

STAFF REPORT

To: Coastside County Water District Board of Directors

From: David Dickson, General Manager

Agenda: September 11, 2018

Report

Date: September 7, 2018

Subject: Comments submitted by CCWD to the Department of Water Resources on the Draft 2018 SGMA (Sustainable Groundwater Management Act) Basin Prioritization

Recommendation:

Information Only.

Background:

As reported by Cathleen Brennan in June 2018, the Department of Water Resources (DWR) has re-prioritized the Half Moon Bay Terrace Basin from very low to high priority in its draft document "2018 SGMA Basin Prioritization Process and Results" issued in May 2018. Under SGMA, agencies responsible for planning and water supply in a basin with a priority of medium or higher must form a Groundwater Sustainability Agency within two years and develop a Groundwater Sustainability Plan (GSP) within five years. Meeting these requirements requires substantial investments of time and money. The Sonoma County Water Agency, for example, has said that its costs for GSP development have been about \$1.7 million per basin. Becoming subject to SGMA requirements is therefore a matter of significant concern for us.

Following release of the reprioritization results, DWR provided a public comment period which closed on August 20, 2018. In the course of developing our comments, we met several times with staff of all the other agencies involved in the Half Moon Bay Terrace Basin, including Montara Water and Sanitary District, the City of Half Moon Bay, and San Mateo County, as well as with DWR staff. The consensus of the agencies is that DWR's identification of this basin as having a groundwater sustainability problem which needs to be managed is a "false positive". We agreed that although we all support the DWR's efforts to protect the state's groundwater resources, we disagree with the DWR's calculations that would change the prioritization of the Half Moon Bay Terrace Basin from very low to high

Studying the details of DWR's prioritization analysis revealed numerous respects in which the statewide datasets they used did not accurately reflect local conditions. Our comment letter, a copy of which is attached, focused on these discrepancies to support the argument that use of accurate local data would result in Half Moon Bay Terrace Basin remaining at low or very low priority. We requested that the DWR

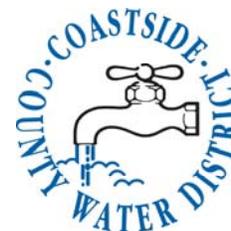
re-run its analysis in consideration of significant changes and corrections described in the letter.

The DWR plans to finalize the basin prioritizations by mid-November 2018.

The County of San Mateo, City of Half Moon Bay, and Montara Water and Sanitary District also submitted public comment.

(See the attached letter - excluding appendices.)

August 20, 2018



Department of Water Resources
Taryn Ravazzini, Deputy Director of Special Initiatives
1416 9th Street
Sacramento, CA 95814

And

California Department of Water Resources
Attn: Trevor Joseph
PO Box 942836
Sacramento, California 94236

Via web form: DRAFT 2018 SGMA Basin Prioritization Public Comments
Via email: sgmps@water.ca.gov and taryn.ravazinni@water.ca.gov

RE: Comments on Half Moon Bay Terrace Basin Prioritization as High under SGMA

[Note: The Appendices in the attached excel document: Coastside County Water District Appendices – SGMA Public Comment Submittal 8.20.2018 .xlsx are integral to this public comment letter.]

Dear Deputy Director Ravazzini and Mr. Joseph:

Thank you for providing the opportunity to comment on the 2018 Basin Prioritization. Coastside County Water District (“Coastside CWD” or “the District”) supports the Department of Water Resources’ (DWR) efforts to protect the state’s groundwater resources for beneficial use by requiring sustainable management of groundwater basins.

Coastside CWD, however, strongly disagrees with the 2018 re-prioritization of the Half Moon Bay Terrace from a Very Low to High Priority basin. We therefore respectfully request that DWR re-run the prioritization analysis for Half Moon Bay Terrace with the following significant changes and corrections, summarized here and further discussed below. Coastside CWD emphasizes that any one of the requested changes would result in assigning the Half Moon Bay Terrace Basin a priority of Very Low or Low:

1. Eliminate Iron and Manganese as indicators of groundwater degradation. Component 7 [CWC Section 10933(b)(7)]

The principal cause of the Half Moon Bay Terrace priority change was the inclusion of naturally occurring groundwater minerals iron and manganese in the 2018 prioritization analysis as indicators of groundwater quality degradation. Far from showing an impact that needs to be addressed by sustainable groundwater management, presence of these minerals in groundwater likely predates any human presence in the Half Moon Bay Terrace area. We believe it would be more appropriate and consistent with the objectives of the Sustainable Groundwater Management Act to omit iron and manganese from the analysis. When DWR does this, Half Moon Bay Terrace Basin will receive zero Priority Points under Component 7 (Documented Impacts). With total groundwater use under 9,500 AF/year, the basin would then be assigned Low Priority under Component 8.c.2.

2. Correct errors in urban groundwater originating from Half Moon Bay Terrace Basin. Component 3 [CWC Section 10933(b)(3)] and Component 6 [CWC Section 10933(b)(6)]

DWR calculated urban groundwater production totals using data reported to the Division of Drinking Water by Coastside CWD and Montara Water and Sanitary District (MWSD). In the case of MWSD, most of the reported groundwater came from a well located outside of the Half Moon Bay Terrace Basin. Previously reported Coastside CWD groundwater data incorrectly classified certain surface water diversions as groundwater, an error we have corrected by submitting revised data. Taken together, these corrections reduce urban and total groundwater use by 229 AF. This change puts Half Moon Bay Terrace Basin total groundwater use under 2,000 AF/year, making the basin Very Low Priority under Sub-component 8.c.1.

3. Adjust agricultural groundwater use based on local data which reflect actual conditions more accurately than the statewide datasets used by DWR. Component 5 [CWC Section 10933(b)(5)]

DWR's estimate of agricultural groundwater use, as further described below, should be corrected to account for the following:

- Identify greenhouse areas served by Coastside CWD's system in the crop maps, as they do not use any groundwater.
- Correct the crop maps to properly reflect areas that are dry-farmed or idle.
- Adjust agricultural groundwater use totals for significant parcels served exclusively (or nearly so) by surface water.

Coastside CWD has identified agricultural groundwater use corrections totaling 1,566 AF/year. This adjustment puts Half Moon Bay Terrace Basin total groundwater use under 2,000 AF/year, making the basin Very Low Priority under Sub-component 8.c.1.

Following release of the 2018 SGMA Basin Reprioritization Process and Results, Coastside CWD has worked closely with staff from San Mateo County, the City of Half Moon Bay, and Montara Water and Sanitary District. Although we collectively decided not to submit a joint comment letter, Coastside CWD has reviewed and supports the comments our fellow utility and planning agencies have submitted.

Coastside CWD would like to extend our thanks to Bill Brewster, Paul Wells, and additional DWR staff for their time in helping us to better understand the prioritization process.

Please find below our detailed comments for many of the basin prioritization components.

Thank you in advance for considering our comments and our request for re-evaluation of the Half Moon Bay Terrace Basin prioritization.

Sincerely,



David R. Dickson
General Manager
Coastside County Water District

Cc: Bill Brewster, Senior Engineering Geologist

SGMA Public Comments by Coastside County Water District - Detail

Component 2: 4 Points - Population Growth 26% [Water Code Section 10933(b)(2)]

The DWR's population growth estimate of 26% is grossly overstated for the Half Moon Bay Terrace Basin. The San Mateo Coastside has been commonly referred to as a "no or low growth" area, and to be ascribed a growth rate outpacing Silicon Valley (Santa Clara Valley) is not conceivable. We request that the DWR adjust their population modeling accordingly:

- The Coastside CWD is subject to the Urban Water Management Act and must submit an Urban Water Management Plan (UWMP) to the DWR every five years. Coastside CWD's service area population for 2010 was estimated at 16,590, and for 2030 it is estimated to be 16,886. This is a 1.8% growth increase for the 20-year period for most of the Basin's population area. The methodology used to compute the population was approved by the DWR for the UWMP 2015. *(See Appendix 2 – 3.4.1 and 3.4.2 of the UWMP 2015.)*
- The entire basin is located within the California Coastal Zone and is covered under the Coastal Act. The Local Coastal Programs and Plans adopted by the City of Half Moon Bay and County (and certified by the Coastal Commissions) include very strict growth policies that serve to significantly limit growth. Refer to Sections 3.4.2 of the UWMP 2015 and the comments submitted by the County of San Mateo and the City of Half Moon Bay for more detail.

Component 3: 4 Points - Public Wells: 13 [Water Code Section 10933 (b)(3)]

The DWR data references 13 Public Water Supply wells in the Half Moon Bay Terrace basin. *(See Appendix 3.)* We request that the DWR consider making the following adjustments to the number of wells:

- The DWR used the wrong coordinates for the Alta Vista Well, which is located outside of the basin boundaries and which is also not an alluvial well. Please refer to the public comments submitted by Montara Water and Sanitary District (MWSD) for more information on the Alta Vista Well including the corrected GPS coordinates. Note that the Alta Vista Well produced over 60% of the water for MWSD or 186 AF in Water Year 2014. The AF attributable to the Alta Vista Well should be adjusted in the calculations for other components (including component 6) that utilize MWSD reported urban water production numbers.
- In addition, two of MWSD's wells, South Airport Well and the Airport Well #3 have not been used since before 2014 and should be removed from the PWS inventory.

- Four of Coastside CWD’s wells (Denniston Wells 2, 3, 4, 5) have not been used since prior to 2014 and should be removed from the PWS inventory.

We would also like to request that the DWR consider applying a possible weighting or threshold to determine if a well should be included in the count, given actual usage or capacity (such as gpm) of the well. Consider that for Water Year 2014, Coastside CWD only drew 8 AF, or less than .5% of its total water production out Denniston Wells 1 and 9, at a maximum rate of 21 gpm out of Well 1 and 18 gpm out of Well 9.

Component 4: 5 Points - Total Wells: 757 [Water Code Section 10933 (b)(4)]

We would like to comment that not all the properties with wells are 100% reliant on groundwater. Based upon the District’s cross connection and backflow protection program records, the Coastside CWD has identified 209 of its residential customers who use Coastside CWD water, but also have a well.

Component 5: 3 Points - Irrigated Acreage: 1,641 Acres [Water Code Section 10933 (b)(5)]

Coastside CWD local data shows that the DWR’s calculation of 1,641 irrigated acres is too high and should be decreased by at least 438 acres that are either idle or dry farmed, with a corresponding 653 AF reduction in applied groundwater to. Note that Coastside CWD’s GIS consultant, California CAD Solutions, overlaid the 2014 crop map onto the parcel map within the basin boundaries. The San Mateo Resource Conservation District (RCD) provided their findings on some of the larger parcels that are either idle or dry farmed (and that were not indicated as such on the 2014 crop map.) Further parcel-by-parcel of water sources and use will result in additional corrections. The acreage and groundwater adjustments identified so far break out as follows:

Crop Type	Crop Acres	Applied AF (using DWR application factors)	Applied AF of Groundwater (using DWR’s 67% allocation of GW/SW)
Miscellaneous Grasses	255	739	496
Misc Grain & Hay	83	59	39
Misc Truck Crops	99	176	118
Total	438	974	653

See Appendix 4 for more detail.

Component 6: 3 Points - [Water Code Section 10933 (b)(6)]

Coastside CWD data indicates that DWR's calculation of 2,100 AF for groundwater use for the basin is overstated, and we request that the DWR recalculate its data in consideration of the following: *(See Appendix 5.)*

Urban Ground Water Use

- Coastside CWD incorrectly reported a surface water diversion (located outside the basin) as groundwater on the PWSE EAR Reports posted with the Division of Drinking Water from 2013-2017. Coastside CWD has since corrected the EAR reporting. The impact is a 43 AF reduction in the reporting of ground water for Water Year 2014. (Coastside CWD had in error, reported 51 AF of groundwater; the correct reporting is 8 AF. *(See Appendix 5A.)*) The District has retroactively revised its reporting to correct this error.
- Montara Water and Sanitary District produced 60% of its water, or 186 AF, from a non-alluvial well that is located outside of the Half Moon Bay Terrace. This 186 AF should be removed from the PWS reported groundwater use in the Half Moon Bay Terrace Basin. *(See Appendix 5B.)*
- DWR used a Gross-GPCD factor of 104.8 to calculate self-served urban water use. Self-served urban water use would include only residential customers; District staff is unaware of any other urban uses, including commercial, outside of PWS boundaries. We therefore request that the DWR utilize the 2014 Water Year (Residential) R-GPCD factor of 65 for the self-served customers.

Agricultural Groundwater Use

- The starting point for the irrigated acreage should be 1,203 crop acres, as discussed in Component 5 above. The corresponding AF applied, or 974, multiplied by the DWR's groundwater factor of 67%, or 653 AF should be deducted from the groundwater total.
- DWR's estimate of agricultural use included greenhouse acreage served primarily or exclusively by the District's system. Coastside CWD supplied 168 AF to these greenhouse customers in 2014. This 168 AF should be removed from the agricultural groundwater use total.
- DWR used a factor of 67% groundwater/33% surface water using a derived average for the entire DAU. The Half Moon Bay Terrace Basin is a 5.85% sliver of the total DAU acreage located along the San Mateo coastline, with a unique geography and micro-climate that varies from the "average" DAU characteristics. (See Appendix 1). We request that the DWR consider the following:
 - Coastside CWD hired its GIS consultant to overlay the 2014 crop map and San Mateo County parcel map over the basin boundary map, and to create a spreadsheet detailing crops and acreage at the parcel level. The San Mateo Resource

Conservation District reviewed this data and provided information on many of the larger agricultural parcels in the basin. Their sample indicates that ground water use by agriculture is likely to be in the range of 10% ground water/90% surface water. (See Appendix 5C.)

- o For the sample of agricultural parcels specifically reviewed by the Resource Conservation District (RCD), the differential between the actual groundwater use indicated by RCD and the 67% generic DAU estimate applied by DWR (and using the DWR application factors by crop type) is 745 AF. This adjustment should be applied to the agricultural groundwater use total.
- o The AF water application factors by crop type calculated by DWR also appear to be high in some cases, and particularly for the pasture and miscellaneous grasses. We are unclear as to what location in the DAU that the DWR pulled CIMIS data. Attached is the CIMIS spatial data specific to Half Moon Bay for WY 2014 and we request that the DWR utilize this local data in their calculations. (Appendix 6.)

Below is a summary of adjustments that should be made to the DWR’s calculation of the Half Moon Bay Terrace calculation of AF of ground water.

HALF MOON BAY TERRACE BASIN - Appendix 5 Summary
 Coastside County Water District
 Proposed Adjustments to DWR Estimates for AF of Ground Water Use -- for Water Year 2014

Description	Category	Crop Acres	AF of Groundwater Use
HALF MOON BAY TERRACE BASIN: DWR CALCULATED AF GROUND WATER USE - 2014 WATER YEAR - DRAFT REPORT	All	1,641	2,100
COASTSIDE COUNTY WATER DISTRICT - PROPOSED ADJUSTMENTS:			
1) Correction of error in Coastside County Water District reporting of ground water use in the Department of Drinking Water PWSE EAR Reporting for Water Year 2014. (Corrected reporting has been submitted to the DDW.)	Urban		(43)
2) Removal of 2014 WY production from the Alta Vista Well (a non-alluvial well that is located outside of the basin.) Montara Water & Sanitary District had included Alta Vista's production in its PWSE EAR data.	Urban		(186)
3) Adjust for double counting of urban water supplied by Coastside County Water District to Agricultural customers. (DWR should remove this number from the Urban calculation, as the use is already counted in the Agricultural calculation given the 2014 crop map land uses.)	Agriculture/Urban		(168)
4) Remove idle or not irrigated crop acres not identified as "idle" on the 2014 crop map (AF Application using DWR crop application rates x - 974 x 67% [DWR's GW 5])	Agriculture	(438)	(653)
5) Adjust parcels identified by Resource Conservation District that primarily use surface water or sources other than ground water (reflects difference between using 67% and actual ground water use)	Agriculture		(745)
Total Adjustments		(438)	(1,795)

Component 7: 1 Point (Overall) - Impacts – Water Quality – 5 points [Water Code Section 10933 (b)(7)(d)(1)]

As described in our summary above, Coastside CWD believes it is inappropriate and inconsistent with the goals of the Sustainable Groundwater Management Act to use naturally occurring levels of iron and manganese as indicators of groundwater quality degradation. We request that consideration of iron and manganese be removed from the prioritization analysis.

Appendices

Coastside County Water District: Public Comment re: Half Moon Bay Terrace Basin Re-Prioritization

Appendix 1 -- San Mateo County – DAU Shape file and Map including Half Moon Bay Terrace Basin

Appendix 2 – Component (2) Population Growth: Coastside County Water District 2015 Urban Water Management Plan, Sections 3.4.1 and 3.4.2

Appendix 3 – Component (3) Public Wells – DWR Supplied Data with Coastside County Water District annotations

Appendix 4 – Component (5) Irrigated Acreage – Adjustments to DWR Acreage, removing idle and dry farmed land

Appendix 5 – Component (6) – Groundwater Reliance

- 5A – Backup showing correction of error in Coastside County Water District’s PWSS EAR Reporting resulting in the reduction of urban use by 43 AF for Water Year 2014.
- 5B – Backup for the Removal of 186 AF from Water Year 2014 Montara Water and Sanitary District’s PWSS Reporting for the Alta Vista Well, a non-alluvial well located outside of the basin
- 5C – Backup showing parcels identified by San Mateo Resource Conservation District, Coastside CWD (and/or other sources) that are idle or dry farmed. Backup also shows ground water vs. surface water use for each parcel.
- 5D - All Detail - review of all parcels by the San Mateo Resource Conservation District and other sources (Only included in excel version provided to Bill Brewster via e-mail.)

Appendix 6 – Cimis Spatial Data for the San Mateo Coast

Also See the attached Excel Spreadsheet for the Appendices: Coastside County Water District Appendices – SGMA Public Comment Submittal 8.20.2018 .xlsx - provided via e-mail to sgmps@water.ca.gov