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PUBLIC COMMENT ON VALLEY WATER'S 2050 WATER SUPPLY MASTER PLAN

Submitted by Harris Siddiqui, PE

Dear Valley Water Board of Directors and Staff,

As a Valley Water water customer, I want to begin by acknowledging the extraordinary scope and ambition of Valley Water's 2050 Water Supply Master Plan (WSMP 2050). The rigorous evaluation of future scenarios, coupled with a robust portfolio of project options, speaks to Valley Water's commitment to resilience in the face of climate uncertainty, drought volatility and growing regional demands. This, combined with Valley Water's pledge to sustain full service in normal years and 80% during droughts, underscores the bold and forward-thinking direction for the region.

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.

THE COST OF IGNORING WHAT IS ALREADY OURS

Approximately 10,500 acre-feet of treated water, equivalent to a mid-sized supply project, is lost annually due to water pipeline leaks. These losses, referred to by the American Water Works Association (AWWA) as "real water loss," are the adjusted loss after accounting for apparent losses such as meter inaccuracies and unauthorized consumption, representing the actual physical leakage from the distribution systems. Although real water loss occurs within retailer-owned systems, the water itself is purchased, imported or treated by Valley Water, sold to its retailers and ultimately paid for by ratepayers.

The financial implications of these losses are staggering. Retailer real water loss today equates to approximately $30 million in treated water annually. Projected forward, those losses could approach $1 billion by 2050, without accounting for the hidden costs of treating, pumping and distributing water that never reaches a customer. Over the lifespan of this plan, energy wasted on lost water may exceed 400 million kWh, with more than 150,000 metric tons of unnecessary carbon emissions released into the atmosphere.

Meanwhile, the WSMP 2050 leans heavily on imported water projects like the Delta Conveyance and the Pacheco Reservoir Expansion, each with price tags in the hundreds of millions to billions, long development timelines, environmental complications and uncertain public support. Compounding these concerns is the uncertainty around imported water treatment and supply. 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 portfolios 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.

WATER LOSS RECOVERY- THE OVERLOOKED SOLUTION

Water loss recovery offers a strategic edge that most supply-side options lack. Unlike new infrastructure projects, it requires no new water rights, complex permitting or institutional coordination. It can deliver measurable results in 2–3 years and directly supports system resilience against drought, seismic events and climate disruptions. Most critically, the costs fall to the retailers, who benefit from operational savings and improved system efficiency.

It may be easy to dismiss water loss as a retailer issue simply because retailers own the pipes, but what is being lost is Valley Water's water, sourced, treated or imported at considerable expense. Every gallon that leaks from aging infrastructure is not just a local problem, it is a systemwide failure that drains resources, skews planning and unfairly burdens ratepayers.

This has cascading consequences:

- Retailers face escalating maintenance costs and lost revenue.
- Valley Water is forced to plan for inflated demand that does not exist at the customer tap.
- Ratepayers pay for water they never receive and for costly projects to "replace" that lost supply.
- The public is asked to conserve, while the system itself continues leaking year after year.

Water loss recovery, by contrast, offers:

- Implementation in under 36 months.
- Immediate return on investment.
- Lower overall system demand.
- Reduced strain on future rate increases.
- Improved ratepayer equity; ratepayers should not be billed for what they never get.
- Enhanced system resilience during drought and emergencies.

In every meaningful category (financial, operational, political, environmental), this approach outperforms the next-best new supply project. Perhaps more importantly, it increases the effectiveness of every other investment Valley Water makes by ensuring the system delivers what it produces.

A STRAIGHTFORWARD PATH FORWARD

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.

THE COMPOUNDING VALUE PROPOSITION

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.

THE TIME TO LEAD IS NOW

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.

Sincerely,

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