

Emergency Water Shortages in Sonoma Valley

The Situation Has Worsened

SUMMARY

A year ago, the Sonoma County Civil Grand Jury investigated how an earthquake could impact water supplies in Sonoma County, and made six recommendations to reduce risks for residents. In responding to those recommendations, two Sonoma Valley water agencies reported that their customers are potentially affected by recent changes at the Sonoma Developmental Center. The Valley of the Moon Water District said its customers are at a greater risk in an emergency now than a year ago. The City of Sonoma said its plan to increase water supplies during shortages has been blocked. The 2019-2020 Grand Jury decided to investigate these concerns and concluded that two separate issues were involved: water for emergencies is considered in this report, and the need for a regional approach to water concerns is studied in a companion report.

The Valley of the Moon Water District reported that the shutdown of the water treatment plant at the Sonoma Developmental Center has had negative consequences, reducing emergency preparedness and increasing risks for its customers. The 2019-2020 Grand Jury's investigation confirms that those concerns are valid. The Valley of the Moon Water District is notably impacted because it essentially surrounds the Sonoma Developmental Center site and may eventually become the area's water supplier. The Grand Jury recognizes that, while the City of Sonoma emergency water plans were not immediately affected by the Sonoma Developmental Center shutdown, it would be prudent to continue its search for water supply improvements.

Closing the Sonoma Developmental Center water treatment plant may or may not have been a good decision. There were reasons to shut it down, but what was missing was a fuller appreciation of how that would affect emergency preparedness for the Valley of the Moon Water District and throughout Sonoma Valley.

The Valley of the Moon Water District is working on solutions to the consequences from the shutdown. The Grand Jury has explored what further options might be beneficial. Its recommendations include: mutual aid with the Sonoma Developmental Center, water distribution management, reduction of demand during emergencies, emergency water sharing with the City of Sonoma, expansion of groundwater supply, additional water storage, leakage reduction, and conservation, although some of these are long-term projects.

The Valley of the Moon Water District confronts a formidable list of problems and uncertainties that affect its own planning as the County carries out the planning process (the SDC Specific Plan) for the Sonoma Developmental Center site. Please see the companion Grand Jury report *Sonoma Valley Regional Water Resources* for more detail.

BACKGROUND

Communities in Sonoma Valley source their water from surface and groundwater resources throughout the Valley, but these would not be enough to sustain the current population without

importing additional water from the Russian River. During an emergency, these communities may not be able to count on those resources.

Major Water Suppliers in Sonoma Valley

Water resource planning, development, and use take place primarily through four local agencies, all of which interact in one way or another: the City of Sonoma, the Valley of the Moon Water District (VOMWD), Sonoma Developmental Center (SDC) and Sonoma Water. A map of the major water interests in Sonoma Valley appears as Figure 1 in the companion report *Sonoma Valley Regional Water Resources*, along with detailed descriptions of each of them.



Sonoma Water “Eldridge” storage tanks at Sonoma Valley Regional Park

Water for Emergencies

Cities and water districts work constantly to minimize the risk of disruptions to the water supply during emergencies. The 2018-2019 Sonoma County Civil Grand Jury studied how well the water agencies are prepared for a major earthquake. The report of that investigation focused on potential disruptions to the aqueduct system that delivers water from the Russian River. It concluded “Sonoma Water and its water contractors maintain a well-designed system and have made significant progress in mitigating earthquake risks. Ongoing efforts are needed to reduce remaining risks.” Then it issued six recommendations for improvement. One asked water contractors, including the Valley of the Moon Water District and the City of Sonoma, to study how they could make their local systems more adaptable under emergency conditions.

All of the water contractors responded that they have been studying options; some said they were already implementing the Grand Jury recommendations. However, the VOMWD responded that its emergency preparedness plans suffered when the SDC closed its water treatment plant in September 2019. The VOMWD said that the SDC water plant shut-down meant the VOMWD could have as little as a one-day supply of drinking water in the event that an emergency put the aqueduct out of commission.

In 2002 the SDC and the Valley of the Moon Water District agreed to provide mutual aid during emergencies, transferring backup water through a piping connection established for that purpose. When the SDC stopped treating water in 2019, it was no longer able to meet its obligation under the agreement from its own resources or maintain the resiliency that comes from having water from different sources, i.e., surface and groundwater. The loss of this potential emergency back-up supply puts the people served by the VOMWD at greater risk of water disruption than before. Managers at the VOMWD relied on emergency water from the SDC for their contingency plan.

The City of Sonoma also reported potential impact from the decision to close the SDC treatment plant. It had considered a cooperative agreement to supplement its well water supply with surface water sources, such as those at the SDC.

METHODOLOGY

This investigation stems from a report by the 2018-2019 Civil Grand Jury on how an earthquake could affect our water supply. The responses to recommendations made in that report raised concerns about possible consequences of the closure of the SDC water treatment plant with respect to emergency preparedness.

The Grand Jury held interviews with:

- Representatives of Sonoma Water, the Valley of the Moon Water District, and the City of Sonoma.
- Representatives of Permit Sonoma, fire agencies, and the California Department of General Services.

The Grand Jury reviewed and evaluated a wide range of sources:

- 2018-2019 Civil Grand Jury report *Will There be Water After an Earthquake?* and responses thereto.
- A variety of maps, studies, contracts and planning documents relating to the water resources of the Sonoma Valley.
- Technical documents dealing with water sourcing, storage, distribution and use under normal conditions and in hypothetical and real emergencies.
- Reporting in the local media, including *The Press Democrat* and *The Sonoma Index-Tribune*.
- The Grand Jury toured the Sonoma Developmental Center site, including the water treatment plant, pumping stations, lakes, and storage tanks.

DISCUSSION

When the Sonoma Developmental Center (SDC) closed, its substantial water demands and independent water supply were interrupted. A new SDC Specific Plan for the site is due to be adopted in December 2021, and it will establish a clearer understanding of how redevelopment is going to affect water resources and their management. Meanwhile, this uncertainty affects the operations and plans of existing water suppliers in Sonoma Valley, most notably the Valley of the Moon Water District (VOMWD).

Emergency Water Issues and Remediation

A water emergency occurs when there is not enough water, at sufficient pressure, to supply necessary uses. While fires and earthquakes are likely causes in our area, there can be others, such as equipment failure or depleted water reserves. Water storage, reserve capacity, and multiple supply sources are ways to increase resilience for emergencies.

Guidance for emergency preparedness comes from the *Restructured Agreement for Water Supply*, which is the current contract between Sonoma Water and its water contractors governing the water delivered through the Sonoma Aqueduct. The Restructured Agreement recognizes that adverse events can occur, including disruption of water flow in the Sonoma Aqueduct, and therefore “it is highly desirable that each Water Contractor achieve and maintain local water production capacity capable of satisfying approximately forty percent of the Water Contractor’s average day of the maximum month demand.” Evaluated against this guideline, the goal for the Valley of the Moon Water District is about 700 gallons per minute (gpm). Until recently, the VOMWD could draw on emergency water sources, including mutual aid through an agreement with the SDC, to meet this standard.

The California Department of General Services (DGS) is now administering the SDC site through a three-year period while the SDC Specific Plan is being developed. SDC operations scaled back as the site’s population shrank; less water was needed and the water treatment plant’s operations were reduced. A facility capable of processing 1.8 million gallons a day was soon cut back to 40,000 gallons a day, which meant neither the plant nor its personnel could be used effectively. Staff members resigned or opted for early retirement. Facilities that process water for human consumption have strict staffing requirements. In August 2019, SDC received a citation, along with fines and mandated corrective action, from the California Water Resources Control Board, Division of Drinking Water, for failure to have a Chief Operator for June and July 2019,



SDC Water Treatment Plant

for failure to have a certified plant operator, and failure to have a certified distribution operator. As DGS was no longer able to retain staffing to meet mandated standards, the decision was made to shut down the water treatment plant. (*see* Appendix).

The Sonoma Developmental Center is now totally dependent on outside agencies for its drinking water supply. From time to time, starting in 1964, Sonoma Water has provided its water, which is how the facility is meeting its needs now. Sonoma Water has become the sole source of water for the SDC. The SDC has no emergency supply for potable water, unless it comes from the VOMWD through a mutual aid agreement.

These emergency supply deficiencies are ongoing until further action is taken. The Grand Jury's investigation therefore considered what options may be available to the VOMWD and to the SDC to mitigate the problem.

Firefighting from Reservoir Storage:

The SDC site has two reservoirs where water from local creeks is stored, used until recently as feedwater for the water treatment plant. In a fire emergency, water from those reservoirs can be used to fight fires by helicopter or through hose lines to fill tanker trucks. The water is not treated and cannot feed the SDC water mains.

Emergency Water Loan:

In 2002, the Sonoma Developmental Center and the Valley of the Moon Water District joined in a mutual aid agreement to loan water to each other as needed during emergencies, up to 500,000 gallons a day. This agreement has been in place for nearly two decades and it remains a valuable feature in the emergency preparedness plans for both the VOMWD and SDC. The fact that the two entities relied on both groundwater and surface water increased resiliency and the probability that water would be available in an emergency. Now that the SDC has no water source of its own and relies solely on Sonoma Water, the intertie with the VOMWD is the only other way to supply its water mains.

With the exception of the SDC, all the major water suppliers in Sonoma Valley participate in the California Master Mutual Aid Agreement, developed under the California Emergency Services Act (1970). The terms and conditions of those contracts are similar to what is found in the agreement between the VOMWD and SDC.

The closing of the water treatment plant at SDC is what triggered the Valley of the Moon Water District's concern. The VOMWD relied on the availability of SDC water during the SDC Specific Plan process and did not anticipate that the shutdown would come so soon; they were therefore unprepared to offset the resulting loss. The SDC water storage tanks hold only a minimum level of water to provide pressure for local use and limited fire flow, but could still respond to a request for an emergency water loan, albeit at a reduced level.

Water Distribution Management:

The water that Sonoma Water is supplying to Sonoma Developmental Center fits conditions of the Restructured Agreement for a sale to an "Other Agency Customer." The agreement describes how the Valley of the Moon Water District could exercise an option to replace Sonoma Water as

the supplier, and retail the water to SDC itself if the VOMWD is ready and willing to do so. While a change in retailer with single-point delivery might be as simple as a change in paperwork, the SDC and the VOMWD could negotiate an agreement for the VOMWD to manage the SDC water distribution system as well. Coordinated management of SDC's potable water storage tanks, together with the VOMWD's own storage capacity and larger water flows, might allow more water to be stored for emergencies, to the potential benefit of both the VOMWD and SDC. A more careful engineering analysis is needed.

Treatment of Surface Water:

Surface water was treated for use on site at SDC until recently. The State's "existing conditions" report says that the SDC property "has both appropriative and riparian water rights [that] provide ample water for any modest future of the property." Options for restoring surface water treatment are discussed in the *Appendix*.



Fern Lake

Demand Reduction during Emergencies:

In an emergency, water suppliers seek to reduce non-essential consumption as rapidly as possible to prevent unnecessary depletion of storage tanks. Successful demand reduction requires advance preparations, such as informing all customers about emergency water supplies and the restrictions on non-essential use that will be required in an emergency. The VOMWD has not communicated this information to its customers since the closure of the SDC water treatment plant.

Water Sharing during Emergencies:

The Valley of the Moon Water District shares similar interests in emergency preparedness with the City of Sonoma. The two service areas are contiguous, with the City limits marking the boundary. There are places where the VOMWD pipes and the City's pipes approach within a few feet of each other, creating a good opportunity to establish a physical connection between them, ready for emergency water transfers. The two entities could easily set up the infrastructure to share water in an emergency; with a standing mutual aid agreement, unnecessary delays can be avoided.

Supplying More Groundwater from Wells:

For the past several years the VOMWD has been investing in a program to develop more well capacity, and it has budgeted to continue those efforts. Municipal wells follow a life-cycle from development through operation and maintenance to eventual retirement. They are subject to many regulatory standards. Well capacity and the number of wells in active service will vary naturally from time to time. The District has reported various difficulties during the past year, ranging from poor water quality to equipment failures, that reduced the amount of water

available from existing wells. The District's well logs for 2019 cover seven wells, two of which were not operational. If run to capacity, the five active wells could deliver about 540 gpm; it is not clear to the Grand Jury how long this output could be sustained.

Well water is the only source of water currently available to the VOMWD other than the Sonoma Aqueduct. Well water helps to meet the demands not only for normal use but also for emergency conditions. The Restructured Agreement suggests maintaining emergency capacity equal to 40% of the average day of the maximum month demand. This is significantly more than utilities typically need for average daily operations, leaving the rest for backup. For the Valley of the Moon Water District, the target is about 700 gpm. With support through the SDC mutual aid agreement, the VOMWD met the recommended emergency capacity. That is no longer the case, now that the SDC water is no longer available.

Well water is also the only source of water currently available to the City of Sonoma other than the Sonoma Aqueduct. Its 2018 Water Master Plan suggests it has enough emergency supply to meet demand for up to two weeks during the loss of the Sonoma Aqueduct. While this analysis suggests the City of Sonoma, unlike the VOMWD, does not currently need SDC water to help in the event of an emergency, the City of Sonoma had begun discussing internally an intertie with the SDC prior to 2017. Such an intertie would have been useful because the SDC has surface water, which would not be disrupted in the event of an earthquake, that might disrupt the City of Sonoma's local well supply as well as possibly damaging the Sonoma Aqueduct. This possibility ended when the SDC water treatment plant closed.

The amount of reserve water storage and well capacity needed for emergencies is a subjective decision about acceptable risk levels, informed by engineering analysis; responding to emergencies requires good general preparation and sound management.

Water Storage Expansion:

The Valley of the Moon Water District has 13 tanks with enough total capacity to store more than 5 million gallons of water; this has not changed in the last decade. A more expansive view might include the 8 million gallons in Sonoma Water's nearby tanks, 10 million gallons in Sonoma Water's tanks located in the City of Sonoma and nearly 2 million gallons of potable water storage at SDC. The VOMWD is considering the addition of up to 500,000 gallons capacity in the Glen Ellen area, primarily to accommodate pressure zones and geographic distribution.

At the Sonoma Developmental Center, water from Sonoma Water flows into a large storage tank which feeds the existing SDC distribution system. With up to 500,000 gallons effective storage in the tank, SDC does in fact have a short-term supply of emergency water for its potable water distribution mains. Water storage tanks provide good support for high-flow events like local fires, but for more sustained emergencies such as an earthquake outage, the system requires water from local wells.

Leakage Reduction and Conservation:

With many miles of pipe and thousands of connections, leakage is an inevitable problem in a water distribution system, a condition that entails economic costs. In an emergency or drought,

leakage also reduces the amount of water available for essential uses. California law requires urban retail water suppliers to submit annual validated water-loss audits to the Department of Water Resources (DWR). The Valley of the Moon Water District and the City of Sonoma reports for 2018, the most recent available, show total system losses for each of about 200 acre-feet per year. That means each supplier is continuously pumping about 125 gallons of water per minute just to feed the leaks. These results do not include leaks inside homes and businesses. The DWR is developing water loss performance standards for urban retail water suppliers, to be released later this year.

Both utilities participate in the Sonoma-Marin Saving Water Partnership and the California Water Efficiency Partnership, and have made important strides in reducing system losses. SDC has not filed leakage audit reports with DWR. This means there are no data available for comparison. The SDC has an aging system with dual piping and more joints, valves, and fittings that can break or leak. The fire department reports pipes bursting during tests. There is good reason to believe that actual system losses are substantial.

CONCLUSIONS:

The need for potable water affects everyone in Sonoma Valley, and becomes critical during emergency conditions arising from fire, earthquake, drought or flood. Responses to emergencies and other needs often depend on close cooperation. As conditions change and we need better ways to manage water, we must look for solutions through coordinated planning and operations. This concern inspired the Grand Jury to conduct an additional investigation and issue a companion report, *Sonoma Valley Regional Water Resources*.

The burden of dealing with reductions in its emergency water resources rests heavily on the Valley of the Moon Water District. The VOMWD is also the presumed water supplier for a new Eldridge (the former SDC) within its service area. This presents the VOMWD with planning challenges that involve costs, uncertain liabilities and investments. It is important that the VOMWD participate in the SDC Specific Plan process, and remain flexible in anticipating the future. It is incumbent on neighboring water entities to cooperate with the VOMWD as it seeks and implements solutions.

While the City of Sonoma's emergency water supply plans were not immediately affected by the SDC closure, it too would benefit from access to the surface water supply at SDC in the event of an emergency that compromises the Sonoma Aqueduct or the City's well supply.

FINDINGS

- F1. The decision of California Department of General Services to close the Sonoma Developmental Center treatment plant has impacted emergency water planning in Sonoma Valley.
- F2. The City of Sonoma, Valley of the Moon Water District, and Sonoma Developmental Center would reduce risk by sharing water during an emergency, using existing and easily implemented interconnections.

- F3. The Valley of the Moon Water District's emergency water supply plan, which relied on wells and the mutual aid agreement with Sonoma Developmental Center, is impaired by the reduction in water available from those sources, increasing risks that Valley of the Moon Water District customers will not have sufficient water in an emergency.
- F4. The Valley of the Moon Water District has failed to inform its customers adequately of elevated risks due to deficient local water supplies and reduced availability under the mutual aid agreement with Sonoma Developmental Center.
- F5. The decision to close the water treatment plant at Sonoma Developmental Center impacted performance under the mutual aid agreement between the Valley of the Moon Water District and Sonoma Developmental Center.
- F6. Water production from the Valley of the Moon Water District's wells is falling behind projections.
- F7. The Department of General Services has chosen to purchase water for the Sonoma Developmental Center site from Sonoma Water, rather than continue treating local water for its supply.
- F8. The planning process currently underway for the SDC Specific Plan will impact all Sonoma Valley water agencies.

RECOMMENDATIONS

The Sonoma County Civil Grand Jury recommends that:

- R1. By December 31, 2020, The Valley of the Moon Water District, City of Sonoma, and Sonoma Developmental Center initiate cooperative planning to reduce risk in emergencies, including promptly implementing ways to share existing water resources. (F2)
- R2. The Valley of the Moon Water District evaluate by November 30, 2020 whether District operation of Sonoma Developmental Center water distribution and storage facilities would offset deficiencies in emergency water for both Valley of the Moon Water District and Sonoma Developmental Center. (F5)
- R3. The Valley of the Moon Water District and the City of Sonoma interconnect their distribution systems, and establish an agreement for sharing water during emergencies by December 31, 2020. (F2)
- R4. Sonoma Water, Valley of the Moon Water District, the City of Sonoma, Permit Sonoma, and the California Department of General Services form an agreement by October 31, 2020, that potable water storage facilities at Sonoma Developmental Center shall remain active and available for shared access during emergencies. (F5)
- R5. The Valley of the Moon Water District accelerate its program for expanding well capacity and water storage by December 31, 2020. (F6)

- R6. The Valley of the Moon Water District establish specific emergency water-use restrictions and communicate them to its customers by September 30, 2020. (F4)
- R7. By September 30, 2020, the Valley of the Moon Water District inform customers annually, or when conditions change, regarding risks and deficiencies in the emergency water supply and any actions taken to mitigate them. (F4)
- R8. Permit Sonoma establish, by September 30, 2020, communication with water system managers for the City of Sonoma, the Valley of the Moon Water District, and Sonoma Developmental Center to inform the SDC Specific Plan process. (F8)

REQUIRED RESPONSES

Pursuant to Penal Code § 933.05, the Grand Jury requires responses as follows:

- The Valley of the Moon Water District (R1, R2, R3, R4, R5, R6, R7)
- City of Sonoma (R1, R3, R4)
- Sonoma Water (R4)
- Permit Sonoma (R4, R8)

The governing bodies indicated above should be aware that the comment or response of the governing body must be conducted subject to the notice, agenda, and open meeting requirements of the Brown Act.

INVITED RESPONSES

The Grand Jury invites the following to respond:

- Director of the California Department of General Services (R1, R4)

BIBLIOGRAPHY

- California Department of Water Resources: *2015 Urban Water Management Plans Guidebook for Urban Water Supplies*
- *California Water Resources Control Board—Citation No 02_18_19c 069, Failure to have a Chief Operator for June & July 2019*
- City of Sonoma documents:
 - *2015 Urban Water Management Plan*
 - *2018 Water Master Plan*
 - *Response to 2018-2019 Sonoma Civil Grand Jury Recommendation 5*
- Sonoma County Grand Jury 2019-2020: *Sonoma Valley Regional Water Resources – Water for a Changing Future*
- Sonoma County Local Agency Formation Commission: *Municipal Service Review and Sphere of Influence Study for the Valley of the Moon Water District, June 2017*
- *Sonoma Valley Groundwater Management Program: 2016 Annual Report*
- Sonoma Developmental Center documents:

- *Department of General Service Budget Change Proposal Fiscal Year 2019-20*
- *Draft Resource Assessment, Prunuske Chatham report for Sonoma County Agriculture Preservation and Open Space District, April 2015*
- *Existing Conditions Assessment, Wallace Roberts & Todd report (WRT), August 2018*
- *Water Treatment Plant – Operations Plan, 2015*
- *Site Transformation Study, The Portrero Group, September 2015*
- *Proposal for the County of Sonoma, Specific Plan & Program EIR for the SDC, Dyett & Bhatia, July 12, 2019*
- *Specific Plan Request for Proposals*
- *Mutual Aid Water Loan Agreement with Valley of the Moon Water District, December 2002*
- **Sonoma Water documents:**
 - *Restructured Agreement for Water Supply, 1985 & 2006*
 - *Technical Memorandum March 2015: Review of Water Resources for Sonoma Developmental Center (Appendix H to Prunuske Chatham report)*
 - *Water Supplies Action Strategies Plan, 2018*
 - *2015 Urban Water Management Plan*
- *State of California Standard Agreement #HD179051, Department of Developmental Services & Valley of the Moon Water District, General Scope to provide services to assist SDC with operation of water treatment plant, January 2, 2018 – November 30, 2020*
- **Valley of the Moon Water District documents:**
 - *Pumping and Storage Reports June 2018 through January 2020*
 - *Response to 2018-2019 Sonoma Civil Grand Jury Recommendation 5*
 - *2015 Urban Water Management Plan*
 - *2019 Water Master Plan*

GLOSSARY

- acre-foot Acre-foot: 325,851 gallons
- DGS California Department of General Services
- DWR California Department of Water Resources
- DDS California Department of Developmental Services
- Eldridge A postal address and census district that includes both public (SDC) and private properties along Arnold Drive
- gpm Gallons Per Minute
- LAFCO Sonoma County Local Agency Formation Commission
- SDC Sonoma Developmental Center
- Sonoma Aqueduct Water from Sonoma Water - the leg of the aqueduct that supplies water to the City of Sonoma and the Valley of the Moon Water District
- Sonoma Valley Geographical area stretching from Kenwood through the City of Sonoma and south to San Pablo Bay

- Specific Plan A detailed plan for implementing or modifying the County’s General Plan for land use, in this report the SDC property
- Sonoma Water Previously called Sonoma County Water Agency
- VOMWD Valley of the Moon Water District
- Warm Shutdown A funded three-year process of shutting down operations on the SDC site, beginning July 2019, during which the California Department of General Services would retain staff for the water treatment plant, maintenance, and operations; and work with state, local, and private partners to meet other requirements including fire prevention and suppression
- WQCB California Water Quality Control Board

APPENDIX

Water Treatment Plant

The definitive public report on facilities at the Sonoma Developmental Center is *Sonoma Developmental Center, Existing Conditions Assessment*, August 2018, prepared by WRT (Wallace, Rodgers and Todd). Chapter 4 and Appendix B, *Existing Conditions Report, Hydrology and Site Infrastructure*, include detailed information about the water treatment plant (WTP). The summary says:

The water treatment plant has been carefully maintained over the years. While industry standard practice would have implemented structural upgrades to the WTP over the years, the SDC has maintained the plant commendably and it is still a functioning system that meets state regulations in treatment, monitoring and operations.

Several months before the plant was shut down in September 2019, the California Department of General Services (DGS) entered into a contract with the Valley of the Moon Water District (VOMWD) and paid for certified VOMWD personnel to gain hands-on experience in the plant’s operation, with the presumed intent that they could provide necessary staffing or backup throughout a warm shutdown. The DGS and the VOMWD cooperated in exploring a way to continue SDC water treatment plant operations, but the operating option was not implemented.

The DGS decision to shut down the water treatment plant was not inevitable. It could have paid more attention to the risk of reducing emergency water supplies and future need for treating surface waters. A staffing problem could have been anticipated and solved. More effort could have been given to a cooperative solution with the VOMWD. The final decision was nonetheless based on allowable managerial considerations.

After the water treatment plant was taken out of service, the Sonoma County Civil Grand Jury conducted a site visit that included observations of the plant. Discussions with operating staff

indicate the plant was in good operating order at the time it was shut down. Our observations confirm that the decommissioned plant was being left clean and carefully mothballed in anticipation of future use.

The Grand Jury has received informed opinions from opposing viewpoints that:

- The water treatment plant was old, falling apart, and forced by its limitations to operate inappropriately. The best thing was to shut it down and never use it again. It should have been taken out of service sooner.

Alternatively:

- The plant has been well maintained, with improvements made from time to time, and it continued to meet operational output requirements. Further improvements should be made, perhaps no more than typical for any facility. But for the DGS's decision, the plant would have remained in service. The plant could be returned to service now or later.

The Grand Jury is unable to make a determination about the suitability of the existing water treatment plant for future operations, based on these informed but conflicting opinions. When it becomes important, a determination should be made by a qualified engineering consultant.