SUMMARY OF
PURE WATER MONTEREY,
SALINAS VALLEY GROUNDWATER SUSTAINABILITY, AND
MARINA COAST WATER DISTRICT GROUNDWATER SUSTAINABILITY
ZOOM MEETINGS
IN SEPTEMBER 2021

Note: This is a synopsis of information from these meetings that may be of interest to the Seaside Basin Watermaster

SVBGSA Monterey Subbasin GSP Committee Special Meeting September 8, 2021:

There was significant discussion of issues affecting the Seaside Basin at this meeting. Topics discussed included:

- On September 9 the complete Draft Monterey Subbasin GSP will go to the SVBGSA Board of Directors for approval to release the draft document for public review. That will start a 90-day comment period. In December the completed revised Draft will be available for review and finalization before submitting it to DWR by the submittal deadline which is the end of January 2022.
- Another meeting of the subbasin GSP committee will be held in either late October or early November so that edits that are being made to the draft GSP can be reviewed and discussed by the committee.
- The Paso Robles and Santa Margarita aquifers operate as a single aquifer within the Corral de Tierra area because there is no aquiclude in that area that separates them.
- Some months ago it was estimated that the corral de Tierra subarea is overdrafted by about 1000 acre-feet per year. That analysis was done before the Monterey subbasin model had been completed. Using the model, the overdraft is now found to be much greater, approximate 2803 acre-feet per year. This figure is considered by Derrik Williams to be more reliable because it is based on a more complete basin analysis. However, work is still in progress to refine this figure. More data is needed to understand why groundwater levels are declining so much, 27 feet since 2000.
- The current modeling indicates that even if all Corral de Tierra pumping was stopped, sustainability in that subarea could not be achieved. This is largely because a lot of water flows out of that subarea and into adjacent subareas and subbasins.
- The Monterey Subbasin GSP has turned out to be a very difficult and complex one to develop. This has resulted in a hurried time schedule in late 2021 to get it completed in time for submittal by the January 2022 deadline.
- In order to achieve sustainability in the Corral de Tierra subarea it may be necessary to provide replenishment water to the subarea in addition to reducing pumping and implementing other projects and management actions.
- Much of the previously provided information is being revised as the new Monterey Subbasin Groundwater Model is being applied to the subbasin by EKI.

- Sarah Hardgrave feels a regional supplemental water supply project will be necessary to help achieve sustainability within the greater Salinas Valley Groundwater Basin, including the Monterey Subbasin.
- Abby Ostovar of Montgomery and Associates, in response to a question I asked, said that the figures in the draft GSP that show interim milestone groundwater levels is not based on specific projects and management actions being implemented. Rather, it is a hypothetical depiction of the rate of change in groundwater levels that would be needed to achieve the desired groundwater levels within the 20-year time period allowed under SGMA. I said that it was not clear to the reader that this was the case, and asked that this be clarified in the chapter where those figures appear.
- Prior to this meeting I submitted written comments on Draft Chapters 6 and 10. There was no detailed discussion of those chapters at this meeting, only an overview presentation on the entire GSP with some questions and answers on it.

SVBGSA Advisory Committee Meeting September 16, 2021:

Topics discussed at this meeting which are of interest to the watermaster included:

- The draft of the entire Monterey Subbasin GSP was presented to the Advisory Committee for review and discussion.
- Some concerns were expressed about whether the 2008 groundwater level Sustainable Management Criteria for the corral de Tierra subarea could be met.
- The hydrogeologic connection between the Seaside Subbasin and the Monterey Subbasin is still being evaluated. The EKI model shows about 400 acre-feet per year of water is flowing from the Corral de Tierra subarea into the Laguna Seca Subarea, and about 3,000 acre-feet per year is flowing out of the Northern Inland Subarea of the Seaside Subbasin and into the Marina-Ord Subarea of the Monterey Subbasin.
- Historically there has been about 2,800 acre-feet per year of loss in storage in the Corral de Tierra subarea, and currently the annual loss in storage is about 1,800 acre-feet per year.
- The Corral de Tierra Subarea groundwater levels are projected to be about 30 feet below the 2008 historical groundwater levels at the end of the 20 year GSP implementation period.
- All of the representative monitoring system wells in the Corral de Tierra Subarea are currently below the Minimum Threshold levels in the GSP.
- Naturally occurring arsenic exceeds Drinking Water Standards in about 39% of the 33 sampled wells in the Corral de Tierra Subarea.
- The corral de Tierra groundwater levels continue to decline, and a decline 27 feet since 2000. It is not clear why groundwater levels are falling so much.
- A lack of extraction (pumping) data makes it difficult to model sustainable yield for this Subarea.
- It is estimated that a large regional desalination plant would produce water at about $2,900 per acre-feet for a plant size to produce 15,000 acre-feet per year. The feedwater for the desalination plant would be water taken from the proposed extraction barrier wells along the coastline of the 180/400-foot Subbasin.
- The Request for Qualification Statements for the Deep Aquifer Study has been released. The SVBGSA hopes to select the consultant team by the first of the year.

Pure Water Monterey Water Quality and Operations Committee Meeting September 22, 2021:

Topics discussed at this meeting which are of interest to the watermaster included:

- Deep injection wells 3 and 4 are both scheduled to begin operation with their first injection in December 2021.
- The extrinsic tracer study has been submitted to the Division of Drinking Water and their comments have been received. M1W plans to respond to those comments on September 23. If they are satisfactory to the Division of Drinking Water, M1W plans to start the extrinsic tracer study early in the week of September 27.
- New log reduction credits are being pursued for chlorine contact time and chloramines. Several meetings have been held with the Division of Drinking Water on this topic already. They hope to begin bench testing to generate data to submit to the Division of Drinking Water, and hope to get approval for these additional log reduction credits by the end of this year.
- All water quality parameters currently are being met, but a few parameters are showing a gradual increase.
- With regard to the ASR project, MPWMD is getting ready to submit a technical report to allow the newest ASR wells to be used for drinking water injection. Also, a new pipeline that will allow simultaneous ASR extraction and Pure Water Monterey injection is about to start construction.
- The next meeting will be held on November 17, and will probably be the last meeting of this committee in 2021.

Seawater Intrusion Work Group (SWIG) Meeting September 27, 2021:

This meeting was primarily devoted to an informational presentation on the seawater extraction barrier that is a proposed project in the GSP for the 180/400-foot Aquifer Subbasin. It would consist of a number of wells near the coast and paralleling it. They would extract groundwater, thus creating a groundwater elevation depression and a flow-divide that would keep seawater from moving inland. As a consequence of this pumping, some water (fresh water) from within the inland portion of the subbasin would also be extracted. Several options were presented including disposing of the extracted water to the ocean, or reusing it following desalination and either injecting it into the aquifer for recharge or delivering it as a water supply source.

There was general support for this project as a seawater intrusion mitigation measure, but there were major concerns about the high cost and how it could ever be funded.

Other projects will be discussed in upcoming meetings. At this point the group is focusing on getting a feel for what types of projects seem the most beneficial to pursue. Concurrently, a seawater intrusion model is under development, and an RFQ for a study of the Deep Aquifers has been sent out.