

Technical Memorandum

DATE: September 13, 2019 PROJECT: 14-2-067

TO: Tom Zigterman
Stanford University

FROM: Peter Leffler

SUBJECT: **PRELIMINARY RESPONSES TO SCVWD LETTER DATED AUGUST 21, 2019
AND MONTGOMERY ASSOCIATES LETTER DATED AUGUST 16, 2019**

INTRODUCTION

This Technical Memorandum (TM) provides our preliminary responses to letters from the Santa Clara Valley Water District (SCVWD) dated August 21, 2019 and Montgomery Associates (MA) dated August 16, 2019. The SCVWD and MA letters provide responses to a Stanford letter dated July 16, 2019 and Luhdorff & Scalmanini Consulting Engineers (LSCE) TM dated June 28, 2019. LSCE had originally provided comments dated May 7, 2018 on the Draft Zone of Benefits (ZOB) Study for SCVWD (prepared by MA). This response is preliminary and not comprehensive due to limited time available for review and introduction of new modeling results by SCVWD/MA that were not previously referenced or made available for our review. Thus, the comments below attempt to address the primary issues from our initial review and may be supplemented with additional review comments at a later date.

PRELIMINARY REVIEW COMMENTS

1. The District states that groundwater modeling results are not needed to support District claims; and that groundwater level evaluation and hydrogeologic connection analysis results are sufficient by themselves to support District claims (District Letter, Page 1, 2nd Paragraph).

LSCE Response:

- a. *Despite the statement above, Montgomery Associates (MA) responses refer to support from groundwater modeling results on numerous occasions; some examples include M&A responses to LSCE comments B-4, B-6, and B-7 (page 8 of M&A letter), M&A response to LSCE comment B-9 (page 9 of M&A letter), M&A response to LSCE comment B-10 (page 11 of M&A letter), and M&A response to LSCE comment B-12 (page 12 of M&A letter).*
- b. *As described elsewhere in this TM, groundwater level evaluation conducted for the Zone of Benefits study does not support District claims with respect to the Stanford/Palo Alto area.*

- c. *The District/MA switch from use of the District groundwater model to claims based on a new Todd model for City of Palo Alto Indirect Potable Reuse (IPR) study.*
- 1) *MA cite claim of 2,300 acre-feet per year (AFY) of groundwater inflow from the south (Santa Clara Plain) into the model domain from a future baseline (2015-2044) Todd model run (MA Letter, Page 10).*
- a) *The Todd Report review/assessment of historic and current water balances shows no groundwater inflow from the south. This is based in part and confirmed by observed groundwater level data and groundwater elevation contours showing a groundwater flow direction that is parallel to southern model boundary. Thus, the cited future scenario model results do not agree with historic/current observed data.*
- b) *Inflow across the southern model domain of the Todd model is strictly dependent on the specific assumptions made and incorporated in the general head boundary condition at this location. The details of the model baseline run and assumptions are not described in the City of Palo Alto IPR report. LSCE requested to obtain additional details on this topic, including model files, from SCVWD but has not yet been provided this information for review.*
- c) *A local model, such as prepared by Todd for the IPR study, is not an adequate tool/method for evaluating potential benefits from Valley Water activities in the Stanford area. The use of a groundwater model for the Zone of Benefits study should be a regional scale model of the Santa Clara Plain and surrounding areas (e.g., San Mateo Plain) that address previous LSCE comments on the regional-scale model originally cited in the Zone of Benefits study.*
2. District cites text in a Geomatrix (1992) report purported to demonstrate that connection between water levels in the Stanford area and conditions in the larger Santa Clara Subbasin (District Letter, Page 1, 3rd Paragraph).

LSCE Response:

- a. *The Geomatrix report text cited by the District is very general and non-specific as to location of pumping, and there was no detailed analysis conducted by Geomatrix in support of the cited text.*
- b. *The Geomatrix report text also notes in reference to Stanford well water levels that, "The recovery of groundwater levels in both wells appears to have continued into the 1980s."*
- c. *One of the Geomatrix report conclusions is, "Groundwater pumping likely will be limited by SCVWD's restrictive fee schedule rather than by hydrogeologic constraints."*
- d. *A Geomatrix report conclusion states, "Groundwater levels must be allowed to recover...during the next wet period, so that the groundwater reservoir will be recharged for*

use during the next dry period.” This statement supports LSCE contention that the initial portion of the 1998-2004 evaluation period was influenced by recovery of groundwater levels from pumping by Palo Alto/Stanford (and perhaps others) during the late 1980s/early 1990s drought period.

3. The District states, “Stanford and others have also questioned the accounting for the benefits of SFPUC. Valley Water acknowledges that SFPUC deliveries benefit the Santa Clara Subbasin by reducing pumping (also called in-lieu recharge). (District Letter, Page 1, 4th Paragraph).

LSCE Response:

- a. It is important to note that SFPUC deliveries provide more than just in-lieu recharge. SFPUC deliveries also provide direct recharge to the subbasin from a water source outside the subbasin via recharge of excess irrigation water at residences, parks, and other irrigated lands, and also provide opportunities for use of recycled water derived from SFPUC deliveries within the subbasin.*
4. The District states, “While the study is conservative in accounting for the effects of SFPUC deliveries, it focuses only on the benefits from Valley Water activities...” (District Letter, Page 1, 4th Paragraph).

LSCE Response:

- a. It remains unclear how the Zone of Benefits study accounted for effects of SFPUC deliveries in any fashion (much less being “conservative” in this regard), other than by acknowledging that SFPUC deliveries have and do occur (resulting in reduced basin groundwater demand).*
5. The District argues that basinwide water budget components overwhelm SFPUC RWS water budget components, “While the basin benefits from the delivery of SFPUC supplies, the recharge volumes provided by Valley Water managed and in-lieu recharge are far greater.” (District Letter, Pages 1 and 2, 4th Paragraph).

LSCE Response:

- a. The key issue here is the groundwater basin is very large and it is very important to consider local water budget components that have a much larger and overriding influence on individual well water levels compared to regional water budget components located much further away.*
6. The District states that it is impossible to implement a gradual change in pumping fees based on distance away from District activities and that all users should pay the same amount for the shared resource (District Letter, Page 2, 2nd Paragraph; MA Letter, Pages 5 and 6).

LSCE Response:

- a. Given that there is no threshold of significance for “benefits” from District activities, as it stands right now the District is arguing that an area that receives 0.1 foot of water level*

- benefit should pay the same amount as an area that receives 100 feet of water level benefit from District activities.*
- b. One alternative is to establish a reasonable significance threshold for District benefits (e.g., 5 feet), plus discounting of the fee for areas that contribute to the basin water balance by bringing in non-SCVWD surface water sources for in-lieu and direct uses and for other mechanisms of subbasin recharge (e.g., Lake Lagunita).*
7. MA states that the time period from 1975/1978 to 1982 is not part of the extended recovery period as stated by LSCE; therefore, increasing groundwater levels during this time period support District benefit claims (MA Letter, Pages 1 and 2).

LSCE Response:

- a. Despite the statement above (and while two Palo Alto wells have one or two data points that might be interpreted to suggest temporary stabilization of water levels between 1970 and 1972), water levels from two other Palo Alto wells plus the overall trend from Stanford wells do not show stabilization of water levels until the early 1980's and later.*
- b. While City of Palo Alto groundwater pumping essentially went to 0 immediately after 1962 (until 1988), Stanford groundwater pumping continued at over 1,000 AFY (to as much as 2,100 AF in 1968) from 1960 to 1973. After 1973, Stanford groundwater pumping was less than 500 AFY except in 1988, 1990, 2001, and 2007-2008. Thus, it is not possible for stabilization in the Stanford/Palo Alto area to have occurred in 1970-72 as suggested by MA, because the Stanford area had to recover from abrupt reductions in local pumping after 1973 along with the continuation of ongoing recovery from reductions in local pumping after 1962.*
- c. Groundwater elevations in Palo Alto Rinconada and Seale wells (the two wells with slight indication of stabilization in 1970-72) were -20 to -40 feet MSL in 1970-72, whereas groundwater elevations ultimately recovered in these wells to +20 to +30 feet MSL by the late 1980's. Again, it is clear these two wells were in recovery during the 1970s and early 1980s during the proposed groundwater level evaluation period.*
8. With regard to the 1978 to 1982 groundwater level evaluation period, MA states, "Annual precipitation increases are another possible explanation for this increase, so this period is not included as an evaluation period for Valley Water benefits." (MA Letter, Page 2).

LSCE Response:

- a. We note that MA states here that they disqualified the 1975/78 to 1982 period as a groundwater evaluation period for Valley Water benefits due to increasing precipitation over this period, even though the following sentence incorrectly cites the groundwater level trend from 1975 to 1982 as demonstrating a benefit from Valley Water.*
9. MA states that the 2001 to 2004 period can be used as a groundwater level evaluation period to show District benefits, and show stable/increasing levels at Stanford Wells 1 and 2 (MA Letter,

Pages 2 and 3).

LSCE Response:

a. For the period from 1998 to 2004, Stanford groundwater pumping peaked in 2001 and the minimum occurred in 2003. This pumping pattern would cause stabilization of groundwater levels in the Stanford area over the proposed 2001 to 2004 evaluation period due to changes in local pumping rates alone; thus, this period cannot be used by the District to evaluate benefits.

10. MA states, “We do not dispute LSCE’s observation of the 2011 to 2013 time period being stable to decreasing in water level trends, which is consistent with the evaluation of trends during this time period in the Palo Alto area in the study report.” (MA Letter, Page 3).

LSCE Response:

a. We note that MA concurs with LSCE that the 2011 to 2013 evaluation period for groundwater levels, which was the only groundwater level evaluation time period used in the original draft ZOB study, and cannot be used to prove a benefit from SCVWD activities.

11. Under LSCE Response A-4, LSCE essentially argues that MA needs to provide more evidence of a District benefit to Stanford that just saying there is a hydrogeologic connection. MA’s response is that LSCE mischaracterized the ZOB study and cites the following quote from the ZOB report, “If data and modeling are insufficient to assess whether an area benefits from District activities, the following assumptions are made: Benefits from a District activity extend to all areas that are connected by groundwater flow (hydrogeologically connected) to the activity.” (MA Letter, Page 4).

LSCE Response:

a. The response by MA confirms LSCE’s comment that if a benefit cannot be proved by groundwater level evaluation or modeling, having a hydrogeologic connection is adequate evidence (by itself) to conclude the area receives a District benefit. LSCE has demonstrated through previous and current comments that the groundwater level evaluation and groundwater modeling are not sufficient to prove a benefit to the Stanford (and Palo Alto) area. Thus, the only remaining argument for a benefit is hydrogeologic connection; however, this is not sufficient in and of itself to prove a benefit (but rather is one of multiple requirements to demonstrate a benefit).

12. MA states that evaluation of benefits from SFPUC RWS water were not included in ZOB study because they are trying to isolate the benefits of District water, and it would be a separate policy discussion to potentially assign credits for basin recharge from other water sources such as SFPUC RWS water (MA Letter, Pages 5 and 8).

LSCE Response:

- a. These points should be clarified in the ZOB study report: that the ZOB evaluation does not actually account for SFPUC RWS water other than acknowledging it exists, and that any such claims of credits from SFPUC RWS would have to be considered by the District as a separate policy decision.*

13. MA states, “We added recognition to this discussion of recovery that occurred in the 1960s after SFPUC surface water supplies replaced Stanford/Palo Alto groundwater pumping.” (MA Letter, Page 7).

LSCE Response:

- a. It is important to note that Stanford pumping was not reduced until after 1973. This should be stated in the ZOB study report, and the ramifications of this fact should be incorporate in the assessment of groundwater level evaluation periods.*

14. In referring to how SFPUC water deliveries were accounted for in the analysis, MA states, “This methodology addresses benefits from in-lieu recharge by SFPUC surface water deliveries to the Stanford/Palo Alto area by limiting evaluation periods to when pumping from the areas are stable or increasing.” (MA Letter, Page 9).

LSCE Response:

- a. It is not clear how this selection of evaluation periods incorporates or addresses the multiple benefits of SFPUC surface water deliveries.*
- b. LSCE describes elsewhere in this TM that Stanford pumping was decreasing during the 2001 to 2004 evaluation period; thus, this time period is disqualified from use as an evaluation period per the criteria cited by MA above.*

15. MA states, “While there would be natural recharge through streams without Valley Water’s managed recharge, it would be far less without our infrastructure, water supplies, and water management.” (MA Letter, Page 12).

LSCE Response:

- a. The District/MA somewhat acknowledge but make no attempt to quantify how much stream percolation would/did occur naturally independent of District activities. Natural stream recharge should be quantified and included in the basin water balance as non-District water (i.e., included as part of natural basin recharge).*

September 24, 2019

Mr. Tom Zigterman, Director of Water Resources & Civil Infrastructure
Stanford University
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Stanford, CA 94305-7272

Subject: Response to Luhdorff & Scalmanini's September 13, 2019 Technical Memorandum on the Groundwater Benefit Zone Study

Dear Mr. Zigterman:

Thank you for the technical memo from Luhdorff & Scalmanini Consulting Engineers (LSCE) dated September 13, 2019 responding to the Santa Clara Valley Water District (Valley Water) letter dated August 21, 2019 and Montgomery & Associates (Montgomery) letter dated August 16, 2019. Valley Water also appreciates the in-depth discussion in the September 16, 2019 meeting with you, LSCE, Montgomery, Palo Alto, and Great Oaks Water Company. Below is the Valley Water response to several of the points raised in the LSCE memo.

LSCE Comment 1

LSCE points out that, despite Valley Water's statement that groundwater modeling is not necessary to support the claim of benefits in the Stanford/Palo Alto area, Montgomery refers to support from groundwater modeling in several places. LSCE also states that the groundwater level evaluation does not support the Valley Water benefit to the Stanford/Palo Alto area.

Valley Water did not rely solely on groundwater modeling results to claim the Stanford/Palo Alto areas benefit from Valley Water activities. However, the model provides additional support for the benefits demonstrated by the groundwater level evaluation and hydrogeologic connection between the Stanford/Palo Alto areas and the rest of the groundwater basin. The zone evaluation by Montgomery uses best available data and tools to develop scientifically-sound recommendations and, to our knowledge, goes well beyond what is done to support groundwater zones/charges in other basins.

Valley Water acknowledges that LSCE and Stanford do not agree with the findings of the groundwater level evaluation despite information provided in previous Valley Water and Montgomery responses and discussion at our September 16, 2019 meeting. Valley Water and Montgomery believe that benefits to the Stanford/Palo Alto area have been reasonably demonstrated.

LSCE also had several observations on the Valley Water/Montgomery reference to the model developed by Todd Groundwater (Todd) for the City of Palo Alto's Indirect Potable Reuse (IPR) study. However, several LSCE assertions are based on incorrect assumptions as noted below.

In our previous response, Valley Water/Montgomery noted that the IPR study model (Todd model) was not used for the Groundwater Benefit Zone Study. However, we referenced the model results from that study because it provides additional support for the connection between the Stanford/Palo Alto area and the rest of the groundwater basin. LSCE notes that "inflow across the southern model domain of the Todd model is strictly dependent on the specific assumptions made and incorporated in the general head boundary condition at this location." However, there is no general head boundary at this location in the Todd model. When LSCE requested the model files and additional details, Valley Water suggested LSCE/Stanford contact the City of Palo Alto directly since the Todd model was developed under an agreement between the City of Palo Alto and Todd. The Todd model is not a local model. It is based on Valley Water's Santa Clara Plain groundwater model and extends the Santa Clara Plain model domain to the Redwood City area in the San Mateo Plain. It therefore covers a larger area than Valley Water's Santa Clara Plain groundwater model used in the study.

Valley Water acknowledges that the 2,300 acre-feet inflow shown by the Todd model is for a future scenario that includes 2,500 acre-feet of pumping in the Palo Alto area. While this does not represent current conditions, it is likely more representative of historical conditions when there was more pumping in the Stanford/Palo Alto area and potential conditions in the future should pumping resume.

The reference to the Todd model and IPR study was made to provide additional relevant information that supports the Valley Water determination that the Stanford/Palo Alto areas are connected to, and benefit from, Valley Water groundwater management activities. As acknowledged by LSCE in our September 16, 2019 meeting, if Valley Water activities ceased to occur, groundwater levels in the Stanford area would be lower.

LSCE Comment 2

LSCE questions the Valley Water reference to a Geomatrix report prepared for Stanford University, and claim it supports their assertion of decades of water level recovery following cessation of pumping in the Stanford/Palo Alto area. The Geomatrix report was referenced to provide additional information from an independent source recognizing the interconnected nature of groundwater levels within a large basin, and that groundwater in the Stanford area is affected by regional basin pumping and recharge conditions. Valley Water does not dispute water level recovery in the Stanford wells into the 1980s. However, as we discussed in our September 16, 2019 meeting, Valley Water and Montgomery believe the recovery from the cessation of pumping in the Palo Alto wells due to SFPUC deliveries was dramatic, as evidenced by a steep, increasing slope in water levels over only a few years in the 1960s, corresponding to the dramatic decline in pumping from 5,500 acre-feet per year (City of Palo Alto IPR Study) to zero in 1962. Following that period, the recovery flattens out in the early 1970s. An extended period of recovery for the Palo Alto/Stanford area into the late 1970s is therefore unlikely to be explained by the smaller reduction of Stanford pumping from 1,000 AFY to less than 500 AFY after

1973. It should be noted that many wells in the Santa Clara Valley show recovery from increasing demand and regional overdraft into the 1980s.

LSCE Comment 3

LSCE notes that SFPUC deliveries provide more than just in-lieu recharge by providing direct recharge to the subbasin due to excess irrigation water at residences, parks, and other irrigated lands, and opportunities for use of recycled water within the subbasin. The primary groundwater benefit from SFPUC water is in-lieu recharge. While Valley Water encourages efficient water use, excess irrigation may occur and provide some incidental benefit to groundwater within recharge areas. However, this occurs throughout the recharge area whether the source is SFPUC or Valley Water imported water and the volumes are likely very minor. With respect to LSCE's claim that SFPUC deliveries provide being a benefit to the basin as a source of recycled water, the source of water is not relevant to recycled water benefits because the demand would be met by another source (eg groundwater or Valley Water deliveries) if SFPUC supply was not available.

LSCE Comment 4

LSCE states it remains unclear how the study accounts for the delivery of SFPUC water beyond acknowledging that it occurs and provides in-lieu recharge benefits. This issue was addressed by Montgomery's August 16, 2019 response to Stanford and was discussed at our September 16, 2019 meeting. Limiting the groundwater level evaluation period to times the pumping is stable or increasing excludes periods of decreased pumping (assumed to be due to SFPUC deliveries). This excludes consideration of periods where groundwater level improvements could be explained by SFPUC deliveries.

LSCE Comment 5

Valley Water previously stated: "While the basin benefits from the delivery of SFPUC supplies, the recharge volumes provided by Valley Water managed and in-lieu recharge are far greater." LSCE notes that "it is very important to consider local water budget components that have a much larger and overriding influence on individual well water levels compared to regional water budget components located much further away."

Local water budget components may have a larger influence on individual wells than regional components located further away. However, it does not follow that the regional components have no influence, nor does it confirm that the difference is sufficiently material to suggest exclusion from a zone. The study was designed only to demonstrate whether a benefit from Valley Water activities exists in an area. The District does not believe it is possible with the data and tools currently available to determine the comparative benefit attributable to individual activities within a small area with the level of specificity suggested by the comment.

LSCE Comment 6

LSCE points out that without a level of significance to benefits, Valley Water is arguing that a well user receiving only a small benefit in water levels would pay the same as another receiving a much larger benefit. LSCE goes on to suggest that a level of significance be developed and used to create a discount for areas that benefit the basin by importing non-Valley Water sources or contributing to recharge. Valley Water acknowledges that all well users within a zone pay the same charge; this is required under the District Act. Groundwater is a shared resource and all well users benefitting from similar Valley Water activities should share in the cost. Moreover, Valley Water does not believe that it is possible at this time with the tools and data available to quantify benefits with the precision that LSCE suggests is needed.

LSCE Comment 7

LSCE questions the use of increasing groundwater levels in the late 1970s and early 1980s to demonstrate benefit from Valley Water activities. LSCE contends that this period is an extended recovery from decreased pumping due to the delivery of SFPUC water in the 1960s and early 1970s. This issue was addressed by Montgomery's October 26, 2018 and August 16, 2019 responses and at the September 16, 2019 meeting. The contention that this period represents extended recovery conflicts with the observed rapid rise in groundwater levels in the early 1960s followed by flattening out of the recovery curve that occurred after the cessation of pumping in Palo Alto. An even shorter period of lower magnitude is therefore likely after Stanford's pumping reduction. Valley Water also observed rapid recovery of water levels in other areas of the basin during and following the most recent drought. Valley Water and Montgomery believe the groundwater level evaluation for the 1978-1982 period demonstrates benefit from Valley Water activities.

LSCE Comment 8

LSCE notes that Montgomery stated that natural precipitation is a possible cause to the increasing water levels in the 1975/78 to 1982 time period and that the period isn't used to demonstrate Valley Water benefits. The statement referenced by LSCE refers to the 1969-1975 period after recovery from cessation of Palo Alto levels off so the 1969-1976 period is not used to demonstrate Valley Water benefits. The 1978 to 1982 time period is used to demonstrate Valley Water benefits as stated in the next paragraph after the statement referenced by LSCE: "The groundwater level trend in the Palo Alto and Stanford areas during the 1978-1982 period is increasing and demonstrates the benefit from Valley Water activities in the Palo Alto and Stanford areas."

LSCE Comment 9

LSCE questions the use of the 2001 to 2004 period for demonstrating benefit, stating that Stanford pumping decreased from a peak in 2001 and reached a minimum in 2003. The study had not shown this trend in Stanford pumping because two Stanford wells are in Palo Alto's delivery area and were grouped with Palo Alto pumping. Montgomery agrees that pumping areas should be redefined such that Stanford pumping area includes all the Stanford pumping. The declining Stanford area pumping from 2001 to 2004 removes that period from being evaluated. The groundwater level trend evaluation

demonstrates a benefit in the Stanford area from Valley Water activities from the 1978-1982 period but does not identify benefits specifically to managed recharge or treated water deliveries.

LSCE Comment 10

This comment notes an area of agreement regarding the 2011 to 2013 time period – comment noted.

LSCE Comment 11

LSCE stated Montgomery's previous response confirms the LSCE comment that "if a benefit cannot be proved by groundwater level evaluation or modeling, having a hydrogeologic connection is adequate evidence (by itself) to conclude the area receives a District benefit." LSCE goes on to say that hydrogeologic connection "is not sufficient in and of itself to prove a benefit (but rather is one of multiple requirements to demonstrate a benefit)."

Although the Study did not rely on hydrogeologic connection to demonstrate a benefit, the connection provides sufficient demonstration that an area is receiving benefit. This is consistent with the definition of a basin and the requirements for establishing a zone. As noted in Montgomery's review of the methods that other agencies have used to establish groundwater benefit zones, they rely on subbasin areas or delivery areas. Valley Water's approach to establishing the zones, which also incorporates groundwater level analysis and modeling results, goes above and beyond what is required.

LSCE Comment 12

LSCE states that the study report should state that the "evaluation does not actually account for SFPUC RWS water other than acknowledging it exists, and that any such claims of credits from SFPUC RWS would have to be considered by the District as a separate policy decision." Per our response to comment 4, Valley Water does not agree that the study did not account for SFPUC deliveries. As we have discussed, issues about non-Valley Water activities or groundwater rates such as credits or discounts are separate policy decisions that are beyond the scope of the study. Like previous comments and responses, these recent LSCE/Stanford comments will be included in the final Groundwater Benefit Zone Study report.

LSCE Comment 13

LSCE states that Stanford pumping was not reduced until 1973 and that the study should include this information and incorporate it into the assessment of the groundwater level evaluation periods. As described in response to Comment 9, the analysis has been revised to group Stanford well pumping together even though two wells are in the Palo Alto delivery area. The analysis now reflects a reduction of pumping from 1972-1973 pumping to lower amounts through 1982. As described above, the pattern of recovery response to the much greater reduction of pumping by Palo Alto in 1962 indicates that recovery from reduction by Stanford would have leveled off by the 1978-1982 evaluation period. Therefore, the observed increase during 1978-1982 can be attributed to Valley Water activities. Pumping information from before 1972 was not available to Valley Water during the study despite requests for information from the water retailers and others throughout this process.

LSCE Comment 14

LSCE states that it remains unclear how the study accounts for the multiple benefits from SFPUC deliveries and that decreased pumping by Stanford during the 2001 to 2004 period should be accounted for. Valley Water responded to these items under comments 4 and 9 above.

LSCE Comment 15

LSCE states that "natural stream recharge should be quantified and included in the basin water balance as non-District water (i.e., included as part of natural basin recharge)." Natural recharge is quantified and accounted for separately from Valley Water managed recharge in the water balance presented in Chapter 6 of the preliminary study report.

Staff plans to present the recommendations and the outcome of the September 16, 2019 meeting to the Valley Water Board of Directors on October 8, 2019. More information will be available at <https://www.valleywater.org/how-we-operate/board-meetings-agendas-minutes>. Thank you again for your interest in the study, and for taking the time to meet with us and provide feedback. If you have any questions, please contact me at (408) 630-2964 or gcook@valleywater.org.

Sincerely,



George Cook, P.G.
Senior Water Resources Specialist
Groundwater Management Unit

cc: Cameron Tana, Montgomery & Associates
N. Hawk, G. Hall, V. De La Piedra