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April 28, 2022

Via electronic mail

Zooey Diggory
Senior Biologist
Watershed Stewardship and Planning Division
Santa Clara Valley Water District
zdiggory@valleywater.org

Re: WY 2021 Draft Mitigation and Monitoring Report

Dear Ms. Diggory:

The Guadalupe-Coyote Resource Conservation District (GCRCD) provides these comments on the Water Year (WY) 2021 draft Mitigation and Monitoring Report (MMR) in response to your email to the Adaptive Manage Team (AMT) dated March 30, 2022. As in years past, we thank the Santa Clara Valley Water District (Valley Water) staff and consultants for their hard work in monitoring and managing the mitigation measures and preparing the draft MMR.

We organize our comments according to the headings in the draft MMR for ease of reference. All page citations are to the draft MMR as indicated.

ES.4 Monitoring Results

We provide comments on the following sections of the Executive Summary, which should also be considered in the respective sections in the main body of the report:

Riparian Vegetation – Health and Vigor. The planting in the Upper Guadalupe River Flood Control Project (UGRP) Reach 12 has low health and vigor even if it is surviving. We request that Valley Water clarify whether the health and vigor was a localized effect or indicative of the whole reach. We are concerned that the trends indicate the plants could be set back significantly if drought conditions persist for another year. We understand that the health and vigor monitoring was extended another year since the plantings did not meet the health and vigor measurable objective (MO) in year 3.

If vigor and health have not been met for the last few years, we request Valley Water clarify the trigger for remedial action. Based on the draft MMR, it appears plant death is the only trigger

for remedial action. If we wait for the plants to slowly die and then need to do remedial planting, we will potentially lose several years of potential recovery and compensation for lost habitat. Short-term irrigation is not ideal and not remedial, but may provide the bridge to growth when wetter years occur and save the planting so that the need for future remedial is lessened or removed. We recommend Valley Water continue to monitor the health and vigor annually until the plants meet the MOs or remedial action is taken and demonstrated to be successful.

Riparian Vegetation – Native Vegetative Cover. The native cover MO results in Reach 12 are tied to health and vigor. If the plantings are not healthy and only somewhat vigorous, we are concerned it will be difficult to achieve the native cover MO. The draft MMR states, "[a]lthough Reach 12 only reached 7% cover in WY 2021, it was the youngest mitigation area (MY 4) and surviving individuals are expected to grow and increase in cover over time." However, if the health and vigor of these plantings continues to be low or in decline, they will not meet the native cover requirement either. We request Valley Water clarify whether the lack of native cover was a localized effect in a permanent plot, and when three additional planting areas were considered, if the native cover MO was achievable.

Riparian Vegetation – Tree height. We request that Valley Water clarify what monitoring year (MY) is associated with WY 2021 to facilitate comparative evaluation of current status in the Downtown Project segments relative to MY 40.

Riparian Vegetation – Tree Basal Area. We request Valley Water provide additional information regarding the possibility that larger tree species are being suppressed due to high vegetation density (vines, herbs, shrubs) that would otherwise be cleared/reset during frequent flood events. The draft MMR reports the MO will be met, so this may not be a substantial issue, but releasing some of the larger trees might help get to the basal area requirement faster.

Shaded Riverine Aquatic Vegetation. We support the recommendation that the monitoring for natural recruitment be extended for an additional year.

1.2.1 Project Construction Status

The draft MMR (p. 1-8) briefly describes efforts by the U.S. Army Corps of Engineers (USACE) to secure funding for construction of UGRP Reaches 7, 8, 9, 10A, 10C, and 11: "[i]n 2021, the USACE began a process to re-evaluate total project costs and benefits before seeking additional funding for UGRP design and construction." We request that Valley Water coordinate with USACE staff to provide a more detailed update regarding the USACE's ongoing re-evaluation process, including a review of the specific procedures involved in the re-evaluation and anticipated schedule for findings and/or recommendations based on that re-evaluation.

Similarly, the draft MMR (p.1-8) briefly describes the Phase 1 gravel augmentation in Reach 6, and states that lessons learned from Phase 1 will serve as a valuable tool to guide Phase 2 implementation. We request that Valley Water elaborate on this statement to provide anticipated timelines and/or thresholds for implementing Phase 2 gravel augmentation. Specifically, we recommend that Valley Water initiate the design process for Phase 2 gravel augmentation based on lessons learned from WY 2022 high flows, supplemented by learning in

WY 2023, such that implementation could occur in 2024 or 2025.

1.5 Other Guadalupe River Efforts

We continue to find Valley Water's description of other activities and conditions affecting Valley Water's implementation of the Mitigation and Monitoring Program (MMP) and cumulatively affecting the Guadalupe River and related resources helpful.

We request that Valley Water, in coordination with Regional Water Quality Control Board and/or City of San José representatives, provide a more detailed report on cleanup activities and reporting under the National Pollution Discharge Elimination System from the State Water Resources Control Board. *Id.*, p. 1-16. We are interested in understanding Valley Water's policy or plans for encampment clean-ups in WY 2022 as well as regional trends observed by the Regional Board so we can better understand if there is additional support that individual AMT members can provide. *See id.* At p. 1-17 ("Valley Water continues to work collaboratively with other agencies and look for additional resources and funding to better tackle this broader community issue in the near future.").

We request that Valley Water provide additional information regarding the upcoming process for the One Water Plan for the Guadalupe River Watershed, including how AMT members may participate before or after a draft plan is issued in June 2022. In addition, for our review planning and scheduling, we request that the word "goal" be removed and a firmer date be established.

We request that Valley Water provide additional information regarding the implementation of the Fish and Aquatic Habitat Collaborative Effort (FAHCE) Plus Pilot Study, including the extent to which implementation on the Guadalupe River has been affected by drought conditions.

We understand from the FAHCE draft Environmental Impact Report that Valley Water is planning additional seismic remediation work for facilities located within the Guadalupe River watershed. We request that Valley Water provide additional information regarding anticipated schedule for those projects as they do not appear to be described in Section 1.5.5, "Other Capital Improvement Projects."

2.4 WY 2021 Monitoring Schedule and Locations

We recommend Valley Water rescale the Y-axis in Figure 2-1 to be a maximum of 150 cfs to better visualize the flows on the monitoring dates, then add text for the magnitude of the late January high flows for context. In the alternative, we request the Y-axis be converted to logarithmic scale, but initial suggestion may be better.

3.1 Local Environmental Conditions

We find the hydrology graphics helpful, but recommend Valley Water incorporate the following additional clarifications:

- Figure 3-4: add text to the graph that summarizes instantaneous peak flow at each gage as the Y-axis is truncated;
- Figure 3-5: clarify that station 5043 is above Masson Dam and station 5114 is below Masson Dam, either in the legend or in the figure caption;
- Table 3-3: correct caption to state WY 2015-2021; and
- Table 3-4: provide citation for how flood frequency intervals were developed (i.e., from raw data plots or Log Pearson III or PeakFQ, or other).

Given the multi-year drought and corresponding vegetation stress, we request Valley Water incorporate flow duration as an important flow characteristic relative to the drought and streamflow discussion. Flow duration during the growing season is likely a better hydrologic variable than average monthly flow (e.g., Table 3-3) to illustrate drought effects and provide perspective within a longer-term record. Including flow duration information and analysis would help to illustrate the effects of early season drying and prolonged low flows leading to drought conditions in the riparian vegetation.

3.2 Riparian Vegetation

While the draft MMR reports general compliance with the MOs related to riparian vegetation, it also indicates some concerning recent trends in riparian vegetation health, vigor, and native cover in certain reaches which are attributed to drought conditions and human disturbance. *See id.* at 3-42 – 3-43. We request the AMT discuss how to address this issue, including consideration of a different MO and/or a differing sampling scheme, so that results better reflect overall performance. For example, if some fixed vegetation plots are being repeatedly influenced by human disturbance, perhaps a sampling strategy that has rotating plots would be able to provide a better indicator of the MO for the reach.

Valley Water does not recommend new plantings to contribute to achievement of MOs at this time: "[i]t is not prudent to add additional plants or replant given the current severe drought as monitoring long-term indicators will continue." *Id.* at 3-12. We request time for AMT discussion regarding this finding and the process for revisiting the issue of whether to replant or add plants in the future. Specific comments to subsections are summarized below.

Section 3.2.2.2 Health and Vigor – Results

The draft MMR (p. 3-11) states: "[t]he single remaining California buckeye planting that had been damaged by mowing in WY 2020 showed signs of recovery with improvement to foliar, wood, and crown health and vigor ratings that increased the individual's rating to 1.3 in WY 2021. Consequently, the health and vigor score for the species in the reach increased from zero in WY 2020 to 0.8 in WY 2021 (Table 3-8)." However, Table 3-7 shows four categories of health and vigor (0 through 3). We request Valley Water clarify the basis for assigning a decimal fraction to an individual (e.g., "increased the individual's rating to 1.3"). While we understand how there might be a decimal if an average health and vigor value is derived from a number of individuals, the assignment of health and vigor in 0.1 increments does not seem to be useful. Furthermore, an increase from 0 to 0.8 still means the species would be considered dead, as described in Section

3.2.1.3 “Survival was defined as a minimum health and vigor rating of 1 (poor)”. While it may be helpful to acknowledge potential plant recovery, for purposes of measuring progress in achieving the MO, what is relevant is that the buckeye is not doing well and would not be considered surviving.

Section 3.2.2.3 Health and Vigor - Comparison to Measurable Objective

Regarding the upland plants (sagebrush, rose), the draft MMR appears inconsistent in referencing “RIP” and “PA” plots in this discussion. This makes interpreting the “RIP” plot results difficult. The RIP are long term plots selected for monitoring and PA are similar Planting Areas that were not selected as plots. We recommend Valley Water separate this discussion into two paragraphs to limit confusion. The results suggest that the RIP plantings are not thriving but might eventually come along, and the PA plots were doing satisfactorily. While potentially positive, this description of results is inconsistent with the described methodology.

The draft MMR also indicates a limitation with the permanent fixed plot sampling regime, which warrants further discussion and perhaps monitoring methodological modification or recommendation (Section 4). If the goal is to understand how the reach or segment is doing, then some type of plot selection should occur to be able to generalize monitoring results to locations that are not sampled (stratified random sample).

Lastly, we request Valley Water clarify its finding that “[i]t is not prudent to add additional plants or replant given the current severe drought as monitoring long-term indicators will continue.” It is not clear what continued monitoring of long-term indicators has to do with planting during a drought. What if we enter a prolonged drought and the measures do not quickly improve? Is Valley Water suggesting that any remedial action be postponed until the drought is over? Presumably long-term monitoring would continue with or without remedial planting.

Section 3.2.3.2 Natural Recruitment-Results

Based on our review, it does not appear that the discussion of recruitment of herbaceous species belongs in this section. Is the draft MMR offering herbaceous recruitment as a proxy for woody plant establishment? The narrative suggests that there are insufficient sources for recruitment in plots RIP 12-1 through Rip 12-3, and that this MO may not be met in the UGRP Reach 12 RIP plots. We recommend waiting until drought conditions are somewhat abated to monitor for this requirement. Natural recruitment is difficult to remediate without seed sources and/or shallow groundwater. We are concerned that the MO will continue to not be met until we enter a wetter period.

Section 3.2.4.2 Native Vegetative Cover-Results

We request that Valley Water clarify why other Planting Area (PA) results and RIP results are being combined in the analysis. The analysis should use the RIP plots and discuss the PA results separately. The PA results do not appear helpful to the discussion (in this case they made the reported value worse) and they make the evaluation of the MO results less clear to the reader. Also, please review the discussion about sampling methods in the Section 3.2.2.3 Comparison to

Measurable Objective comments.

Section 3.2.4.3 Comparison to Measurable Objective

We request that Valley Water clarify absolute or relative cover when the word "cover" is used. We consider the use of the term "cover" by itself to be confusing. For example, the draft MMR states, "[i]n WY 2021, the UGRP totaled 40% absolute cover of native trees and shrubs (or 36% absolute cover when additional Reach 12 planting area monitoring results are included), which exceeds the MY 12 MO. Although Reach 12 alone only reached 7% cover (or 16% absolute cover when additional Reach 12 planting area monitoring results are included) in WY 2021, it was the youngest mitigation area (MY 4), and surviving individuals are expected to continue to grow and increase in cover." It is unclear whether the MO is for the whole UGRP, or is specific for Reaches 6, 10b, and 12. The discussion is confusing because it describes Reach 6 and 10b as meeting targets but Reach 12 as not meeting the targets. We request that Valley Water break the narrative into paragraphs that describe individual Reach results, the MO, and whether the MO is met. Adding plots and combining reaches to present different results are only helpful if the MO methods require it; otherwise, it adds unnecessary information, dilutes the results, and confuses the reader.

Section 3.2.8.2 Qualitative Assessment – Findings

We appreciate the addition of the encampment impact and the scale that was used. Human impacts to the mitigation areas have been ongoing and a limitation to achieving many of the MOs. It seems possible that the continued impacts due to visitation and encampments has the potential to preclude meeting MOs in some reaches. The discussion throughout Sections 3.2 and 3.3 suggests that human impacts are limiting some of the mitigation areas from meeting MOs. Encampments and human resource use are influencing mitigation success, while also being complex social issues that have been exacerbated during the pandemic. As stated above, we request Valley Water provide additional information regarding planned encampment cleanup actions for WY 2022.

3.2 Shaded Riverine Aquatic Cover

Section 3.3.5.3 Comparison to Measurable Objective.

The draft MMR states, "[b]ased on trend analysis, the Downtown Project average will exceed the MO with 90% shaded streambank by MY 40 with a 95% prediction confidence interval of 20–100% shaded streambank." We are concerned the reported information does not support this finding. We agree that the upper end of the 95% confidence interval and the estimate suggests that the MO will be met. However, all stream segments show a decline in SRA during the last round of monitoring. The confidence interval ranges from 20% to 100%, which is 80% of the value range (it's very large). The confidence intervals suggest that the result will occur between 20% and 100% with 95% confidence, which is a less positive indication that the SRA MO will be met. In some cases, the regression lines are nearly flat. With continued decline and no obvious positive correlation to show increase in SRA, it is concerning that three of the segments could potentially not meet the SRA MO at 40 years. Figure 3-10 suggests that we may be on the verge of a negative correlation between SRA and time. We recommend SRA monitoring be continued until a period of

increased SRA suggest a real recovery, or that the MO will not be met.

3.7 Anadromous Fish Passage and Rearing Habitat

The draft MMR (p. 3-53) summarizes sediment deposition in the low flow channel, but does not specify where (although it is apparent that it is in Reach 3B based on Table 3-24). We suggest adding "in Reach 3B" into the second sentence in Section 3.7.1.2. for clarity.

The draft MMR (p. 3-54) states: "[t]he Downtown Project did not meet the MOs on one occasion due to sediment deposition … The accumulated sediment was removed as soon as possible following the Fish Barrier Removal Protocol … and the measurable objectives were consequently met." We request that Valley Water provide more specific information regarding the timing and magnitude of flows during the storm event, and timing of observations of fish passage so we can quantitatively understand the flows that caused the deposition and the duration of sedimentation that impeded fish passage, and the recorded (versus estimated) flow magnitude when the sediment was removed.

The draft MMR (*id.*) also states that the area at the Weir #1 does not meet the MO, as has been the case for many years, and that "conceptual design options for weir remediation are being explored and were provided to the AMT in December 2021." We request the AMT schedule time for discussion to clarify the options for and relative priority of weir remediation once a design option is selected. We also request that Valley Water develop a firm schedule for final design and implementation, given that this fish passage impediment has been known since 2001.

Lastly, the first sentence at the top of page 3-55 should read "For flow equal to **or greater than** 100 cfs…" (bold text is suggested addition).

4.2 Recommendations

We are concerned that Valley Water has not made any recommendations in the draft MMR. At minimum, we request that Valley Water provide its recommendations for addressing some of the vegetation issues described above, as well as the fish passage impediment remediation at Weir #1. We do not offer additional specific recommendations at this time, aside from those offered in the text above, but may do so after the benefit of discussion at the AMT meeting.

Conclusion

Thank you for considering these comments. We look forward to the discussion at the annual AMT meeting on May 5. Please contact us if you have questions regarding these comments in advance of the meeting.

Sincerely,

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AMT members