



Santa Clara Valley Water District

File No.: 22-1186

Agenda Date: 11/22/2022

Item No.: 3.2.

BOARD AGENDA MEMORANDUM

SUBJECT:

Denial of Request to Modify Groundwater Benefit Zone W-2 to Exclude Well 08S02E31E014.

RECOMMENDATION:

Deny the request to modify Groundwater Benefit Zone W-2 to exclude well 08S02E31E014.

SUMMARY:

Well 08S02E31E014 is a domestic well located at 21392 Tierra Grande Court in the Almaden Valley in San Jose, adjacent to Calero Creek. The well is located within the Santa Clara Subbasin and Groundwater Benefit Zone W-2 (Zone W-2). The well owners have requested that Santa Clara Valley Water District (Valley Water) exclude well 08S02E31E014 from Zone W-2 (Attachment 1), claiming the well:

- is located 250 feet from a neighbor's well that was removed from the zone in 2020, and
- is 500 feet deep, is completed in bedrock, and does not pull groundwater from Valley Water sources.

Any changes to groundwater benefit zones must be approved by the Board of Directors. Attachment 2 contains all information submitted by the well owners along with Valley Water staff's detailed technical evaluation of the request. As described below and in Attachment 2, staff concludes that well 08S02E31E014 is properly located within Zone W-2 and recommends denying the request to exclude the well from the zone.

Background

The current groundwater benefit zones approved by the Board of Directors became effective in July 2020 following completion of a multi-year, science-based study of the groundwater benefit zones and their boundaries. A groundwater benefit zone includes any area within Valley Water's jurisdiction where any of the following criteria are met:

- A Valley Water activity provides water supply
- Valley Water activities improve groundwater supply reliability
- Valley Water activities prevent or limit land subsidence
- Valley Water activities reverse or control salt water intrusion
- Valley Water activities improve or maintain groundwater quality
- Valley Water activities improve groundwater levels

The study was based on the premise that the benefits from Valley Water activities extend throughout areas connected by groundwater flow in similar geologic deposits (called hydrogeologically connected areas). The extent of these areas is based on regional US Geological Survey (USGS) mapping of alluvium (permeable sediments deposited by streams), which comprise local aquifers. Given the large areas covered by USGS maps, they are generally based on non-site-specific data such as aerial photographs and topographic maps. In adopting the zone boundaries, Valley Water was conservative in accounting for mapping error or inconclusive evidence to minimize the possibility of including wells that do not benefit from Valley Water activities within a zone.

Well owners can request a modification of the zone boundaries if they believe the well does not benefit from Valley Water groundwater management activities. A modification request process is warranted due to the uncertainties associated with the regional mapping and changes in Valley Water activities that can occur over time. To support granting such a request, Valley Water should have convincing evidence that supports the petitioner's belief that there is no benefit to their well.

Request to Modify Groundwater Benefit Zone W-2

Based on the detailed technical evaluation, which included sampling by Valley Water and review of information provided by the well owners, Valley Water staff finds the following:

- The well owner's parcel and surrounding areas are underlain by alluvium that benefits from Valley Water managed recharge activities along Calero Creek. This is demonstrated by the quick response of groundwater levels in the alluvium to the flow in Calero Creek.
- The presence of dilantin (an anti-seizure medication) and sucralose (an artificial sweetener) in well 08S02E31E014 indicates the well is connected to the alluvium. These manmade compounds likely originate from overlying or upgradient septic system discharges and would not be found in groundwater that is not connected to the alluvium.
- Although there are some differences, water quality is generally similar between well 08S02E31E014, nearby wells (both shallow and deep), and Calero Creek. Geochemical modeling also suggests a significant portion of the groundwater in well 08S02E31E014 is from Calero Creek and the alluvium.

For these reasons, and as explained in greater detail in Attachment 2, staff recommends denying the well owner's request to modify the boundary of Zone W-2 to exclude well 08S02E31E014.

ENVIRONMENTAL JUSTICE IMPACT:

There are no Environmental Justice impacts associated with this item.

FINANCIAL IMPACT:

There is no financial impact associated with the staff recommendation.

CEQA:

The recommended action, related to potential modification of groundwater benefit zones, is not a project under CEQA. CEQA guidelines Section 15273(a) reads as follows: CEQA does not apply to establishment or modification of charges by public agencies which the public agency finds are for the purpose of meeting operating expenses, purchasing or leasing supplies, equipment, and materials, meeting financial reserve needs/requirements, and obtaining funds for capital projects needed to maintain service within existing service areas.

ATTACHMENTS:

Attachment 1: Modification Request

Attachment 2: Technical Evaluation

UNCLASSIFIED MANAGER:

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