Consider receiving the 2017 Groundwater Level Contours and Coastal Salinas Valley Seawater Intrusion Maps.

RECOMMENDATION:

It is recommended that the Monterey County Water Resources Agency Board of Directors, the Monterey County Water Resources Agency Board of Supervisors and the Monterey County Board of Supervisors:

Receive the 2017 Groundwater Level and Seawater Intrusion Maps

SUMMARY/DISCUSSION:

2017 Groundwater Level and Seawater Intrusion Maps

August Trough Groundwater Level Survey

Each summer, Agency staff conducts an intensive groundwater level survey of the northern Salinas Valley. Groundwater levels (GWLs) are sampled at 155 wells from Chualar to the coast, to obtain a "snapshot" survey of conditions within and beyond the Seawater Intrusion Front. This is done during a time of the year when aquifers are most stressed by pumping. One of the key purposes of the survey, is to monitor and assess the forces driving seawater intrusion, in particular groundwater level gradients sloping inland from the coast, which are most pronounced when pumping is at its seasonal peak.

Fall Groundwater Level Survey

In the latter part of each fall, from mid-November to mid-December, the Agency samples GWLs in approximately 480 wells throughout the Salinas Valley, from the San Ardo Oilfields to Moss Landing. The timing of this sampling survey allows us to capture conditions in the groundwater basin at a time when a relative lull in agricultural pumping causes groundwater level troughs to relax, prior to the influence of seasonal recharge in response to winter/spring precipitation. In this way, the annual Fall survey of groundwater level data is an assessment of the relative, year-to-year change in groundwater storage throughout the valley.

2017 Coastal Salinas Valley Seawater Intrusion Maps

Coastal groundwater quality monitoring occurs annually during the peak pumping season. Samples are collected twice per season at 96 agricultural wells and 25 dedicated monitoring wells and analyzed for general minerals. Chloride concentration is used as a proxy for indicating seawater intrusion with several other geochemical tools used for verification and validation. The 500 mg/L chloride concentration contours are used to develop seawater intrusion maps in the odd years.

OTHER AGENCY INVOLVEMENT:

None

FINANCING:

There is no financial impact in receiving this report.

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Attachments:
1. Board Order