D-R-A-F-T MINUTES

Seaside Groundwater Basin Watermaster Technical Advisory Committee Meeting November 17, 2021 (Meeting Held Using Zoom Conferencing)

Attendees: TAC Members

City of Seaside – Scott Ottmar

California American Water – Tim O'Halloran

City of Monterey – Cody Hennings

Laguna Seca Property Owners – Wes Leith

MPWMD – Jon Lear

MCWRA – Tamara Voss

City of Del Rey Oaks – No Representative

City of Sand City – Taylor Fagan

Coastal Subarea Landowners – No Representative

Watermaster

Technical Program Manager - Robert Jaques

Consultants

Montgomery & Associates – Georgina King, Patrick Wickham

Others

MCWD – Patrick Breen City of Seaside – Nisha Patel Kevin Hanrighausen

The meeting was convened at 1:33 p.m.

1. Public Comments

There were no public comments.

A. Approve Minutes from the August 11, 2021 and October 20, 2021 Meetings

On a motion by Ms. Voss, seconded by Mr. O'Halloran, the minutes from both meetings were unanimously approved as presented.

B. Results from Martin Feeney's September 2021 Induction Logging of the Sentinel Wells

Mr. Jaques summarized the agenda packet materials for this item, and there was no other discussion.

C. Sustainable Groundwater Management Act (SGMA) Update

Mr. Jaques summarized the agenda packet materials for this item. Mr. O'Halloran reported that he will attend the Monterey Subbasin Corral de Tierra Community information meeting to be held via Zoom later today . Ms. Voss will also be attending, Mr. Jaques said he was not sure whether his schedule would allow him to attend.

D. Update on Security National Guarantee (SNG) Well

Mr. Jaques summarized the agenda packet materials for this item and there was no other discussion.

E. Make Findings Required Under AB 361 Regarding Holding Meetings Via Teleconference

Mr. Jaques summarized the agenda packet materials for this item.

Mr. Lear asked whether the Board of Directors could do this for itself as well as all of its committees. Mr. Jaques responded that according to Mr. Girard, County Counsel, AB 361 requires that each of those bodies adopt findings on its own, and that the Board of Directors could not adopt the findings for its committees.

Mr. Leith asked what the result would be if the findings were not adopted. Mr. Jaques responded that the body would then have to meet in-person.

A motion was made by Mr. O'Halloran, seconded by Mr. Lear, to adopt the three findings stated in the agenda packet on pages 20 and 21. The motion passed with Mr. Leith voting no, and all other members of the committee voting yes.

3. Discuss and Provide Input on the Draft 2021 Seawater Intrusion Analysis Report (SIAR)

Mr. Jaques introduced this agenda item, and Ms. King of Montgomery and Associates made a PowerPoint presentation summarizing the report and its findings and recommendations. Copies of the PowerPoint slides are attached.

Mr. Lear reported that MPWMD is in the process of getting permits and approvals, so that destruction of Monitoring Well FO-9 shallow can proceed.

In response to a question from Mr. Jaques, Mr. Lear reported that a new data logger has been installed in Sentinel Monitoring Well SBWM-1. B failed datalogger has been sent in to the manufacture to try to retrieve data from it for water year 2021. He felt the failure of the data logger was likely caused by a battery wearing out.

Mr. Lear also reported that the K Mart monitoring well is very close to the CDM well, and that perhaps data from the CDM well could be used as representative of that area. He said that in spite of requests made to law enforcement about clearing away the homeless encampment there, no action by them has thus far been taken. Therefore it remains an unsafe location for MPWMD staff to visit. He went on to say that if the homeless camp was cleared away, MPWMD could resume sampling there.

In her PowerPoint presentation, Ms. King noted that injection of water under the Pure Water Monterey Project seems to the reducing the easterly expansion of the pumping depression located in the Northern coastal subarea. She also pointed out the following:

- Water levels in all of the deep aquifer protective elevation wells are below sea level.
- Monitoring Well FO-10 Shallow continues to show increasing chloride levels and decreasing sodium:chloride molar ratios.

Because data is often late in arriving, it is not possible to complete preparation of the full draft SIAR in time for presentation to the TAC at its November meetings. Mr. Jaques said he would look into delaying the presentation on the SIAR to a December TAC meeting in future years. Mr. Lear noted that longer than usual lead times to get lab data back from Monterey Bay Analytical Services has occurred this year. Ms. Voss suggested looking into a change of laboratories to the Monterey County Health Department's laboratory, if that might help resolve the problem. Mr. Lear pointed out that this would increase costs due to having to transport samples to Salinas if that laboratory change were to be made. There was consensus that if the date for submittal of the draft SIAR was postponed until December in future years, this would likely resolve these problems.

Ms. Voss asked if any progress is being made in determining what is causing the increasing chloride levels in Monitoring Well FO-10 Shallow. Mr. Jaques responded that MCWD has indicated it will investigate this as it implements the GSP for the Monterey Subbasin in the Marina-Ord area.

Mr. Leith asked if the depth to groundwater in the Pure Water Monterey injection areas has decreased. Ms. King said yes, near the injection wells themselves, but groundwater levels have not shown an increase near the coast.

Mr. Lear reported that there is a 1000 acre foot operational reserve now in place in the pure water Monterey project. The goal is to raise this to 1500 acre-feet sometime in the near future. A drought reserve would be created if the growers quote buy-in" to the pure water Monterey project. No agreement on this has thus far been achieved.

A motion was made by Ms. Voss, seconded by Mr. Leith, to approve the draft SIAR and forward it to the Board with the TAC's recommendation for approval. The motion passed unanimously.

4. Discuss and Provide Input on the Preliminary Draft Watermaster 2021 Annual Report Mr. Jaques briefly summarized the agenda packet materials for this item and invited questions or comments on the document from the TAC.

Following brief discussion, a motion was made by Mr. Lear, seconded by Ms. Voss, to accept the document as-is and submit it to the Board for its consideration. The motion passed unanimously.

Ms. Voss asked if the Pure Water Monterey Project was currently able to inject the full 3,500 acre-feet per year with the existing deep and shallow injection wells. Mr. Lear responded that all

four original wells are currently injecting. The two additional deep injection wells are expected to become operational in January or February 2022, and are expected to increase injection capacity to the full 3,500 acre foot per year level. He went on to say that MPWMD is pursuing a Waste Discharge Requirement revision to enable it to increase to 4,100 water acre-feet per year the amount the Pure Water Monterey Project is authorized to inject. He noted that the existing Advanced Water Treatment facility in the Pure Water Monterey Project can provide this additional 600 acre-feet per year.

5. Schedule

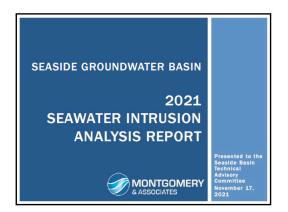
Mr. Jaques briefly summarized this item and highlighted the potential need for a December TAC meeting in order to comply with AB 361 meeting requirements.

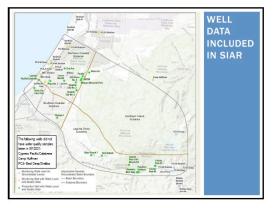
6. Other Business

Mr. Leith asked what the pipeline construction work was on General Jim Moore Boulevard. Mr. O'Halloran responded that it consists of installing a parallel pipeline to increase the capability of the ASR project to simultaneously inject and extract water.

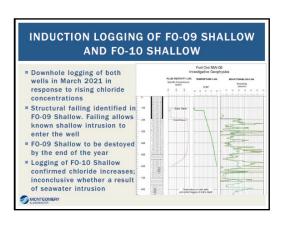
Ms. Voss asked when the appendices to the SIAR would be available. Ms. King said she would complete those next week, and Mr. Jaques said he would then post them to the Watermaster's website.

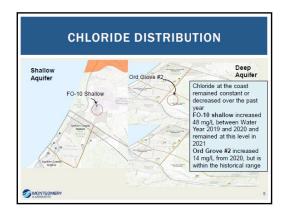
The meeting adjourned at 2:49 PM.

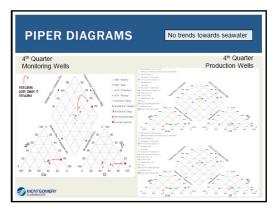


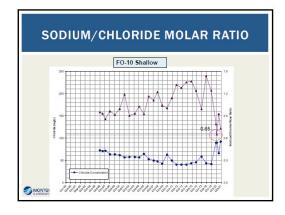


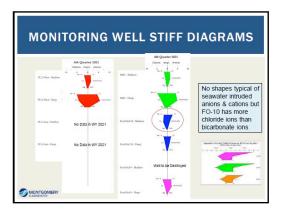
SIAR ANALYSIS Chloride Distribution and Na/Cl Molar Ratio Cation/Anions - Piper and Stiff Diagrams Electric Induction Logs Groundwater Elevations Protective Groundwater Elevations Groundwater Production

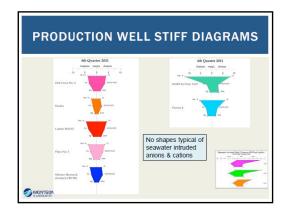


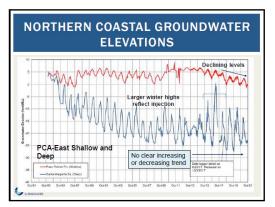


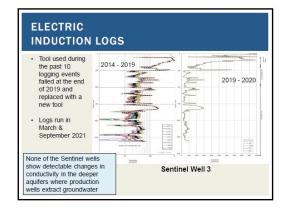


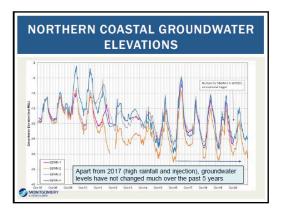


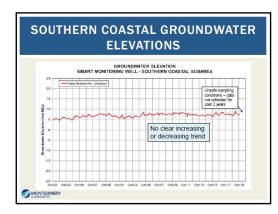


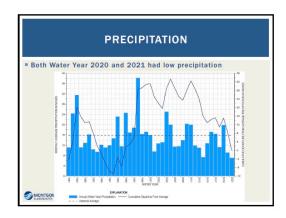


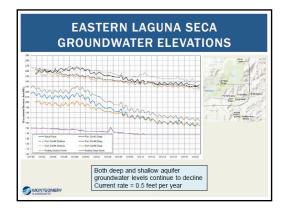


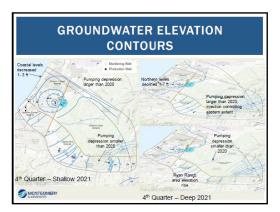




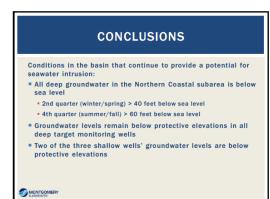














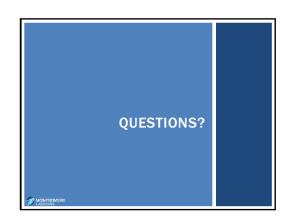
CONCLUSIONS Analyses indicating seawater intrusion is currently NOT occurring: No groundwater chemistry changes towards seawater in either shallow or deep groundwater Overall, chloride concentration trends were stable for most monitoring wells. Two wells had an increase greater than 10 mg/L FO-10 shallow has sustained increased chloride concentrations up to 93 mg/L chloride since 2020 Sodium/chloride molar ratios at most monitoring wells remained constant or increased over the past year. One well had a molar ratio below 0.86: FO-10 shallow now has a molar ratio 0.65 Induction logging data at the coastal Sentinel Wells do not show large changes over time that are indicative of seawater intrusion

CONCLUSIONS

- There are still ongoing groundwater level declines in the Laguna Seca subarea of around 0.5 feet per year
- Native groundwater production in the Seaside Groundwater Basin for Water Year 2021 was 2,828 acre-feet:

 495 acre-feet less than Water Year 2020
- 172 acre-feet less than the Decision-ordered Operating Yield of 3,000 acre-feet per year that is required starting on October 1, 2020
- Largely due to increased recycled water injection, native groundwater pumping was below the Decision-estimated Natural Safe Yield of 3,000 acre-feet for the second year in the historical





RECOMMENDATIONS

- 1. Execute Plans to Destroy FO-9 Shallow and Replace with New Monitoring Well
- 2. Continue Increased Groundwater Quality Sampling Frequency at FO-10 Shallow
- 3. Ensure Consistent Sampling and Delivery of Results
- 4. Continue to analyze and report on groundwater quality and levels annually

MONTGOMERY 6.ASSOCIATES