

From: Dave Clark [REDACTED]
Sent: Tuesday, February 22, 2022 1:23 PM
To: General Plan <generalplan@cityofsanmateo.org>
Subject: Re: (2) City of SM GPU 2/17 meeting : On the topic of water (\$5.4 utilities)

Unclear if there is a place for citizen comments, I don't really have anything for the three minute yellow card comments section. But I have added to my calendar.

I think that water seminars that I sent over would be good to explore. It's possible that my concerns are off target, but good to talk with someone like Felicia Marcus as a sounding board.

~ Dave

The goal of this meeting is to solicit GPS feedback on the preferred land use and circulation scenario. The GPS will review the land use alternatives by study area and mix and match components of each alternative to describe a preferred land use scenario. The General Plan team will ask the GPS to identify the elements of each circulation alternative they would like included in the preferred circulation scenario. There will be time for public comment.

From: General Plan <generalplan@cityofsanmateo.org>
Subject: RE: (2) City of SM GPU 2/17 meeting : On the topic of water (\$5.4 utilities)

Good morning Mr. Clark,

Thank you for providing this comment. We will share this with our project team to consider further.

We hope you can join us at our upcoming General Plan Subcommittee meeting, scheduled for March 3, 2022. Please visit the Strive San Mateo website [here](#) for more information.

Thanks,
General Plan Team

From: Dave Clark [REDACTED]
Sent: Monday, February 21, 2022 7:07 PM

To: General Plan <generalplan@cityofsanmateo.org>

Cc: Sustainability & Infrastructure Commission <SandlCommission@cityofsanmateo.org>

Subject: (2) City of SM GPU 2/17 meeting : On the topic of water (§5.4 utilities)

<resending without attachment>

Reference §5.4 utilities // GPU_Alternatives_Evaluation_PRD_1-14-22.pdf

Thanks to all for the long hours and hard work. I am impressed and grateful for the thought quality, expertise and planning that has gone into the GPU.

I am concerned that we may have misjudged the capacity of the peninsula water system. The “three alternatives” are contingent on Cal Water magically manifesting more water. What I understood from the meeting is that CaWa can’t guarantee that we will have adequate water, but they seem to always find a way. Without sufficient water the city will not function. We have to prepare for the worst and hope that in 20 years the next generation is pleasantly surprised at the results of our conservative rationale.

Water Infrastructure Management

The City of San Mateo, unlike our neighbors, also has an unusual vendor vendor relationship with California Water. CaWa will always put their profits before quality; that’s their charter. This contract (1915?) with the city of san mateo is a one of a kind agreement on the peninsula and limits the recourse and duties of the city. In the previous drought a number of us tried to get more information on that agreement. I think that Brad Underwood made progress on this but not sure what the conclusion was. Understanding this agreement is really important; especially service level agreements and the ability to move out of the contract if CaWa does not perform. Tighter vendor management may be in order.

Prolonged drought

The assumption of an adequate water supply needs to be scrutinized within the context of a prolonged drought. Duration of “dry periods” should be extended from several years to a decade to align with the realities of terrestrial geological time frames. Any plan for population growth should be predicated on significant reduction of city-wide water consumption. We should be prepared to operate at some reduced capacity for as long as a decade. What would a reduction of 50% look like?

CaWa uses SFPUC’s Urban Water management Plan (UWMP) for Dry Year Water Supply Planning which allows 90% reduction in the first year of a drought and 80% for following years. Per the below link (San Mateo Corridor Plan EIR) CaWa had promised to study, make recommendations and implement. CaWa has no additional sources of water, it’s a matter of coming to a pricing agreement with SFPUC. It assumes that SFPUC has “extra” water.

Point one

I suggest that GPU scrutinize the work done by CaWa since the date of this EIR (link below)

What have they done to date? We must obtain commitments for tangible future deliverables. Are we good for 2000 acre feet in 2030 with no sierra snowpack and with a growing population? Really?

Future Supply Plans and Sources

Cal Water is investigating development of a local water supply to reduce their reliance on SFPUC supplies and to supplement supply for redevelopment projects. Moreover, developing a local supply will cost much less than paying to develop additional imported supplies (Cal Water, 2003a).

Cal Water intends to develop sufficient local sources to generate an amount of water equal to 10 percent of the total system demand, which would amount to approximately 1,900 AFY. To this purpose Cal Water has budgeted the drilling of a test well in the Mid-Peninsula District service area. The assessment of the planned test well will take nearly one year to complete. If a sufficient groundwater supply is detected, then it would take another year to drill, develop and equip the well, with an additional year required for constructing any necessary water treatment facilities. In total, an additional water supply could be provided within two to three years (Cal Water, 2004).

Point two

Table 18 (pg 85) references ABAG 2019 /pre-drought/ projections.

2018 was a year of 100% snowpack. Has ABAG refined these numbers to reflect the new reality? Are there other assessments that could be considered? (page 85) Can we have details on the water conservation savings?

year or 94.5 gallons per day per capita for San Mateo. Note that this demand per capita figure does not account for future water conservation and efficiency improvements and is therefore likely an overestimate. Estimated water conservation savings are added in Table 19. The increased demand due to the alternative growths was added to the baseline 2020 demand value of 14,563 acre-feet (ac-ft).

Water storage

Unlike Santa Clara Valley Water (and more akin to SF Water) the peninsula does not have deep geologic strata to store the water. Santa Clara Valley Water operates about ten Dams and Reservoirs (<https://www.valleywater.org/your-water/local-dams-and-reservoirs>) which drain into a U shaped geological formation that holds about 24 months of water. San Mateo County relies on Crystal Springs.

Water distribution

In addition to water supply, San Mateo has a water distribution system that is 75 years old. The water main on our street has broken four times in the past decade and we just spent a harrowing two weeks

with CaWa coaxing them to please do their job. The GPU should address the necessary remediation within the next two decades.

Infrastructure management and monitoring

The way we buy, manage, treat, distribute, measure, and account for water must be re-examined. As an example, Branch line monitoring helps to pinpoint and reduce leakage and allows additional real-time quality of water measurements. This is the age of the internet of water! (<https://internetofwater.org>) Let's deploy a modern water management system that addresses the needs of those living in San Mateo in the future. I want to look at my iphone to determine how much hot water our kids used last month!

CaWa should be investigating and adopting solutions like "Point of Use Reclamation" for new developments (per SFPUC Paula Kehoe) <https://americanwatersummit.com/speakers/paula-kehoe/> And guide us past solutions like Purple Pipe which don't suit our needs. Let's see the plan, and the promise of what we can expect for all the water dollars that are paid to our vendor, California Water.

We need to use less *100 gallons per capita per day*

Decades ago I listened to a speech by [Helen Caldicott](#), who summed up the issues around pollution, consumption, and waste: "you Americans, use too much!". That has always stuck with me. The true solution for water usage here is that the residents of San Mateo will have to use less. This means rethinking urban landscaping, and moving towards a culture of resource conservation. Our local governments must lead the way.

Again – I extend my deep appreciate for the efforts made on the GPU. I only wish that you would select acronyms that can be more easily pronounced ;-> GaPu ?

Dave Clark



REFERENCE - San Mateo Corridor Plan EIR (I will assume that this document is germane)
(excerpted)

[https://www.cityofsanmateo.org/DocumentCenter/View/3940/48-Utilities#:~:text=Under%20normal%20conditions%2C%20the%20pressure,\(Cal%20Water%2C%202003b\)](https://www.cityofsanmateo.org/DocumentCenter/View/3940/48-Utilities#:~:text=Under%20normal%20conditions%2C%20the%20pressure,(Cal%20Water%2C%202003b))

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4.8 UTILITIES

California Water Service Company (Cal Water)

The project area is within the City of San Mateo, which receives water service from the California Water Service Company (Cal Water). The City is within Cal Water's Mid-Peninsula District, which serves more than 120,000 people in the cities of San Mateo and San Carlos, including over 31,000 residential and nearly 4,000 commercial connections. Within the Cal Water service area, single-family and multi-family residences account for 87.8 percent and 1.6 percent of water connections, respectively, and commercial connections total 9.3 percent. Industrial, government, and construction uses are small, at 1.3 percent (Cal Water, 2003b).

The Cal Water system comprises 41 storage tanks with a combined storage capacity of up to 21.2 million gallons of water and over 358 miles of mains for water delivery. Most of the City's existing water system was installed in the 1950s and 1960s, while portions of the Hillsdale Boulevard system were replaced in the 1970s. Under normal conditions, the pressure of the system is 55 pounds per square inch (psi). Presently, the City's water supply is considered sufficient to meet the current demand, which averages 16.9 million gallons of water per day (Cal Water, 2003b).

San Francisco Public Utilities Commission Agreement

Cal Water's Mid-Peninsula District is 100 percent dependent on imported surface water purchased from the San Francisco Public Utilities Commission (SFPUC) under a 25-year contract (Cal Water, 2003a). SFPUC receives its water from the Hetch-Hetchy system, the Tuolumne Basin, and various local sources, and serves the City of San Mateo through connections in the northwest region of the City.

Cal Water's contract with the SFPUC accounts for Cal Water's purchases by its three peninsula districts: the Bear Gulch District, Mid-Peninsula District and South San Francisco District. The contract with SFPUC allows Cal Water to purchase up to 47,400 acre-feet (AF) of water per year for all three peninsula districts. This amount was set based on the SFPUC's locally generated supply, since the Raker Act, which authorized the construction of the Hetch-Hetchy Project, excludes investor-owned utilities like Cal Water from purchasing water produced by the Hetch-Hetchy Project. Based on current demand conditions, the five-year average purchased water demand is 39,142 AF, which indicates some water remains available within the original contractual allocation (Cal Water, 2003a).

The contract with the SFPUC was amended in 1984 with the adoption of the Supplemental Agreement and Master Sales Contract. This agreement called for the development of a Supply Assurance Allocation (SAA) for all SFPUC suburban customers. The SAA allocates to these customers the available supply of 206,106 acre-feet per year (AFY) as a maximum annual average metered supply. This allocation was reached through negotiation in the early 1990s between the SFPUC and the Bay Area Water Users Association (BAWUA), an association of the suburban customers of the SFPUC. Cal Water's SAA for its collective systems is 39,642 AFY.

Future Supply Plans and Sources

Cal Water is investigating development of a local water supply to reduce their reliance on SFPUC supplies and to supplement supply for redevelopment projects. Moreover, developing a local supply will cost much less than paying to develop additional imported supplies (Cal Water, 2003a).

Cal Water intends to develop sufficient local sources to generate an amount of water equal to 10 percent of the total system demand, which would amount to approximately 1,900 AFY. To this purpose Cal Water has

budgeted the drilling of a test well in the Mid-Peninsula District service area. The assessment of the planned test well will take nearly one year to complete. If a sufficient groundwater supply is detected, then it would take another year to drill, develop and equip the well, with an additional year required for constructing any necessary water treatment facilities. In total, an additional water supply could be provided within two to three years (Cal Water, 2004).

Water Planning

The following water supply data are based upon a Water Supply Assessment prepared by Cal Water and subsequent communications with Cal Water. The City of San Mateo requested that Cal Water prepare a Water Supply Assessment in accordance with Senate Bill 610 (SB 610). SB 610 amended existing California land use and water supply law by requiring that water retail providers like Cal Water demonstrate that sufficient and reliable supplies are available to serve large-scale developments prior to completion of the environmental review for such projects. Specifically, SB 610 requires that a Water Supply Assessment include an inventory of the water provider's total projected supplies and address whether those supplies will be available during normal, single-dry, and multiple-dry years during a 20-year projection, and also evaluate whether that projected available water would satisfy the demand of the proposed project; given present and planned future uses. Therefore, the Water Supply Assessment projects the available water supply through 2023, although other environmental impacts in this EIR are considered through 2020. The Water Supply Assessment prepared by Cal Water in accordance with SB 610 is provided in Appendix E.¹

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