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Ms. Kim Adamson
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June 13, 2014

Subject: Quarterly Report for Coastal Monitoring Data through April 2014

Ms. Adamson:

Attached is the third quarterly report with updates on groundwater level and salt concentration data at coastal monitoring wells where protective elevations have been defined. These wells, SC-1A, SC-3A, SC-5A, SC-9C, SC-8D, SC-A1A and B, SC-A8A and B, SC-A2A and B, SC-A3A and B, and SC-A4A and B are the key wells for assessing risk of seawater intrusion and the status of basin recovery in the Soquel-Aptos basin. Protective elevations estimated to protect productive aquifer units from seawater intrusion and secondary drinking water standards (MCLs) for chlorides and total dissolved solids (TDS) are shown on the plots. Data through April 2014 are included.

GROUNDWATER LEVEL TRENDS

As noted in the previous quarterly reports, there is at least a partial reversal of the multi-year recovery trend in groundwater levels in the Western Purisima A unit (SC-1A, 3A, and 5A), groundwater levels in these wells have declined in the last 1-2 years. In the Central Purisima (BC and DEF units), groundwater levels show a multi-year recovery trend although seasonal recovery at SC-9C and SC-8D has not increased groundwater levels as much as previous years.

In the Aromas area (Purisima F unit and Aromas Red Sands), there appears to be a slowing of the multi-year recovery trend with groundwater levels stabilizing or slightly declining groundwater levels in these wells over the last 1-2 years. At SC-A3A and SC-A4A wells, groundwater level declines over the last year bring groundwater levels below protective elevations.

SALT CONCENTRATION TRENDS

There are no notable changes in salt concentration trends except at SC-A4A where the increase of salt concentrations over the last two years has been greater than the long-term increasing trends.

ADDITIONAL NOTES

Concentrations at SC-A3B based on samples using equipment installed in 2012 continue to be much lower than concentrations prior to 2012. We recommended ordering a new drop tube to sample the bottom screen of the well, but the drop tube had not been installed prior to the latest sample.

Like the previous reports, this report does not include groundwater level logger data planned for these reports going forward. District staff has configured new software that will expedite the transfer of this data for future quarterly reports. Future quarterly reports will include the following based on the logger data:

- Plots of available groundwater elevation data recorded by groundwater level loggers. The current equipment was installed at most of these wells in 2012.
- Average groundwater elevations will be calculated based on the logger data for the quarter, water year to date, and preceding four quarters. Average equivalent freshwater heads will be estimated for the three time periods at wells where chloride concentrations are above the MCL of 250 mg/L.

Page numbers are consistent with the Annual Report and Review figure sections 3B, 4B, and 5B, and therefore are not in consecutive order.

Thank you to District staff for making the data available expeditiously. Please let me know if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Cameron Tana". The signature is fluid and cursive, with "Cameron" on top and "Tana" below it.

Cameron Tana, Vice President
HydroMetrics Water Resources Inc.

Attachment: Coastal monitoring well hydrographs and chemographs





























