

# Response to Stakeholder and Public Comments

## City of Sunnyvale:

- While the report mentions life-cycle costs for different portfolios, it doesn't deeply explore the return on investment (ROI) or socio-economic impact analysis per dollar spent.

The economic analysis for this WSMP relies mostly on previous studies, because it is very challenging to estimate the ROI or socio-economic impacts, because they vary by business type depending on how essential water is to them. This type of analysis requires significant time and effort and involves surveys and/or reviews of various economic activities. Even with a robust analysis, the estimate is generally considered high level. Given this, and time and resource constraints, the socio-economic impact was drawn by reference from previous studies.

- The 126,000 AFY conservation goal by 2050 seems ambitious, especially since it requires a 192% increase in participation. There's limited discussion on how feasible this is, given demographic, behavioral trends and hardening demands.

The 2050 goal is considered ambitious but implementable based on the analysis performed to support the goal development. The detailed discussion on how the goal was developed and rationale for the recommendation is provided in Appendix B.

- Many strategies depend on agreements with external agencies (e.g., for the Delta Conveyance Project). The report lightly touches on this complexity but doesn't fully analyze the risks if agreements falter.

The need for partnerships is one of the risks and uncertainty that is out of Valley Water's control and hard to predict. That is why the adaptive management framework is recommended, which monitors project development and other conditions as a way to manage the risk. If any agreement falters, Valley Water has to reassess the situation and options and pivot potentially to a different project.

- While climate change is acknowledged, the scenarios don't seem to fully explore compounding risks (e.g., fire + drought, or regulatory changes during a drought emergency).

The climate change impact analysis for this plan is focused on changes in temperature and precipitation pattern on future demand and water supply, for which data and modeling analysis are available. We understand that compounding risks, like wildfires during droughts or sudden impacts to operations in an emergency, could make things even more challenging.

But because there isn't currently data and modeling available to assess those complex interactions, we haven't included them in the current analysis.

Also, the range of potential compounding impacts is so wide and often very situation-specific that it wouldn't be practical to cover them all through a scenario analysis. To plan conservatively, the WSMP uses the longest drought in the historical record with available data as the foundation for its analysis.

- How does each strategy's cost per acre-foot of water compare when adjusted for risk, timeline, and uncertainty?

These factors are near impossible to quantify, however, in general, change in timeline and risk/challenges could potentially increase the cost per acre-foot of water

- What are the economic consequences of inaction beyond 2030, and how are they quantified?

As discussed in the plan and appendix F, the economic consequences of no action beyond 2030 could be in billions or tens of billions, depending on the extent of water shortage.

- Residential – willingness to pay (\$1.6 - \$2.8 Billion)
- Agricultural – crop production loss (\$220 - \$280 Million)
- Business – impact on sales revenue (\$1.2 - \$14.2 Billion)
- Subsidence – hard to quantify, potential billions of damages

Details related to cost shortage can be found in Appendix F.

- What specific climate scenarios (e.g., multi-decadal megadroughts) were modeled, and how sensitive are the portfolios to these extremes?

Valley Water used climate scenarios recommended by California's Climate Change Technical Advisory Group (CCTAG) to explore a range of future conditions. Staff selected two global climate models, CCSM4 and CESM1, to capture variation in temperature and precipitation, which affect local reservoir inflows, evaporation, and water demand. We also looked at two CalSim scenarios that represent different climate impacts on imported supplies: DCP Medium (1.8 ft sea level rise) and DCP Central Tendency (0.5 ft sea level rise).

While we didn't specifically model multi-decade megadroughts, the scenarios do include warmer and drier conditions that help us evaluate resilience under various future conditions.

In terms of sensitivity to these scenarios, we see a range of future shortages across these scenarios, as shown in the quadrant analysis in the WSMP. These differences highlight that

our portfolios are sensitive to supply and demand conditions that are impacted by external climate forces. Depending on future supply and demand conditions, we may need more or fewer projects to maintain reliability. This uncertainty is exactly why the plan includes an adaptive management approach, allowing us to stay flexible, monitor changing conditions, and adjust our investments as needed over time.

- Are the groundwater recharge assumptions valid under long-term drought scenarios?  
During drought, local and imported surface water is often limited. Therefore, Valley Water prioritizes available water for recharge operations to areas of the groundwater basin most in need. For example, we may prioritize South County because those communities are 100% reliant on groundwater for their potable water needs or North County because of the subsidence risk. Valley Water closely tracks countywide groundwater conditions during drought to help make decisions about recharge operations. During drought, Valley Water expands in-lieu recharge by encouraging additional treated water use and water conservation by the community. Additionally, Valley Water operates a healthy recharge program during wet years to build groundwater storage prior to drought and after drought to quickly recover groundwater storage.
- How will Valley Water engage the public in understanding and supporting projects with high costs but long-term benefits?  
So far we have engaged the public through public meetings such as our advisory committees and environmental stakeholder meetings, as well as the Board meetings, discussion with stakeholder groups, sharing info on Valley Water webpage, stakeholder emails, blogs, and social media. Going forward, we will continue to utilize all these communication venues to engage the public on projects. Board meetings relating to the WSMP are advertised on social media and next door.

## **Doug Peterson**

- **Cost concerns should not be voiced more heavily than environmental concerns**

Valley Water's strong commitment to the environment should be expressed more forcefully in the WSMP as a primary factor driving the evaluation of water supply options. Water must be reasonably affordable, but Valley Water has a fundamental duty to staunchly protect our ecosystems and then price water accordingly. Consumers should be expected to pay the true price of environmentally sustainable water. Our conceptualization of an adequate water supply should embrace our moral obligation to share our limited water resources generously with innocent wildlife and adapt our methods to shield them from undue suffering. Ideally, our commitment to wildlife should go beyond preventing harm and strive to nurture our ecosystems proactively. It is especially important that environmental concerns be evaluated with the same precision that is devoted to cost considerations. Passionate environmental arguments are of little value to wildlife if they are not rooted in factual evaluation and honest debate.

Valley Water strongly commits to the environment as environmental stewardship for healthy creek and ecosystem is one of Valley Water's three missions. As discussed in the draft plan, environmental impact is one of the major criteria for project evaluation. We rely on each project's CEQA documents to characterize environmental impacts, as they contain the most comprehensive analysis and evaluation of the projects. Cost of some WSMP projects includes mitigation and other measures that will be implemented to restore or protect the ecosystem.

- **The Adaptive Management Strategy is useful and appropriate**

Climate Change is making it very difficult to plan far into the future. As we set long-term goals, we need to pay close attention to our current situation and exploit our most promising opportunities with vigor and confidence, reevaluating our available choices frequently and systematically. The strategy will be most effective when paired with methodical scientific investigations, and we should never be reluctant to invest heavily in our own purposeful research in consultation with highly qualified experts.

Yes, through the adaptive management processes, Valley Water will continue to conduct vigorous scientific analysis regarding climate change and other areas to support science-based water resources planning and management. Valley Water's Board Ends Policy E2, now added as an appendix, includes goal "2.5. Manage water resources using an integrated, science-based approach."

- **The three "portfolios" seem to make imprecise distinctions.**

It is difficult to see, for example, why groundwater banking falls in the local control portfolio while the Sisk Dam Raise does not. I understand the usefulness of bunching projects in different ways that emphasize different objections and advantages, but a straightforward appraisal of individual projects based on their pros and cons would seem more useful. In general, project diversification seems extremely valuable in this era of escalating uncertainty, far exceeding portfolios seeking local control or lower costs. Maximum project diversification would appear to dovetail best with the adaptive management strategy and preserve synergistic projects.

Groundwater banking falls in the local control portfolio, because it represents the current participation in the Semitropic groundwater bank, so it is part of Valley Water's current system even though it is not local. A straightforward appraisal of individual projects based on their pros and cons was done to provide a basis for portfolio analysis and discussed in Section 5.3. The summary of each project's benefits and risk/challenges is provided in Table 5-3.

Three themes and resultant portfolios were developed to frame options and highlight different considerations. Because of project options, we agree that the distinctions between them may not be very strong as they all include a diverse set of supply and storage projects.

- **The WSMP should reflect the urgency of the moment.**

The high probability of more prolonged droughts, bigger storms, and rising summer temperatures fueled by climate change suggest a need for more urgent action to augment our supply and storage capabilities. The international effort to mitigate climate change is failing to deliver meaningful results, and there are sure to be serious consequences. It may be a bit unfair to criticize a long-term planning document like this for its sluggishness, but I would like to see our most promising opportunities advancing on faster timetables. I may not fully appreciate the difficulty of accelerating our water purification efforts but would especially like to see this drought-proof supply strategy scaling up more quickly. The slow progress on the Anderson Retrofit and the Pacheco Reservoir Expansion Project has also been extremely frustrating to me.

While we share your concern over the urgency of the moment and understand your frustration over the timeline of some projects, those projects are very large, complex, and expensive infrastructure projects that take a long time to permit, design, and construct. The Pure Water project is planned for completion in 2035, which given the regulatory requirements for direct potable reuse, is as fast as possible. This is also why continued planning for additional projects is prudent, as all projects can take multiple decades and participating in them now allows us to pivot if we need to.

- **Desalination is correctly viewed as a strategy of last resort.**

I am pleased to see that desalination does not figure prominently in the WSMP. I applaud the effort to continue studying this drought-proof water supply strategy, but I am not optimistic about it. Desalination would appear to compete directly with water purification for a finite supply of effluent, a small number of feasible sites near the bay shoreline, and limited funds for capital improvement. Water purification requires considerably less energy than desalination, and I was perplexed by the rough estimate in the WSMP showing desalination being cost-competitive with water purification.

Valley Water is completing a feasibility study on desalination per Board direction. We will update the cost for the desalination project once its feasibility study is completed later this year. The staff recommended lower cost portfolio includes the Pure Water Silicon Valley project to provide drought resilient water supply.

- **Conservation expectation is very optimistic.**

All of the scenarios outlined in the WSMP assume that we will meet our future water conservation targets, and I am glad to see Valley Water striving to outperform our current efforts. We need to acknowledge that we are already doing very well incentivizing water conservation, and it will likely become more difficult to maintain the pace of these impressive gains. Heroic water conservation represents a very uncertain component of the WSMP, bolstering the already strong argument that we need to pursue new supply and storage strategies with urgency and robust capital improvements.

The future water conservation targets are developed based on the analysis of our programs and potential for future savings especially from outdoor water uses. We agree those targets are ambitious but believe they are implementable with sufficient resources. Our County already achieves high water use efficiency, so there might be demand hardening in the future. That's why we developed an adaptive management framework to address uncertainty with future conditions including whether we will meet our conservation goals. Annual WSMP reporting will include water conservation savings to track our progress toward the long-term saving goals.

## **Infractiv LLC**

- Section 1.3.2 of the WSMP 2050 states that “future water supply availability from imported water is uncertain and generally expected to decrease” due to climate change and Delta regulations. However, the portfolio still rely heavily on these same sources. As an example, during the 2020-2022 drought, Valley Water allocations were 5% and 0% from the State Water Project and Central Valley Project, respectively, among the lowest on record. Yet, the Lower Cost and Diversified strategies include the Delta Conveyance Project as a hedge, creating a strategic contradiction: recognizing the unreliability of Delta water while simultaneously planning to invest in it.

The Delta Conveyance Project can help Valley Water maintain existing imported water supply in the face of future climate change and Delta regulations and is one of the most affordable options among WSMP projects. In balancing affordability and other considerations, a diverse portfolio of mixed imported and local supply and storage projects can best address the county’s need and ensure a resilient and reliable water supply system. Imported water remains an affordable supply for Valley Water. In addition, the Delta Conveyance Project works well with storage projects by capturing excess flows from large storm events to be stored in storage projects and therefore enabling more efficient utilization of those projects.

- The WSMP 2050 outlines a sophisticated portfolio-based approach to addressing projected shortages of up to 70,000 acre-feet annually by 2050. Valley Water’s three strategic themes, Lower Cost, Local Control and Diversified, each offer distinct pathways to water security, incorporating options such as potable reuse, groundwater banking, imported water infrastructure and storage expansion. However, the WSMP 2050 contains a glaring omission, one that may represent the most practical, cost-effective and politically feasible strategy available today. While the plan contemplates multi-billion-dollar infrastructure investments with long timelines and high regulatory hurdles, it gives only cursory attention to a challenge hiding in plain sight: the water lost each year through retailer distribution systems.
- Valley Water has an opportunity to lead, not by absorbing all responsibility, but by enabling the right partners. The model is simple:
  - Set formal water loss recovery targets as part of Valley Water’s Level of Service commitments.
  - Establish a Regional Water Loss Partnership to coordinate efforts across retailers.
  - Support retailers with programmatic expertise while they fund improvements within their own systems.

- Integrate water loss assumptions into demand projections and planning scenarios.
- Acknowledge asset management as a core component of demand-side resilience in the WSMP 2050.

The implementation model is clear: Valley Water provides regional coordination and oversight, while retailers fund and execute improvements within their own systems. This model circumvents the delays and risks tied to major infrastructure, while ensuring that future investments operate on a foundation of systemwide efficiency.

- Every gallon saved through water loss reduction multiplies Valley Water’s long-term strategic options. Lower retailer demand reduces pressure on imports, extends stored supplies and may delay or even eliminate the need for some high-risk, high-cost infrastructure. This creates a virtuous cycle: lower regional costs, fewer environmental impacts, stronger drought preparedness and greater public acceptance than contentious capital projects can deliver. Just as importantly, it positions Valley Water as a forward-thinking leader in demand-side management, showing that sometimes the most effective strategy is not producing more, but protecting what already exists. In a time when every drop and every dollar matters, water loss recovery offers a rare combination of short-term impact, long-term sustainability and fiscal responsibility.
- Valley Water’s WSMP 2050 is an impressive blueprint for long-term regional water security. But its greatest strength, its commitment to adaptiveness, is also its greatest opportunity. Santa Clara County faces serious and growing water challenges that demand bold, adaptive solutions. The WSMP 2050 affirms Valley Water’s leadership and commitment to long-term stewardship and embedded within current operations is an option that offers high yield with low risk, tangible returns with minimal delay and systemwide benefits with shared accountability. The real question is not whether Valley Water can afford to act, but whether it can afford not to. In water management, the smartest investments often come not from expansion, but from preservation. For Valley Water, that means rethinking “new supply” through the lens of loss prevention, where the return on investment is not just real, it is generational. I respectfully urge the Board to integrate comprehensive water loss recovery into the WSMP 2050 as a foundational strategy. The data is available. The benefits are clear. The technology exists. The only thing needed now is leadership.

The water lost through retailer distribution systems is included in each retailer’s demand projection as part of Nonrevenue water. Section 5.3.6 of Appendix C – Demand Model Development describes how this water is estimated. In addition, the loss in Valley Water’s system is very small, less than 1% of total water use.



## **Sierra Club**

- It would be helpful to add a section to the WSMP to provide context about the relationship between the WSMP and other water supply related plans and regulations. This could be added to the Introduction.
  - Explain the relationship between the WSMP and the Urban Water Management Plan (UWMP), and the associated Drought Response Plan and Water Shortage Contingency Plan. How will the updated WSMP impact these plans?

Added Section 1.4 describing how WSMP relates to other plans. Drought Response Plan was a one-time effort to prepare for the update of the Water Shortage Contingency Plan and will be merged into it.

- Describe the significance of the upcoming Bay-Delta Water Quality Control Plan and proposed Voluntary Agreements (alternative implementation pathways) in relation to water supplies delivered by the State Water Project (SWP), Central Valley Project (CVP), and San Francisco Public Utilities Commission (SFPUC).

More discussion on the Bay-Delta Water Quality Control Plan and its potential impact is added to Section 3.3.3.

- The Draft WSMP describes affordability/cost concerns related to potable reuse and water conservation, identifies cost as one of the most important factors when prioritizing portfolios, and focuses on the Lower Cost Strategy. However, the Draft WSMP does not include any policies to address affordability related to high-cost projects and does not include any triggers or indicators (metrics) related to affordability.

The Board Ends Policy E-2 is added as an appendix which includes '2.6.2. Maintain affordable water rates through cost-effective water supply investments and management.' Currently, there are no widely accepted affordability metrics. Valley Water is conducting a study to understand demand elasticity and affordability issues, which is anticipated to be done by the end of the calendar year 2025.

- On June 24, 2025 the Valley Water Board of Directors received information on a consultant study regarding Valley Water's Water Use Projections, Water Demand Elasticity, and Customer Affordability Study. The presentation describes upcoming Affordability Analyses including "Modeling local/statewide affordability metrics – AR20, hours at minimum wage, and lowest quintile income for Santa Clara County, by Retailer." This could be a starting point for metrics in the WSMP.

- For these reasons, we recommend a future Monitoring and Assessment Program (MAP) topic to develop specific affordability policies and metrics for integration into the Draft WSMP, after the consultant studies are completed.

MAP is designed to track project progress and report real world conditions to support decision-making. It is not the venue to develop affordability or other board policies. The current affordability study could help Valley Water better understand affordability issues. MAP will track and report on project cost updates as they become available, and Valley Water's annual CIP and rate-setting processes provide opportunities to discuss affordability issues.

- In section 2.2, Local Surface Water, information should be added to explain that Anderson Reservoir and Calero Reservoir can also be used to store imported Delta water from the San Luis Reservoir.

Added.

- In section 2.3, Groundwater, the Draft WSMP says "The estimated operational storage capacity of the groundwater subbasins is up to 548,000 AF. Valley Water's managed recharge capacity is up to approximately 144,000 AFY." However, there is no explanation of how these two numbers relate to each other, or what it means for water supply. Some explanation should be added to make this information useful in the context of the WSMP.

Edits are made in the section to better explain these two numbers.

- In Section 2.4, Imported Water, the Draft WSMP says "... imported water is pumped out of the Sacramento-San Joaquin Delta and brought into the county through the complex infrastructure of the SWP and CVP." A figure (map) showing this infrastructure should be added to illustrate this complexity. Figure 2-5 Imported Water Delivery from 2010 to 2024 should also be updated to show years on the x-axis and to add notations for dry and wet years, to make the chart more useful and readable.

A map of SWP and CVP system is added. Figure 2-5 is updated with years. Adding dry and wet years will make graph very busy, instead, a sentence describing some dry and wet years in the graph was added.

- In section 2.7, Water Conservation and Demand Management, there is a discussion about the Water Conservation Strategic Plan which includes a "link" to [www.watersavings.org](http://www.watersavings.org). This link does not work. Typing [www.watersavings.org](http://www.watersavings.org) into a browser leads to <https://www.valleywater.org/watersavingsorg>, but there is no information about the Strategic Plan on that webpage. Please provide a working link that links directly to the Strategic Plan.

The link to the strategic plan is updated: <https://www.valleywater.org/droughtsaving-water/studies-and-reports>

- In section 3.2.2, Forecast Development, the Draft WSMP says that Plan Bay Area 2040 projections are used for housing development and CII growth in the model because Plan Bay Area 2050+ blueprint projects are not available at a census tract level. Hopefully this break-down will be provided soon. If the refined projections are made available, we suggest including a MAP topic to update WSMP demand projections to use the latest regional planning analysis.

Demand projection represents long-term trends that should not be updated outside WSMP planning cycle. MAP will track actual water use trends but is not the venue to update the demand projection. In addition, Plan Bay Area 2050+ is an interim plan and ABAG is going to start developing Plan Bay Area 2060 next year. Therefore, we will update the demand projection in the next WSMP update in 5 years, and plan to use the Plan Bay Area 2060 if it is available by then.

- Table 3-3. Forecasted Santa Clara County water demands through 2050 shows demand starting at 330,000 AFY in 2030 with conservation. This appears to be unreasonably high given current demand is less than 300,000 AFY and demand has not been at 330,000 AFY since 2014. Figure 3-4 illustrates this well, with the steep demand curve increase between now and 2030. This should be updated to a more reasonable 5-year increase like the increases shown in Table 3-3 (5,000 – 10,000 AFY increases every 5 years). At least this 30,000 AFY jump in demand between now and 2030 needs to be explained.

The steep demand curve increase between now and 2030 matches historical trends of drought rebound. While short and near-term water uses will fluctuate, the demand at the end of planning period is what is important, which is the focus of the plan and what drives shortage analysis and consequently water supply strategy. Annual MAP will track actual water use trends to provide information for adaptive management.

- In section 3.3.3, Regulation, there is a discussion about the Bay-Delta Plan which has been modeled into the water supply needs assessment assuming implementation of voluntary agreements (Healthy Rivers and Landscapes Program). The model needs to be revisited once the Bay-Delta Plan is approved, preferably as a MAP topic (if the adopted Plan differs from this current assumption).

Yes, the modeling analysis will be revisited to reflect the adopted plan.

- In section 4.3.1, WEAP, it says that WEAP uses the historic hydrologic sequence of 1922 through 2015. It would improve the model to use data through at least 2020. According to

section 4.3.2, this is not possible due to missing data from SFPUC. This needs to be addressed or the model will become increasingly out of date. The model needs to be revisited once the SFPUC data is available, preferably as a MAP topic.

We are currently working to extend the modeling data to 2021 and hope to complete it early next year. The expansion of modeling period won't impact the WSMP analysis which was focused on a historical drought. We are completing the WSMP with current modeling analysis and will use the expended model for future planning efforts.

- In section 4.3.3, Analysis Results, the charts analyzing a 6-year drought are confusing and need to be explained in more detail. It is unclear why the demand lines are different for the two stable demand futures and the two high demand futures. It is also unclear why Delta-conveyed supply goes up and down during the drought. This should be explained.

For the demand - even with the same full demand level, modeled demands drop during drought when conditions trigger a call for reduced water use. Timing of these calls depends on incoming supplies, so demand reductions vary by scenario.

For Delta-conveyed supply - Delta-conveyed supplies come from CalSim outputs, which vary annually based on hydrology and regulatory constraints. The drought pattern is based on the 1987-1992 drought but modified to reflect climate change and future operations, so year-to-year variation is expected.

- In the text explaining Figure 4-13 Average Shortage During the Six-year Drought, the Draft WSMP says "The projected shortages represent future water supply needs in the County that Valley Water aims to meet to achieve its LOS goal." We assume the LOS goal is 80% of pre-drought demands, but it would be very helpful to clarify that in relation to this chart. Also, it is unclear why supply is different between the two moderately impacted imports futures and the two severely impacted imports futures. These differences need to be explained.

Yes, LOS goal is 80% of pre-drought demands. The supply bar includes stored water from prior years. Futures with lower demand will store more water going into the drought, increasing available supply even under the same imported water scenario.

- In section 4.4, Needs for Investment, it is unclear whether the 10% rationing used to evaluate cost of shortage is 10% in addition to the 80% level of service goal, 10% below pre-drought demands, or something else. Please explain the baseline for the 10% rationing.

The 10% shortage and associated cost are from a study done for the 2012 WSMP. At that time, Valley Water's LOS was 90% during drought, so the 10% rationing was based off pre-drought demands.

- In section 5.2.5, Delta Conveyance Project, the Draft WSMP says the project “would enhance and/or complement the benefits of other projects that are being considered under the WSMP 2050.” More information is needed about projects that would benefit and how the DCP would provide that benefit. This section also notes opposition due to cost and environmental concerns. This is true, but the main opposition is due to equity concerns related to communities in the Delta. This needs to be added for full transparency.

For enhanced benefits – DCP works well with storage projects, because it allows for capturing excess flows from large storm events to be stored in storage projects, and therefore, enabling more efficient utilization of those projects.

The equity concern is added to the plan.

- In section 5.2.8, Pacheco Reservoir Expansion, information should be added about the 30% partnership goal and the provision of water for environmental public benefit. Please discuss the amount of storage that will be dedicated to partners and to fish in Pacheco Creek, and the amount dedicated to Valley Water water supplies.

Valley Water would not have dedicated space within Pacheco Reservoir assigned for any specific use. Rather, the expanded reservoir would be operated consistent with priorities to serve the best interests of the Valley Water rate payers. Operational priorities include:

- **Emergency Response** - Project would be operated to provide water supplies to Valley Water Municipal & Industrial water users if a supply interruption poses an imminent risk to essential public health and safety. Such emergency circumstances could include Delta export outages, imported water conveyance outages, regional infrastructure failures, or extended drought periods when water supplies are required to meet essential health and safety needs for drinking, hygiene, sanitation, fire protection and/or to avoid permanent land subsidence due to groundwater depletion. With nearly half of Valley Water’s water supply being imported from the Delta, such outages pose significant threat to Valley Water residential and commercial customers.
- **Existing Water Right** - Project would be operated to be consistent with the existing water right of the Pacheco Pass Water District (PPWD).
- **Ecosystem Improvement** – Pacheco Creek Project would be operated to improve habitat conditions for South-Central California Coast steelhead in Pacheco Creek, as part of Water Storage Investment Program (WSIP) commitments.
- **Delta Ecosystem Improvement** - Project would provide 2,000 acre-feet (in below normal years) to the IL4 water supply pool for refuges in the Delta watershed via exchange, as part of WSIP commitments.

- **M&I Water Supply and Groundwater Recharge** - The Project would provide additional groundwater recharge to aquifers fed by Pacheco Creek, thereby benefiting agricultural customers of San Benito County Water District (SBCWD) and PPWD.
- **M&I Water Quality** - Project would be operated to avoid delivery of San Luis Reservoir supplies to avoid taste and odor problems caused by the algae growth created during certain summer months by taking those supplies earlier or later in the season.
- **Reduced overall Project Cost** - Project would be operated to provide temporary access, with appropriate payment, to other water districts, as needed, with the goal of reducing overall cost of the Project by 35%.

Working with operational priorities, rather than dedicated spaces, provides for significantly improved operational flexibility while maintaining full control of the reservoir operations within the Valley Water purview.

- In section 5.3.1, Evaluation Criteria and Process, the evaluation process is not completely explained. A table should be provided with evaluation of all 14 criteria for each project, for transparency and completeness. The usefulness of the evaluation is also unclear since there is no ranking of projects for each criterion or in general. It would be helpful if the WSMP explained how these evaluations will be used.

As discussed in this section, with the exception of cost and water supply benefits, the evaluation is largely done qualitatively to provide a comprehensive understanding of each project. The process is through discussion with a group of internal experts and project teams and the results are summarized in Table 5-3. The evaluation was used for initial screening of projects and understanding each project's benefits and risk and challenges, which then served as the basis for development and evaluation of various portfolios.

- In section 5.4.1, Cost Analysis Methodology, the Draft WSMP says "lifecycle cost includes capital and annual operations and maintenance (O&M) costs over a project's useful service life with financing." It does not say that mitigation and monitoring costs are included. Information about the inclusion or exclusion of mitigation and monitoring costs needs to be added.

Section 5.4.1 is updated to include the description and a table of cost line items. Appendix G is also greatly expanded to include detailed cost information for each project (i.e. cost breakout, sources, etc.), including whether mitigation and monitoring cost are included.

- In section 6.2.1, Portfolio Evaluation Approach, The Draft WSMP says that second-tier criteria can help to identify backup projects for each major project, but no backup projects are identified in the Plan. It is unclear whether these backup projects will be identified in the

future or this information is superfluous. Please add some explanation or remove this if no follow-up is planned.

The proposed roadmap essentially lays out what are the priority projects vs backup projects. Any projects not currently included in the recommended lower cost portfolio are considered backup projects. However, since many WSMP projects are large and complex and still in the planning phase, it is hard to predict which ones will ultimately be successful. Therefore, we will use adaptive management processes to make decisions on which project will be implemented.

- Table 6-2 Portfolio Rate Impacts in North County Zone W-2 includes average monthly impact to a household, but this information is confusing without more explanation. What is being averaged? Is this the average of all households in the County? Also, what does the dollar figure represent? Is this the projected increase to the monthly water bill over the 5-year period? Please add some explanation to clarify the meaning of average monthly impact.

In North County Zone W-2 (Santa Clara County north of Metcalf Road, which encompasses the vast majority of water rate payers in the County), assuming an average household of 3-4 people using about 1,500 cubic feet of water per month (equivalent to: 15 HCF; or about 11,000 gallons; or about 0.34 acre-feet ), the monthly impact (\$/month) of the entire groundwater production charge under the WSMP 2050 portfolio options was calculated. The rate impacts are presented as an average in 5-year increments. Valley Water is the primary water wholesaler and groundwater management agency in Santa Clara County and relies on local retailers (municipalities and private companies) to deliver water to homes and businesses throughout the county. These retailers enact and implement local water use ordinances and bill their customers directly. The rate impacts presented in the Draft WSMP 2050 do not include additional charges that a retailer may add.

- In section 7.3, Annual Monitoring and Assessment Program, the WSMP says a standard report will be devised to include key elements of the WSMP, including “Any adjustments should be made.” Perhaps the word “that” is just missing, but it would still be unclear. It would be helpful to clarify what kind of adjustments would be recommended. Would it just be adjustments to projects and portfolios, or some other aspect of the WSMP?

It means the adjustments to the roadmap and recommended projects and portfolios



## **Tuolumne River Trust**

- Valley Water is planning for a 6-year drought, which is essentially a repeat of the 1987- 92 drought with some adjustments that take into consideration potential climate change impacts on water supply and demand. This drought planning scenario is more conservative than the State's requirement for agencies to plan for their driest 5-year sequence. Valley Water's approach strikes a reasonable balance between preparing for an extreme drought while avoiding over-investing in expensive alternative water supplies that are unlikely to be needed. The San Francisco Public Utilities Commission (SFPUC), on the other hand, is planning for a much more extreme "Design Drought," which combines the two worst droughts from the 20th Century. By combining the 1987-92 drought with the 1976/77 drought, the Design Drought is 72% more severe than what Valley Water is planning for (see Slide 1). Imagine the price tag if Valley Water were to plan for the Design Drought. Valley Water should not concern itself with the following statement in the WSMP – "If SFPUC supplies available to its wholesale customers are cut back significantly, the retailers with SFPUC contracts may request increased treated water from Valley Water and/or increase groundwater pumping, which will have implications for Valley Water's water supply strategy." At current demand, the SFPUC could manage a repeat of the drought of record (1987- 92), with the Bay Delta Plan in place, without requiring any rationing nor developing any new alternative water supplies.

The statements in the WSMP are hypothetical but reflect what would happen if SFPUC supplies are reduced. We will continue to work with SFPUC and BAWSCA to ensure there will be sufficient water for residents and businesses in our county.

- TRT takes issue with Valley Water's description of the Healthy Rivers and Landscapes Program, and respectfully requests that you remove the language in the following sentence that attempts to legitimize the HRLP: "The water supply needs assessment incorporated estimates for potential impacts of the Healthy Rivers and Landscapes Program – a comprehensive, multi-year solution to help meet requirements to protect beneficial uses in the Sacramento and San Joaquin watersheds..." (p. 32) The Healthy Rivers and Landscapes Program is far from comprehensive. Please review TRT's comments on the Tuolumne River Voluntary Agreement (TRVA) and a peer review of the fish models upon which the TRVA is based. The TRVA (Tuolumne River component of the Healthy Rivers and Landscapes Program) focuses predominantly on habitat restoration, primarily in-river gravel augmentation for spawning. Spawning habitat is not a limiting factor on the Tuolumne. The limiting factors are rearing habitat (activated floodplains) and sufficient out-migration flows for juvenile fish. Please see TRT's OpEd and USFWS' draft Limiting Factor Analyses



The language describing Healthy Rivers and Landscapes Program is removed. A link to the Healthy Rivers and Landscapes Program, <https://resources.ca.gov/Initiatives/Voluntary-Agreements-Page>, is provided for readers who may want to understand more about this program.

- Valley Water’s “Lower Cost Strategy” assumes an investment of \$4.6 billion. Interestingly, the SFPUC’s Water Supply Improvement Program (WSIP), adopted in 2008, had a similar price tag of \$4.8 billion (plus debt service). Valley Water should learn from the SFPUC’s experience. At the time the WSIP was adopted, the SFPUC projected Regional Water System (RWS) demand would reach 285 mgd by 2018. To avoid legal challenges, the SFPUC agreed to cap water sales at 265 mgd until at least 2018, and make up any shortfall through water conservation, recycled water and groundwater use. Actual demand in 2018 was 196 mgd – 31% lower than the original forecast. Demand has remained under 200 mgd for the past decade. Several factors played a role in reducing demand, but price was a major driver. The cost of SFPUC water tripled between 2008 and 2018, sending a strong price signal to consumers to use water more efficiently. Today the cost of SFPUC water is four times what it was in 2008, and water rates are projected to continue increasing significantly. The SFPUC is likely in the midst of a financial death spiral. As water sales decrease, rates must increase to cover fixed costs, driving down demand even further, and the cycle continues. See my OpEd [here](#). Valley Water should also consult with the San Diego County Water Authority to learn from their experiences. As with the SFPUC, the escalating cost of water has driven down demand significantly. Valley Water might consider increasing water rates in advance of future investments to help reduce debt-financing while also observing ratepayer feedback on how price increases impact demand. This could help avoid unnecessary investments in alternative water supplies.

Prior to beginning the WSMP process, Valley Water performed benchmarking with other agencies including SFPUC and San Diego County Water Authority and regularly coordinates with our peer agencies to share lessons learned. Valley Water has annual CIP and rate setting processes to decide on water rate and debt-financing. The WSMP’s adaptive management framework will also provide information on project progress and real-world conditions to minimize the risk of over-investment.

- Plan Bay Area’s population and jobs growth projections are controversial and unlikely to materialize. In 2022, BAWSCA produced a water demand study that included a sensitivity analysis using California Department of Finance (CADOFF) projections. The study found that using the CADOFF projections resulted in no overall increase in demand. Please see Attachment A. Valley Water’s WSMP 2050 should include a similar sensitivity analysis using CADOFF population and jobs growth projections.

In developing Valley Water's demand model, we did an analysis comparing ABAG and CADOF data, and the conclusion is that their differences in household and population projections are no more than 2%. The analysis was discussed in Appendix C – Demand Model Development.

- Partnering with a Central Valley Irrigation District on agricultural water delivery efficiency and/or groundwater recharge would be much cheaper than developing alternative water supplies in Santa Clara County.

Agricultural water use accounts for around 8% of total water use in the county. A recent study by Valley Water found that agricultural users in our county are very efficient, therefore agricultural water delivery efficiency will not address the magnitude of future shortages. Groundwater recharge in the county is already near maximum capacity, and Valley Water is actively looking for groundwater banking opportunities outside the county. More information about the Agriculture Water Use Baseline Study can be found here:

<https://scvwd.legistar.com/LegislationDetail.aspx?ID=5943317&GUID=3DAE20B9-4E42-4A6E-8231-D464CD5E5523>