Santa Clara Valley Water District



File No.: 20-0418 Agenda Date: 4/28/2020

Item No.: *2.3.

BOARD AGENDA MEMORANDUM

SUBJECT:

Public Hearing on the Decision to Adopt Modified Groundwater Benefit Zones W-2 and W-5 and Establish New Groundwater Benefit Zones W-7 and W-8.

RECOMMENDATION:

- A. Conduct public hearing on the Decision to Adopt Modified Groundwater Benefit Zones W-2 and W-5, and New Groundwater Benefit Zones W-7 and W-8;
- B. Adopt the Resolution AMENDING THE BOUNDARIES OF GROUNDWATER BENEFIT ZONE W-2, with an implementation date of July 1, 2020;
- C. Adopt the Resolution AMENDING THE BOUNDARIES OF GROUNDWATER BENEFIT ZONE W-5, with an implementation date of July 1, 2020;
- D. Adopt the Resolution ESTABLISHING GROUNDWATER BENEFIT ZONE W-7, with an implementation date of July 1, 2020; and
- E. Adopt Resolution ESTABLISHING GROUNDWATER BENEFIT ZONE W-8, with an implementation date of July 1, 2020.

SUMMARY:

The Santa Clara Valley Water District (Valley Water) has sustainably managed local groundwater resources for many decades. The Santa Clara Valley Water District Act (District Act) authorizes the Valley Water Board of Directors (Board) to establish zones encompassing areas where groundwater pumpers benefit directly and indirectly from Valley Water activities to protect and augment water supplies. Valley Water established the two primary groundwater benefit zones (Zones W-2 and W-5 representing North and South County, respectively) in 1963 and 1977, respectively (Attachment 1).

Since the zones were first established, Valley Water's activities benefitting groundwater pumpers have changed, and new and more detailed information has become available regarding the groundwater subbasins Valley Water manages. Valley Water initiated the Groundwater Benefit Zone Study (Study) to assess existing zones and recommend changes needed to ensure that ratepayers are grouped in a way that reflects the most recent and relevant data regarding the services and benefits received by well owners and operators (Well Users).

Valley Water hired an independent consultant to conduct a science-based study of the zones and conducted robust outreach to Well Users and stakeholders through a transparent process.

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Based on the technical study and Well User input, staff recommends that existing Zones W-2 and W-5 be modified and that two new zones (W-7 and W-8) be established (Attachment 2). These new or modified zones, including a change from one zone to three zones in South County, help ensure Well Users fund only the activities benefitting their area.

Extensive information supporting the staff recommendation, including the consultant's technical study, stakeholder communications, and rationale have previously been presented to the Valley Water Board of Directors on August 27, 2019 (Item 5.1) and October 8, 2019 (Item 5.1). The agenda and video for each meeting is available at https://scvwd.legistar.com/Calendar.aspx.

The District Act requires the Board to adopt metes and bounds (survey description) to establish or modify groundwater benefit zones. Staff recommends Board adoption of resolutions containing the metes and bounds to modify Zones W-2 and W-5 (Attachments 3 and 4, respectively) and establish new zones W-7 and W-8 (Attachments 5 and 6, respectively).

Staff recommends implementing these zone changes in fiscal year 2021 (FY 21), to become effective July 1, 2020. Proposed groundwater production charges for the four proposed new and modified zones were included in the Protection and Augmentation of Water Supplies (PAWS) report as part of the FY 21 rate-setting process.

Background

Valley Water has sustainably managed the Santa Clara and Llagas Subbasins (Attachment 1) for many decades through the integrated management of groundwater and surface water. This includes direct groundwater replenishment through the managed recharge of local and imported surface water, and "in-lieu" recharge activities that increase groundwater levels and storage by reducing groundwater pumping. In-lieu recharge includes treated and raw surface water deliveries, long-term water conservation programs, and activities to expand the use of recycled water.

By assessing a groundwater production charge on water producing facilities within the groundwater benefit zones, Valley Water funds and implements projects and activities for the benefit of groundwater pumpers in the zone, to avoid undesirable results like chronic overdraft, land subsidence, and saltwater intrusion, and to ensure continued groundwater supply and sustainability, consistent with the purposes set forth in the District Act.

Existing Zone W-2 (also known as North County) largely coincides with the Santa Clara Plain portion of the Santa Clara Subbasin. Existing Zone W-5 (South County) largely coincides with the Coyote Valley (part of the Santa Clara Subbasin) and the Llagas Subbasin. The existing zones were established many decades ago, and Valley Water activities have changed since then. For example, recycled water activities were typically in their infancy when the zones were first created. Imported water deliveries and water treatment plants have also been expanded.

In addition, Valley Water's understanding of the subbasins' structure and interconnectivity have changed since the zones were first established. Additional studies by the United States Geological Survey, California Department of Water Resources, and others have improved knowledge of the aquifer systems and features that potentially affect groundwater flow. Decades of additional data on

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groundwater levels and pumping are also available.

Periodic modifications of the groundwater benefit zones have occurred, typically at the parcel scale after evaluating requests from individual Well Users. Valley Water last modified Zone W-2 in 1971 and Zone W-5 in 2008. There are currently eleven exemption requests being held pending the outcome of this study. One goal of the Study was to provide a regional, scientific approach to evaluate the zones rather than responding to individual requests for exemption.

Independent Technical Study

Valley Water hired the consulting firm Montgomery & Associates (Montgomery) to perform an independent, science-based study of the zones. Montgomery solicited stakeholder input on the Study approach and conducted extensive data analysis. The Study approach and findings were also reviewed by an independent technical review committee.

Montgomery recommended six groundwater benefit zones, with detailed analysis and findings presented in their Preliminary Groundwater Benefit Zone Study Report (Preliminary Report), which was included in Item 5.1 of the August 27, 2019 Board agenda and is available at http://scvwd.legistar.com/gateway.aspx?M=F&ID=615efd34-c05b-474d-bea8-3b58b0b9b8e9.pdf.

Based on extensive analysis of groundwater and geologic data, key Study findings are that:

- Valley Water's managed aquifer recharge supports a balanced water budget by making up most of the difference between groundwater pumping and natural recharge. Since pumping exceeds natural recharge in all years, managed recharge provides ongoing benefit.
 - The valley floor of both the Santa Clara and Llagas subbasins benefits from the recharge of both local and imported surface water.
 - Areas along the creek channels directly below Uvas and Chesbro reservoirs benefit from Valley Water releases of local water.
- Valley Water's in-lieu recharge activities (treated and raw surface water deliveries, recycled water, and water conservation) benefit groundwater by easing demands on groundwater pumping in all years. In the Santa Clara Subbasin, treated water deliveries are typically more than 100,000 acre-feet per year. Without this supply, ongoing groundwater pumping would far exceed total recharge even with managed recharge.
- Both managed and in-lieu recharge benefit groundwater throughout the unconsolidated alluvium in the Santa Clara and Llagas subbasins. However, specific areas benefit from different groups of activities, providing the basis for the proposed zones. For example:
 - There is no treated surface water delivered in South County, so related benefits are only attributed to the North County.
 - The Coyote Valley is part of the Santa Clara Subbasin, and does not benefit from recycled water programs in the Llagas Subbasin since the flows are not interconnected.
- Valley Water's groundwater protection and water conservation activities are applied across all

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zones but are dispersed and variable in nature. While not used to define groundwater benefit zones, these activities are equally available throughout Valley Water's jurisdiction helping to save and protect groundwater supplies. Therefore, the Study assumes all zones benefit from these activities.

It should be noted that the Study evaluated which areas receive benefit from major Valley Water activities like managed aquifer recharge, treated water deliveries, and recycled water programs. However, the Study did not attempt to proportion the benefits of those activities among zones. The allocation of costs for Valley Water activities to individual zones occurs each year as part of the rate-setting process.

Stakeholder Engagement

A key aspect of the Study was stakeholder engagement to facilitate an open, transparent process and solicit input from potentially impacted Well Users and interested parties. Outreach occurred following development of the draft Study methodology and preliminary Study recommendations. This robust outreach included meetings with water retailers, direct mailings, open houses, presentations to Board committees and elected officials, meetings with individual Well Users, phone conversations, and emails.

Several water retailers submitted detailed comments, which were discussed at length in meetings and Valley Water responses. Some Well Users provided Valley Water with site-specific studies, well logs, and other data. All comments were carefully considered, and the information submitted led to revised recommendations in some areas.

A complete summary of the comments received and Valley Water responses can be found in the Valley Water Board of Directors meeting agendas and minutes for the August 27, 2019 (Item 5.1) and October 8, 2019 (Item 5.1) meetings.

Staff-Recommended Zones

After carefully evaluating Montgomery's Preliminary Report and considering all information received from stakeholders, staff recommends that four of the zones proposed in the Preliminary Report be implemented (Attachment 2). The recommended zones are identical to four of the six zones recommended by the consultant, although the zone names are changed to align with Valley Water convention. These four zones are as follows:

- Modified Zone W-2 (Santa Clara Plain Valley Floor)
- Modified Zone W-5 (Llagas Subbasin Valley Floor)
- New Zone W-7 (Coyote Valley)
- New Zone W-8 (Areas below Uvas and Chesbro Reservoirs)

Staff does not recommend implementation of Montgomery-recommended zones B1 and B2, located along the foothills in North County. Staff believes Montgomery's technical rationale is sound, but greater certainty is needed to fully justify the imposition of groundwater charges due to greater hydrogeologic uncertainty and the lack of reliable data in these areas.

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Outcome if Staff-Recommended Zones are Implemented

If the staff-recommended zones are implemented, about five South County wells would be added to a zone, and therefore subject to future groundwater charges. However, many more wells would be removed from a zone. This is the case for about 350 wells in North County and 500 wells in South County, with these Well Users no longer subject to charges for groundwater pumped if the zones become effective. The zone changes are proposed to be implemented in FY 21, beginning July 1, 2020. Well Users with wells being removed from zones would still be subject to charges for any groundwater pumped through June 30, 2020.

Board approval of the staff recommendations would also allow staff to close out eleven pending requests for exemption from a zone. These requests, received between 2012 and 2016, have been held pending the outcome of this Study. All eleven Well Users would be removed from the zone under the staff recommendation. Given the regional, holistic review of zones, future requests for exemption would follow the process described in the Preliminary Report. While staff would still consider each request on a case-by-case basis, Well Users would have to provide compelling evidence or data that no benefit is being received.

The proposed groundwater production charges for the new and modified zones are included in the FY 21 Protection and Augmentation of Water Supplies Report. While other factors affect rates and total proposed rate changes from FY 20 to FY 21, the proposed zone changes result in the following estimated rate impacts:

- In North County (Modified Zone W-2), the water rate is unchanged as a result of the recommended zone modification to shrink the zone slightly.
- Water rates in the Coyote Valley (Zone W-7) are estimated to increase by about \$45/acre-foot as a result of the zone changes.
- Water rates in the Llagas Subbasin valley floor (Modified Zone W-5) and below Uvas and Chesbro reservoirs (Zone W-8) are estimated to decrease by about \$14/AF and \$154/acre-foot as a result of the zone changes, respectively.

The proposed zone changes merely reallocate total costs amongst groundwater pumpers in the managed subbasins. They do not affect the overall revenue received by Valley Water from groundwater production charges.

Additional discussion of the outcomes of implementing the staff-recommended zones can be found in the Valley Water Board of Directors meeting agendas and minutes for the August 27, 2019 (Item 5.1) and October 8, 2019 (Item 5.1) meetings.

Metes and Bounds

On October 8, 2019, the Board directed staff to develop new metes and bounds (the survey description that defines the boundaries of the zones) in accordance with District Act requirements.

The metes and bounds for the existing groundwater benefit zones are parcel-based and were developed without the benefit of digital technology currently available. For the now or modified zones to more accurately reflect the areas benefiting from Valley Water activities and to minimize the time

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and cost to prepare metes and bounds, a new approach was used.

Rather than rely on parcel boundaries, the new metes and bounds are more precise in that they honor geologic boundaries and other features that affect areas receiving benefit. Due to the shift from parcel-based zones, a zone boundary may now cross through a parcel, with some parcels potentially split between zones or with part of the parcel outside a zone. The proposed zones are conservative in this regard, in that they are slightly smaller than originally mapped during the Study.

The metes and bounds were prepared and stamped by a Professional Surveyor and have been confirmed to accurately align with the boundaries shown in Attachment 2. If the metes and bounds are adopted by the Board, they will be recorded with Office of the County Surveyor.

FINANCIAL IMPACT:

If the Board adopts the metes and bounds for modified groundwater benefit zones W-2 and W-5 and new zones W-7 and W-8, there will be no change to overall revenue for Valley Water. However, the rates within individual zones will change since a different group of Well Users would fund activities benefitting their area. These rates are described in the FY 21 Protection and Augmentation of Water Supplies Report published by Valley Water in February 2020 and available at www.valleywater.org.

CEQA:

The recommended action, establishment 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: Map, Existing GW Benefit Zones and Subbasins Attachment 2: Map, Staff-Recommended GW Benefit Zones

Attachment 3: Resolution, Amending Zone W-2 Attachment 4: Resolution, Amending Zone W-5 Attachment 5: Resolution, Establishing Zone W-7 Attachment 6: Resolution, Establishing Zone W-8

Attachment 7: PowerPoint *Handout 2.3-A, Stanford

UNCLASSIFIED MANAGER:

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