

Valley of the Moon Water District's Response to the Grand Jury's Recommendation No. 5  
Adopted by the Board of Directors' Resolution 190901 on September 12, 2019

September 12, 2019

Hand Delivery

Honorable Gary Nadler, Presiding Superior Court Judge  
Hall of Justice  
600 Administration Drive  
Santa Rosa, CA 95403

READ AND CONSIDERED  
DATE 9/13/19 BY M

Re: Response of Valley of the Moon Water District to  
Sonoma County Civil Grand Jury Recommendation 5

Judge Nadler:

**Summary of Statement.** The Valley of the Moon Water District (VOM) has approximately 27,000 residents and 7200 service connections. VOM and The City of Sonoma are located at the end of the Sonoma aqueduct and are therefore particularly at risk of losing Sonoma Water service in the event of a major earthquake or fire emergency damaging that facility.

Because of this risk of aqueduct failure or fire, VOM has had an independent emergency water backup plan authorized by the State Water Resources Control Board in place with the Sonoma Development Center since 2002, the only significant or large independent source of water and treated water in the Valley.

VOM was in the process of further improving its emergency readiness over the last year when the State Department of General Services communicated to VOM in May that it might have to close SDC's water plant. The reason given at that time was the difficulty of hiring a new senior operator required to manage the plant to meet State regulatory requirements.

Closing the plant would substantially degrade VOM's readiness. It would terminate that independent source of treated water and limit the ability of VOM, in the near term, to even serve drinking water after one day if the aqueduct is out of service.

It is important to note that at no time prior to May 2019, during the entire process since 2015 to take SDC down to a "warm shutdown" and then develop a three year future plan for the property, was VOM given any notice the plant even could or would be closed. Even the then chief plant operator had no notice of that possibility until about the time VOM learned of it. VOM was informed that was part of his decision to find a more stable position.

If the shutdown had been a possible part of the plan, with sufficient notice, VOM would have had the time and opportunity to add its own municipal wells to have available the minimum gallons per minute necessary to pressurize its system and at least provide drinking water after the first day of aqueduct failure.

Since the General Services made known the potential of closing the plant in May, VOM did determine and discuss several limited steps that could be taken to maintain the SDC water plant on a *standby* basis for the time necessary to bring its own wells on line. This included the possibility of expanding an existing agreement to use VOM staff at the plant. The standby steps suggested would keep the plant in full compliance with all water quality requirements. The plant would then be available for *only* aqueduct failures, which is even more limited than required by the original State Board authorization to VOM. This would not interfere with Sonoma Water's regular service to SDC.

General Services on its own raised the possibility that VOM manage the plant and actively serve SDC. This raised broader regulatory and planning issues that VOM was and is willing to explore, but the State's own September 11, 2019 deadline for a plan didn't leave time to resolve. It also would have displaced Sonoma Water who is now serving SDC during the "warm shutdown", an issue VOM had tried to avoid

But either plan would cost money. VOM suggests the State's lack of any adequate notice to it, i.e., the two or three years required to permit VOM to cover the emergency water needs of 27,000 residents, is sufficient reason for the State to carry that cost burden or to help VOM speed development of its own wells.

Unfortunately, as of this drafting late in the afternoon of September 12<sup>th</sup>, General Services has delayed a decision past the State regulators' September 11<sup>th</sup> deadline and does not appear to want to spend the money or continue the liability of maintaining the plant, even though VOM's residents will be without water after one day if the aqueduct fails.

**History.** VOM is an original member (Contractor) of the Sonoma Water (then SCWA) contract in 1961 to provide Russian River water to the Sonoma Valley. The aqueduct was completed in 1963. The contract has been amended several times, but over about the last 20 years, the pertinent provisions have remained the same.

VOM is entitled to a maximum of 3200 acre feet a year (AFY).

Over the years VOM had developed some ground water wells producing 500 (AFY), but relied on the aqueduct for about 80 percent of its water. In 2002, VOM's Directors reviewed local hazard mitigation analyses and plans and determined the need for an independent local source of backup water in the event the aqueduct was disrupted. The Sonoma Development Center has the only large independent local source of water and treated water in the Valley.

The Sonoma Development Center (SDC) is owned by the State and was then managed by the California Department of Developmental Services (DDS). SDC is bracketed by VOM's service territory, and VOM has a service main through it connecting VOM's two territories. SDC has developed and maintained two lakes, three dams and a surface water treatment plant supplying all the water used at SDC for all residents, staff and other purposes.

On July 3, 2002, the Chief of the Petitions and Transfers Unit of the State Water Resources Control Board (SWRCB) issued a letter ruling authorizing the construction of an emergency inter-tie between SDC and VOM.

“The inter-tie would allow either agency to supply water to the other in cases of emergencies. The State of California Sonoma Development Center has two water rights licenses (License 3082 and License 2451).

The proposed project does not require the filing of a petition for change nor will the project affect water rights held by the State of California Sonoma Development Center. A new water right is not required for the transfer of water occurring in the case of a fire emergency, or a facility failure.”

The agreement between DDS and VOM for the SDC inter-tie was executed on December 2, 2002, and the agreement has been regularly renewed and is currently in force. VOM and DDS have in place a direct inter-tie between the two systems with a meter to measure any water passed between them, and from time to time it has been used.

Under a separate agreement with DDS, VOM also can and has provided technical assistance to SDC’s water plant staff.

The existence of this independent backup source has now been relied upon for the health and safety of VOM’s residents for 17 years.

**Today.** VOM still relies on the aqueduct for most of the 2400 AFY of water it provides annually, with only about 500 AFY coming from local wells.

**With respect to Grand Jury Recommendation 5 specifically:** VOM currently has about 80% of its 7200 meters digitized and can tell precisely who is using water and how much. In this fiscal year almost all meters will be digitized. VOM also has separate zones and, as part of the below fire safety program, will by December have the ability to move water between the zones and up gradient to where it’s needed. VOM can isolate water by zone, but does not have automatic shutoffs within the zones. VOM does have an automatic earthquake shutoff on one of its tanks that has to be manually reopened. The remote shutoff equipment at another site was damaged by the rains and needs to be rebuilt.

**Aqueduct loss of adequate pressure in 2017.** During the fire of 2017 the aqueduct lost adequate pressure to serve VOM’s distribution system and fill its tanks. VOM’s staff had to pump water directly from the aqueduct in two locations to fill its tanks. Additionally, SDC had its own fire issues and did not have water to spare, making the aqueduct water and VOM well water even more important.

As a result of lessons learned during the fire and loss of adequate aqueduct pressure to fill the tanks, in 2018-2019 VOM had begun a program adding permanent generators with automatic transfer switches to wells and most booster stations, and adding solar with batteries to SCADA

equipped with radio transmission capability so that staff does not have to risk being in fire areas to obtain necessary system readings. This project was just completed the end of August, providing alternative power in a PGE outage or fire for all buildings, pumps and monitoring systems.

In late Spring VOM had also begun the process for test wells on two sites it owns next to pipes and storage to add more local production. And, VOM has been approached by private interests to see if it would purchase surplus water.

All of these improvements take time, especially developing new municipal wells or purchasing surplus water. With SDC's backup agreement and operating water plant VOM had the safety backup of a large independent water source with treated water while it increased its internal capacity to emergency standards over the next few years.

**Why develop backup local water?** In addition to the lessons of 2017 and the VOM Board's hazard mitigation concerns, the Sonoma Water Contract has a specific provision for a "Local Production Capacity Goal" intended to:

"mitigate against...earthquakes...temporary impairments...it is highly desirable that each Water Contractor achieve and maintain local water production capacity capable of satisfying approximately forty percent (40%) of the Water Contractor's average day of the maximum month demand."

However, prior to 2019, Sonoma Water did not encourage adding more wells, and with SDC as a backup, VOM's Board found replacing other very old mains a more immediate need.

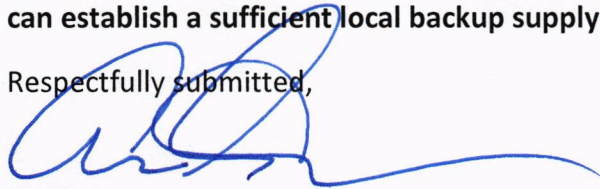
How much local water does VOM need to meet this goal? As part of the Restructured Agreement of 2011 Sonoma Water's formula, as processed by our engineering firm, determined in 2015 that the District's *minimum* human health, sanitation, and fire flow needs are 1,716 AFY, while the reasonable regular use should be about 2908 AFY. But, given the real progress made by VOM on conservation during the drought, VOM believes the updated number *minimum* need level is 1500 AFY and the regular use need is respectively lower too.

When the State decided to close SDC the Closure Plan established a three year planning cycle for the future use of the property. The site would be essentially unoccupied during that time, requiring a much smaller amount of annual water. GS did not announce or include in the planning process that it might close the plant until a couple of months ago stating it had difficulty finding a new chief operator.

VOM then began discussions about supplying operators to keep the backup opportunity active. The reasons for closure now being discussed are reducing GS liability and costs due to the small amount of water needed. But, these were not weighed through the planning process against the lack of time given to VOM to develop a backup supply.

**If the water plant cannot be maintained on a standby emergency basis over the next three years, the result of closing the plant will place this District on an emergency footing, and leave about 27,000 residents without drinking water after one day if the aqueduct fails before VOM can establish a sufficient local backup supply.**

Respectfully submitted,

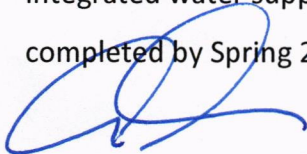


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**Post Script:** Please note that, while recognizing its position at the end of the aqueduct makes coordinated assistance difficult except with the City of Sonoma, VOM does support the Regional Reliability Study to identify opportunities to enhance coordination and partnerships between the NMWD, Agency and the eight other water contractors for improved regional integrated water supply emergency planning. VOM anticipates that this Study will be completed by Spring 2020.



Alan Gardner, General Manager  
Valley of the Moon Water District