



## MADERA SUBBASIN GROUNDWATER SUSTAINABILITY PLAN (GSP) COMMENT FORM

Please complete the following information to provide comments on the draft Madera Subbasin GSP. Type or print legibly for your comments to be considered.

Please return this form to (hand delivery, mail, or email accepted):

**Stephanie Anagnoson**

Madera County

200 W. Fourth Street

Madera, CA 93637

Email: [MaderaGSPComments@maderacounty.com](mailto:MaderaGSPComments@maderacounty.com)

Date Submitted: November 8, 2019

Submitted By: Madera Valley Water Company by Gregory E. Rodgers General Manager

Address: 18454 Road 26 Madera CA 93638

Phone Number / Email: 559-674-2407 maderavalleywater@onemain.com

APNs: Multiple

Located in Groundwater Sustainability Agency (GSA):

Madera County    MID    City of Madera    MWD    Other \_\_\_\_\_

Affiliation:    Irrigated Ag    Non-Irrigated Ag    Rural Residential

Disadvantaged Community Member    Agency/Government    Other \_\_\_\_\_

November 8, 2019

### Section 1: Comments on issues directly affecting MVWC service area.

1. Madera Valley Water Company (MVWC) is the third largest municipal water supplier in the Madera Basin, providing slightly less water than the City of Chowchilla and about half of the water delivered by the City of Madera. We provide potable water to residents in our service area, all of which is groundwater. However, there is no discussion of MVWC service and operations

anywhere in the text of the GSP (with the exception of brief statement in Chapter 2 that we conduct water quality testing). This omission appears to be because we are not a GSA and are lumped in with the County GSA in the “white areas” of the basin. However, our service population of approximately 8,900 is entirely dependent on our ability to provide drinking water of adequate quantity and quality. Our ability to provide this service is being negatively impacted by hydrogeologic conditions documented in the GSP. It appears likely that MVWC will need to incorporate infrastructure projects in the future to react to the changing hydrogeologic conditions in the Basin, and funding availability for many of these projects is likely to be contingent on the MVWC’s inclusion in the GSA/GPS. Therefore, we request that the MVWC be specifically identified in the early chapter(s) of the GSP, as a distinct entity within the County GSA’s area along with the included agencies. We provide the following summary text for inclusion in the plan.

“Madera Valley Water Company is located in the County of Madera north of the City of Madera and was constructed in 1956. Located north of Avenue 17 between Road 26 and Road 27. It encompasses approximately 1,600 acres. The population served is estimated at 8,900. The majority of the connections are residential. The lot sizes range from ¼ acre to 1 acre. There are approximately 50 commercial properties which consist mainly of small retail stores, restaurants, offices, and several gas stations. The water system has 5 wells ranging in depth of 543 feet to 770 feet and a 1.5-million-gallon elevated water storage tank. Each of the wells has a liquid chlorination unit for emergency chlorination. There are approximately 40 miles of pipeline in the system.”

2. Declining water levels and well yield. It is acknowledged in the GSP that agricultural production is by far the largest user of groundwater in the Basin. In recent years there has been a substantial increase in the amount of groundwater used in the area surrounding the MVWC as agricultural acreage been converted from historical seasonal crops to crops that require more water such as almond and other orchards without the availability of surface water. The planting of new orchards immediately adjacent to and surrounding the MVWC service area for nut farming has accelerated since the passage of SGMA. Our service area is now bounded on three sides by recently installed deep agricultural wells. When these ag well pumps are turned on, MVWCs static water levels decline over 40 feet, and the resulting drawdown when we operate MVWC wells is significantly greater than any recorded drawdown in the MVWC’s history. This results in total dynamic head pumping conditions that do not correspond to the pump design curve, resulting in pumping inefficiency, greater electricity costs, and likely ultimately necessitating the replacement of pumps before their design life has been reached. In September 2019, production in Well 5 decreased from 1,700 gpm to 1,300 gpm overnight when the ag well pumps were turned on. The standing water level dropped 40 feet and the pumping water level dropped 100 feet. Because MVWC serves 8,900 residents has been impacted in the last 3-5 years with unprecedented declines in water levels we believe that at least one SGMA-specific monitoring well should be included in or immediately adjacent to our service area.
3. Subsidence. To the extent that subsidence is discussed in the GSP, it is essentially stated that it is not a significant enough issue that it needs to be specifically addressed. However, subsidence is one of the six undesired results listed in SGMA as requiring actions to prevent undesired results. Since 2013 MVWC has already had to repair three well casing fractures caused by subsidence affecting two of our existing wells at a cost of approximately \$500,000.00. It appears likely that subsidence-related damage to our wells over the course of the SGMA planning horizon

(through 2040) will require engineering projects to repair or replace damaged wells. Chapter 4 of the GSP states that no plan to address subsidence is necessary, and that subsidence of up to 0.25 feet per year does not require mitigation. Subsidence of 0.25 feet/year is equivalent to subsidence of 5 feet through 2040, which is significant. Having already experienced infrastructure issues due to subsidence to date, and anticipating additional engineering projects may be required in response to additional subsidence, MVWC believes that subsidence is an undesired result of increased groundwater usage that needs to be specifically addressed in greater detail in the GSP.

4. Change in Water Quality. Over the more than 60 years that MVWC has provided drinking water to our service area, there has not been an issue with delivered water exceeding either primary or secondary drinking water quality standards until recently. As discussed in comment #2, static and operating water levels elevations have declined substantially in recent years concurrent with increased agricultural pumping due to a lack of availability of surface water for agriculture use. As a result, MVWC now appears to be drawing groundwater from different and/or deeper geologic strata than we were previously. Simultaneous with these new hydrogeologic conditions, for the first time we have recently observed concentrations of iron and manganese (a secondary drinking water standard, affecting taste and odor) in groundwater pumped from MVWC wells. If this water quality issue persists or expands in area/wells, it may ultimately require well head treatment to maintain the delivered water quality that our service area has historically enjoyed. The GSP should address the impacts of the lowering groundwater levels on groundwater quality in greater detail and identify the possible mitigation of groundwater quality issues over the planning horizon of the GSP.
5. MVWC Projects. Although it is stated in the GSP that agricultural pumping is the dominant use of groundwater in the Basin, MVWC understands that we have to do our part to reduce groundwater usage. We have recently successfully received recognition as a disadvantaged community (DAC) from the state, which will allow us to pursue additional funding sources for future projects. We are currently pursuing state funding sources to implement flow meter installation for each connection in our service area. We anticipate that once we establish water use for each residence, we can pursue potential management actions such as conservation programs and tiered rate structures that will result in a decrease in per capita groundwater consumption in our service area. We anticipate that these actions will result in a decrease of at least 30% in our annual groundwater pumping volume. This project should be included in the GSP.
6. MVWC provided more than 30 years of data to the GSA consulting team for use in the GSP development, but we see no evidence in the plan that it was considered or utilized. Will there be an appendix or some acknowledgement that our data was used in the development of the plan?
7. The GSP utilizes estimates for much of the pumping data collection. The GSP should include a policy or at least a discussion of having all non-de minimis wells metered to ensure accuracy of the pumping data and for potential use to generate revenue to pay for recharge projects based on actual use.

**Section 2: Comments on larger policy and management issues that do not directly affect the MVWC service area or operating conditions but may impact the implementation of the GSP for the MVWC and other agencies in the Madera Basin.**

8. The GSP appears to depend on future purchases of surface water to account for much of the water budget deficit, but no details are given on these proposals. As the sub-basins are all interconnected, with no hard boundaries between them groundwater flows freely between sub-basins based on local gradients, pumping centers, etc. It seems that regional cooperation will be necessary to coordinate proposed recharge (and other) projects to optimize the impact of such projects. There is no discussion of such proposed regional cooperation outside of the Madera sub-basin in the plan. The GSP should include a policy or at least a discussion on how basin-wide or multi agency projects would be planned and developed to include all stake holders, including small agencies and DAC's, to ensure that recharge or other mitigation projects are effective and economically feasible.
9. Finally, the Implementation chapter of the GSP is the shortest chapter, and lacks the detail that would comprise a robust GSP. The MVWC recommends that the implementation chapter include more detail on how the GSP would be implemented and include policy statements regarding implementation such as those discussed in these comments.

Respectfully,

Gregory E. Rodgers  
General Manager