered topics such as water use reductions and water rates.

- 2018 Stakeholder workshops: one for non-government entities and the public and one for the water retailers and city/county agencies.

- 2019 Stakeholder workshops: one for non-government entities and the public and one for the water retailers and city/county agencies.

- Additionally, staff has presented numerous updates at various Board and Board committee meetings. No changes incorporated.

Section 3.5: See response to Step 1 comment from Mr. Sherman.

Sections 4, 4.1, 4.2, 4.3: The planning staff does coordinate with Capital Improvement Program (CIP) staff on all baseline projects prior to any Board meeting in order to ensure a consistent message is delivered. Not all projects in the CIP are related to water supply, and therefore staff believes providing the information to the Board in the context of the Water Supply Master Plan (WSMP) is reasonable and not duplicate of effort. The WSMP Monitoring and Assessment Plan (MAP) is aimed at describing the methodology of the annual

Water Supply Master Plan 2040 update External Comments and Responses

<p>My experience as a facilities Engineering Manager responsible for implementing these types of changes points out several areas where I believe risks or costs are underestimated and the planned results will likely not be achieved. Preliminary estimates need to be reconciled such as the Pacheco Reservoir Expansion reported last week as costing \$1 billion and the January 14, 2019 value of lifecycle cost you show in Table 6 at \$340 million.</p> <p>https://www.mercurynews.com/2019/08/09/environment-report-out-on-new-1-billion-dam-proposed-for-santa-clara-county/</p> <p>- 4, 4.1, 4.2, 4.3 All sections need to be reviewed and made consistent with previous Plan changes previously identified. Specifically, in Section 4.3, at least 3 of the elements identified are reported on monthly by the CIP for all projects Approved on the 5 Year CIP. You need to coordinate with the CIP Committee to assure that the present project reporting through the CIP to the Board is not duplicated nor differs. In addition, it would be helpful to briefly explain in the MAP how your proposed projects transition to approved status with the Board. In the August 12 Agenda of the CIP Committee meeting, item 4.3, starting on page 17 there is an informative flow chart. This would be helpful to the reader.</p>	<p>Board check-ins, a graphic similar to the CIP one will be incorporated into the MAP.</p>
<p>Step 5 - Provide Pertinent Comments on Previous Stakeholder Comments.</p> <p>On July 16 and 18, former Valley Water Director Ferraro and Ms. Irvin of the Sierra Club provided written comments on the draft Valley Water's Water Supply Master Plan 2040. They both pointed out their understanding that the amount of water demand growth after drought conservation savings would be far less than projected. My comments support this conclusion. In fact I can put an expected size of the error at nearly 20% which means that while the 2040 Plan is based on providing more supplies to meet the stated need of maintaining an approved service level during extended drought, there is no shortfall at all during normal weather nor will an extended drought, need more supply. The analysis error shows that there will actually be a 49,000 annual acre ft lower year 2040 usage demand (12.5% lower) to further defer any necessary supply growth. Further investigation has confirmed Ms. Irvin's statement concerning correlation with population growth, and Mr. Ferraro's comments about justification of unneeded capital-intensive engineering projects as being accurate.</p>	<p>Step 5: This document demonstrates Valley Water's commitment to responding to written public comments received pertaining to the Water Supply Master Plan update.</p>