KERN WATER BANK AUTHORITY

VIA EMAIL AND FIRST CLASS MAIL

January 18, 2021

Tim Ashlock, Engineer Manager
Buena Vista Water Storage District
P.O. Box 756
Buttonwillow, CA 93206
Email: tim@bvh2o.com

Re: Kern Water Bank Authority's Comments on Palms Groundwater Recovery Project Draft Environmental Impact Report;
State Clearinghouse #2020060315

Dear Mr. Ashlock,

1. INTRODUCTION AND SUMMARY.

The Kern Water Bank Authority ("KWBA") submits the following comments on the Draft Environmental Impact Report ("DEIR") for the Palms Groundwater Recovery Project ("Project") (SCH No. 2020060315) proposed by the Buena Vista Water Storage District ("Buena Vista" or "BV"). The DEIR fails to comply with the California Environmental Quality Act ("CEQA") for multiple, independent reasons. KWBA objects to certification of the EIR and the approval of the Project based on the legal and factual errors identified in this letter and attachments.

The purpose of the DEIR is to serve as an informational document for the public and for the decision maker by providing both quantitative and qualitative analysis of a proposed project's impacts on the environment.[1] An EIR that complies with CEQA allows the public to understand the basis on which the lead agency approved or rejected an environmentally significant action, so that the public, being duly informed, can respond accordingly to an action with which it disagrees.[2] An EIR that fails to provide sufficient information subverts the purposes of CEQA where it omits the material necessary to informed decision making and informed public participation.[3]

The DEIR is fundamentally flawed and violates CEQA informational standards. The inadequacies in the DEIR infect nearly every section of the document, including the Project description, alternatives, hydrology and water quality, biological resources, and the cumulative effects analysis.

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[1] Pub. Resources Code, § 21061; Cal. Code Regs., tit. 14 ("CEQA Guidelines"), § 15003, subds. (b)-(e).

[2] *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 515.

[3] *Id.*

The DEIR's fatal defects include, but are not limited to, the following:

- The DEIR presents a misleading evaluation of the direct, indirect and cumulative effects of the Project because DEIR does not evaluate the entire "project" as required by CEQA;

- Buena Vista has engaged in a classic invalid "piecemealing" analysis of Project effects. It first analyzed and evaluated recharge ponds using a negative declaration. It is those recharge ponds that Buena Vista relies on in this Project to supply the groundwater that would be extracted by this Project using recovery wells. This separates the analysis of the groundwater recharge ponds from the recovery wells, analyzing the two components entirely separately in violation of CEQA;

- The Project purpose includes attracting additional, yet-to-be defined partners; mixing water to meet the California Department of Water Resources' ("DWR") water quality standards for pump-in of non-State Water Project water, e.g., groundwater, into DWR's California Aqueduct ("Aqueduct") for the State Water Project ("SWP"); moving water through the Aqueduct but does not identify the purposes for which the water is being moved; and vaguely describes the sources of water recharge that the Project will rely on.

- The evaluation of the Project's water quality effects is misleading and uninformative because it is based on incorrect and incomplete water quality data, and there is no degradation or other adequate analysis of cumulative effects of the pump-in of poorer quality Project groundwater into the Aqueduct or whether Project pump-ins will impact other existing or future reasonably foreseeable banking projects' ability to meet DWR's standards;

- Because the Project will not recharge water in the lands outside the District, it will result in a significant and unreasonable reduction in groundwater storage within the Kern Groundwater Authority GSA ("KGAGSA") and West Kern Water District GSA ("WKGSA");

- The water quality impact analysis *does not consider* the environmental impacts of removing better quality groundwater located outside the BV District and Buena Vista GSA ("BVGSA") and within another GSA, without replenishment or replacement, or the impacts of blending such mined water with the poorer quality groundwater that will be recovered within the District where recharge occurs;

- The DEIR does not evaluate a reasonable range of alternatives including: alternative locations and configurations of the Project; an alternative that limits use of the Project water to the District; and alternative Project operations to minimize potential effects on groundwater, water quality, and biological resources;

- The DEIR fails to evaluate the significance of the effects of the Project as compared against valid CEQA existing condition and future baselines;

- The DEIR fails to include quantitative data on impacts to biological resources derived from protocol survey methodologies established by state and federal wildlife agencies;

- The DEIR does not include adequate mitigation and avoidance measures, and defers adequate definition of mitigation measures to the results of future studies;

- The DEIR does not disclose material assumptions in the groundwater model used for the Project which render the model fundamentally misleading and uninformative; and

- The DEIR improperly constrains cumulative impacts analysis to include only three other projects, and excludes the impacts of other past, present, and reasonably foreseeable future projects including, but not limited to, the Kern Fan Groundwater Storage Project and associated final EIR (State Clearinghouse #2020049019) approved and certified by the Groundwater Banking Joint Powers Authority on or about December 28, 2020.

These and other significant and fatal defects of the DEIR are described in further detail, below and in the attachments to this letter.

2. THE PROJECT DESCRIPTION IS INADEQUATE, INCONSISTENT AND INDEFINITE.

A. "Piecemealing" of the Project Description.

CEQA prohibits an agency from "piecemealing" the analysis of potential effects by dividing a larger project into smaller units. CEQA defines the term "project" to include the "whole of the action" being undertaken.[4] Here, the "whole of the action" includes: the construction, operation, and maintenance of the recharge ponds; the construction, operation, and maintenance of recovery facilities; the annexation of lands outside of the District, the sources of Project water, transmission of water within and outside the District, and uses of water surface and groundwater stored and recovered by the Project; and all ancillary facilities and activities.[5]

An "accurate, stable and finite project description, [which] is the *sine qua non* of an informative and legally sufficient EIR.'"[6] "A project description that gives conflicting signals to decision makers and the public about the nature of the project is fundamentally inadequate and

[4] CEQA Guidelines, §§ 15124, 15126.6.

[5] CEQA Guidelines, § 15124.

[6] *South of Market Community Action Network v. City and County of San Francisco* (2019) 33 Cal.App.5th 321, 332, citation omitted.

misleading." [7] The Project description provided by the DEIR is inadequate for multiple separate and independent reasons.

The description of the Project violates CEQA because it does not describe and evaluate the "whole of the action." Buena Vista first analyzed and evaluated the Palm's recharge ponds (not including any groundwater recharge via BV's existing canal system) using a negative declaration.[8] It is those recharge ponds that Buena Vista relies on in this Project to supply the groundwater that would be extracted by this Project using recovery wells. This separates the analysis of the effects of the groundwater recharge ponds from the recovery wells, analyzing the two components entirely separately in violation of CEQA. To the extent the DEIR is adding a third component – recharge via BV's existing canal system, in addition to such component not being adequately described or evaluated in the DEIR, there is a further segmentation problem since that component of recharge was not described or evaluated as part of the Palm's recharge in the negative declaration. Such a change would represent a substantial change and/or significant new information with respect to the project or circumstances described therein and would necessitate that recharge to be evaluated in this DEIR.

In the DEIR, the project description provides an uncertain and shifting description of the sources of banked water. The DEIR does not provide any description whatsoever of the participants in this banking and recovery project. The Project is designed to attract unidentified partners, and to transfer water outside of the District and outside of Kern County. The DEIR, however, does not identify or evaluate the uses, and effects of the uses, of the water outside of the District and Kern County. The DEIR does not include detail on the sources of Project water sufficient to allow for a detailed analysis of the effects on the water sources. (DEIR, p. 2-5.)

The DEIR fails entirely to describe the groundwater mixing elements of the Project. There is no description of the mixing facilities, process, or the location at which mixing would occur. The DEIR states that the purpose for the mixing is to allow the Project water to meet DWR's standards applicable to pump-in of non-SWP water into and movement through the Aqueduct. (DEIR, pp. ES-i, ES-ii, 2-5.) The Project description must identify the location of any facilities at which water would be mixed, and the ultimate destination and uses of the mixed water, so that the effects of the Project are analyzed and mitigated.

The DEIR indicates that parties other than Buena Vista may participate in the Project, but fails to identify who those parties would be, what the nature of their involvement would be, and whether the involvement of these third parties would alter Project operations or result in impacts resulting from such parties' use of banked supplies for growth or otherwise. (DEIR, p. 2-5 [identifies a Project objective as "Install recovery facilities to attract new banking partners in order to increase the groundwater in the Kern Subbasin for District use"].) As this is both an objective of the Project and is identified as part of the Project itself, the DEIR must identify, evaluate, and

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[7] *Ibid.*

[8] SCH #2020060092, Corn Camp Groundwater Recharge Pond Project (Mitigated Negative Declaration Approved June 3, 2020).

disclose any environmental impacts this might have, including disclosing the foreseeable use of Project water provided by the unidentified "partners."[9]

The Project description fails to describe the recovery capacity of the extraction wells that the Project would rely on. Rather, the Project description relies on a bare identification of the number of new and existing wells that would be used, and their approximate locations to satisfy CEQA's requirements. (DEIR, p. 2-6.)

The Project Description does not clearly identify that at least half of Project recovery will occur outside the BVGSA and within the KGAGSA. Neither the text nor Figure 2-2 identify the District boundary or the locations of the BVGSA, the West Kern Water District Banking project or GSA, the Kern Water Bank, or the KGAGSA.[10] All of these facilities/agencies are directly adjacent to the Project and significant stakeholders in the groundwater basin where that portion of the recovery project outside the District is located.

Section 2.3.2 (Operation) includes the following statement: "Available surplus water supply will continue to be recharged at the Palms Project during wet years. The District anticipates recharging up to 100,000 AFY through the Palms Project when surplus water supply is available. *The District also recharges groundwater through their existing canal system during wet years, a District practice for many decades*." [Emphasis added] Historic canal seepage in the District is not part of a bona fide groundwater banking program that has not undergone public review under CEQA. This water cannot be included in the Palms Project bank account without CEQA analysis. The canal system with the District extends over 20 miles to the north-northwest from the project area, and the DEIR includes no evaluation of using canal seepage to support the Project.

B. Inaccurate, Incomplete, and Unstable Description of Water Sources.

The Project description is inaccurate, incomplete, and unstable, particularly with regard to Buena Vista's description of the source of the water to be diverted for use by the Project and the nature and extent of Buena Vista's rights to divert and use such water. Water rights are economic entitlements or rights that, when exercised, have physical effects. CEQA requires the description and analysis of the physical effects associated with the exercise of claimed water rights.

Buena Vista asserts that it "controls an average entitlement of approximately 150,000 acre-feet per year (AFY) of surface water from the Kern River, based on the Miller-Haggin Agreement of 1888." (DEIR, p. 3-50.) It further asserts that it "has a net irrigated acreage maximum of about 40,000 acres." (DEIR, p. 1-6.) Buena Vista further asserts that this Kern River supply, in conjunction with its State Water Project ("SWP") supply, is sufficient to meet its water demand: "Conjunctive management within the District begins with deliveries of surface

[9] *Laurel Heights Improvement Assn. v. Regents of the Univ. of California* (1988) 47 Cal.3d 376, 394 n. 6 [finding that the failure to accurately describe the extent and cumulative impact of anticipated future plans rendered the project description inadequate, and rendered the EIR's discussion of future environmental effects inadequate].

[10] See Attachment N [Annotated DEIR Figure 2-2].

water from the Kern River and the Aqueduct with these two sources generating an average annual supply sufficient to meet District-wide demands." (DEIR at 2-1.)

The DEIR states that Buena Vista will divert and recharge up to 100,000 AFY of water when "surplus water" is available. (DEIR at Appendix D, Groundwater Model Report, at 3 ["The District anticipates recharging up to 100,000 AFY when *surplus water supply is available* through the Palms Project and their existing canal system during wet years, a District practice for many decades."].) It further states that Buena Vista will use this water "to partner with others to help meet their water supply needs." (DEIR, p. ES-ii.) The DEIR, however, contains no description or analysis of the basis for Buena Vista's claimed right to "surplus water," or the physical impacts associated with the diversion and use of "surplus water" on other water right holders and the environment.

The Project description fails to quantify Buena Vista's Kern River water supply, including the specific quantity that Buena Visa is relying on under its alleged right and any limitations thereon. In fact, the Project description contains no description of the Kern River water supply that the Project relies upon. (DEIR, pp. 2-5 to 2-6.) Instead, the Project description characterizes the water that would supply the Project as only that which is already banked. As this is a fundamental delimiter on the amount of recharged or banked water that would be available to the Project, it is integral to the Project description. Accordingly, the DEIR must be revised to properly identify the sources of the water for the Project (including water recharge that is subject to Buena Vista's Kern River water rights and any limitations thereon) in order to comply with CEQA.

C. Incomplete and Inaccurate Description of Water Rights.

The DEIR fails to disclose that Buena Vista lacks a water right for diversion of water to the Project. The DEIR asserts the right to divert "surplus water" from the Kern River. This claim is unsupported by water rights on the Kern River and California water rights law and is contrary to recent water rights orders of the State Water Resources Control Board.

The U.S. Army Corps of Engineers constructed the Kern River-California Aqueduct Intertie ("Intertie") as a flood control project in 1977. On October 2, 2008, the Water Board recognized that water was diverted "through the Intertie in six different years between 1978 and 1988, in 1997 and 1998, and again in 2006."[11] On these grounds, the Water Board determined that:

> [D]iversion of water to the California Aqueduct via the intertie on numerous occasions since its construction in 1977 confirms that there has been a change in circumstances since D1196. Kern River flows in excess of the established uses of historical water

[11] Attachment A [Memorandum from V. Whitney, Chief Division of Water Rights at State Water Resources Control Board to Katherine Mrowka, Chief Watershed Unit 3, Division of Water Rights, State Water Resources Control Board Re Petitions to Revise Status of Kern River on State Water Board Fully Appropriated Streams List, October 2, 2008].

> right holders have been available, and excess water has been put to beneficial use through the SWP.[12]

As a result of these changed circumstances, the Water Board found there was "sufficient information" to conduct a hearing on whether the Kern River's Fully Appropriated Stream designation should be lifted.[13] The Water Board held an evidentiary hearing on October 26 and 27, 2009, on the issue of whether Kern River water was in fact available for appropriation and the Water Board ultimately lifted the Kern River Fully Appropriated Stream Declaration. In so deciding, the Water Board cited, among other things, the following evidence presented by the "North Kern Petitioners," a group comprised of the Kern Water Bank Authority, Buena Vista Water Storage District, North Kern Water Storage District, Kern County Water Agency and the City of Shafter.

Likewise, the North Kern Petitioners presented a graph; exhibit JE 67, showing Kern River water "undistributed to existing entitlements" in several years. Daniel Easton, witness for the North Kern Petitioners, explained in his written and oral testimony that there was what he calls "undistributed release" water in at least eight months since 1964. Mr. Easton testified that water diverted into the Intertie is in excess of traditionally held and exercised rights and claims of right to Kern River water, and that whenever water has been released into the Intertie in the past, all Kern River water right claims had already been satisfied. This water is, by definition, unappropriated water. (Emphasis added.)[14]

This finding was based on evidence of "water diversions via the Kern River/California Aqueduct Intertie" which showed "Kern River water being diverted into the Intertie in nine separate years since 1978." (*Id.*) The State Water Board concluded, based on evidence presented during an evidentiary hearing, that Kern River water that reached and flowed past Second Point to the Intertie is available for appropriation.

Following the adjudicatory hearing that culminated in Water Board Order WR 2010-0010, certain parties filed petitions for reconsideration. In the Water Board's order on reconsideration, the Board re-analyzed the evidence supporting its finding that water is available for appropriation on the Kern River.[15] The Board affirmed that Kern River water is available for appropriation. (*Id.* ["the agreement [between DWR, the Kern County Water Agency and other water districts asserting water rights on the Kern River] limits Intertie diversions to flood flows *in excess of the needs of the districts claiming water rights on the Kern River*. Evidence presented at the hearing…directly supports this conclusion."].)

Orders WR 2010-0010 and WR 2010-0016 were challenged in the Kern County Superior Court. The trial court ruled that there was substantial evidence in the record to support the

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[12] *Id.*

[13] *Id.*

[14] Attachment B [Order WR-2010-0010: Order Amending Declaration of Fully Appropriated Streams to Remove Designation of the Kern River as Fully Appropriated].

[15] Attachment C [Order WR-2010-0016: Order Denying Reconsideration].

Water Board's finding that there may be unappropriated water in the Kern River.[16] The trial court's ruling was subsequently challenged in the Fifth District Court of Appeal. Orders WR 2010-0010 and 2010-0016 were affirmed on appeal, with that court noting:

> The evidence was clear, and essentially uncontroverted, that during occasional flood years water that is unappropriated—not physically claimed by any entity with a right to the water—has been diverted into the California Aqueduct….[17]

The Water Board's Orders 2010-0010 and 2010-0016, the Kern County Superior Court ruling, and the Fifth District Court of Appeal opinion all confirm that unappropriated water exists on the Kern River, as evidenced by water being diverted into the Intertie and in excess of the needs of the districts claiming water rights on the Kern River, including Buena Vista. Buena Vista does not have a water right to all Kern River water that reaches Second Point of Measurement, and Buena Vista is not entitled to rely upon such claimed flows for the project as discussed in the DEIR. This concern is more fully expressed in the KWBA's water rights Complaint against Buena Vista filed on August 8, 2019, with the Water Board, enclosed as Attachment F. That Buena Vista lacks a right to unappropriated water Kern River water is not disclosed, discussed, or evaluated in the DEIR. This constitutes a violation of CEQA.

D. Failure to Disclose that Buena Vista is Seeking—But has not obtained—a Water Right to Surplus Water the Project Relies Upon.

The DEIR fails to disclose that Buena Vista is seeking—but has not yet obtained—a water right to the Surplus Water it relies on for the Project. In 2007, following the State Water Board's determination that water is available for appropriation on the Kern River, Buena Vista filed Application No. A031675 with the State Water Resources Control Board to appropriate surplus Kern River water. This application seeks a permit to appropriate 180,000 acre-feet annually of Kern River Water by direct diversion and 520,000 acre-feet annually of water for collection to storage, for a total maximum combined diversion amount of 700,000 acre-feet in any year.[18]

To date, Buena Vista has not secured this right or any other right to surplus Kern River water, which is subject to the law and procedures of the State Water Resources Control Board governing the appropriation of water in California. The DEIR fails to disclose, discuss or evaluate Application A031675 or the environmental effects of the increased Kern River diversions contemplated by that application. This constitutes a violation of CEQA.

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[16] Attachment D [*North Kern Water Storage District v. State Water Resources Control Board*, Case No. S-1500-CV 270613 NFT, Judgment Denying Petition for Writ of Administrative Mandate (July 21, 2011)].

[17] Attachment E [*North Kern Water Storage District v. State Water Resources Control Board*, F063989, Opinion (April 18, 2013)].

[18] Attachments G-1, G-2 [Application No. A0301675 of the Buena Vista Water Storage District to the State Water Resources Control Board.

3. THE HYDROLOGY/WATER QUALITY ANALYSIS IS MISLEADING AND INADEQUATE.

The Palms Groundwater Recovery Project as described in the DEIR fails to disclose critical data regarding both groundwater levels and quality, is poorly conceived, and may in fact be infeasible.[19] The primary objective of the project is to "Recover banked groundwater of suitable water quality that can be blended, as needed, to meet water quality standards for pump-in to the California Aqueduct (Aqueduct)." (DEIR p. ES-I and 2-5.) Recharge for the Palms Project only occurs in recharge ponds within the District (and the Buena Vista Groundwater Sustainability Agency (BVGSA)). However, in order to meet the stated objective, the District intends to recover better quality water from lands outside the District and within the Kern Groundwater Authority GSA (KGAGSA) to blend with the poorer quality water recovered within the District. Importantly, there is no intent to recharge water on the lands outside the District or replace the good quality groundwater extracted by the Project from KGAGSAS's portion of the groundwater subbasin. The Project, by its very design, will result in both significant environmental impacts to water resources and lead to undesirable results as defined by the Sustainable Groundwater Management Act, Water Code section 10720 *et seq.* ("SGMA").

A. Utilization of Limited and/or Incorrect Data and Nondisclosure of Existing Critical Data

Much of the analysis for the Project is conducted with limited and/or incorrect data and without disclosure of substantial existing data.[20] These data sets include water level and flow direction information, groundwater quality information within the District, and water quality information within the California Aqueduct. Concealment of relevant data from the public and decision makers is contrary to CEQA's full disclosure requirements and precludes informed decision making.

(i) Groundwater Level and Flow Directions

With respect to groundwater levels and flow directions, the DEIR describes flow directions as generally in a southeasterly direction using data from a single map from January 2015. Abundant groundwater data for the area is available but is not disclosed in the DEIR. For example, a discussion of groundwater flow directions provided in the Negative Declaration for the Palms Project Recharge Phase, but not disclosed or referenced in the DEIR, stated:

> "Local groundwater flow direction near the Palms Project appears to be in a westerly direction and may indicate that the canal east of the project is currently providing recharge to the area. Three nearby wells with good records of groundwater level measurements were analyzed to determine the local flow direction (W-1, W-2, and DMW-12B). The three wells had 44

[19] Attachment H, Dr. E. John List, Technical Memorandum, p. 1.

[20] *Id.,* p. 1 ["there is a paucity of data describing in detail the water quality issues that will be associated with the project."]

> measurements that were taken simultaneously between 1994 and 2013, and the direction and gradient of the groundwater surface was calculated. Figure 12 shows the range of flow directions and the average flow direction to the west-southwest. The average gradient was 0.017 ft vertically/ft horizontally."[21]

Importantly, Figures 11 and 12 in IS/MND Assessment of Potential Groundwater Impacts clearly shows groundwater flow away from the proposed out-of-District recovery wells.

(ii) Groundwater Quality Information

The description of groundwater quality in the Project Area is misleading and does not disclose available information. (DEIR p.3-59 to 3-60). The discussion divided the area into a west and east area with the East Side Canal (the District boundary) serving as a dividing line. Table 3-6 is a list of wells in each area and is captioned "Wells used in Water Quality Analysis." Ten wells are listed for the area west of the East Side Canal. However, the text then states that, due to limited data, only one well is used as a "representative well." The text then goes on to state: "For *wells* located west of the East Side Canal, sulfate and TDS slightly exceeded the drinking water standards." (Emphasis added.) The DEIR also states "…the west side does not have arsenic…"

Table 3-7 (DEIR p. 3-60) lists water quality for the "representative well" located west of the Eastside Canal and the wells located east of the Eastside Canal. The water quality shown for most constituents is comparable in the two areas, and in fact for some, the water quality shown is better in the western area (e.g. for arsenic).[22] However, contrary to the information for the "representative well", GEI in 2017[23] conducted an evaluation of groundwater in the District "to provide California Environmental Quality Act (CEQA) compliance support services for the Palms Groundwater Bank – Recovery Phase (Project)." This evaluation (not included in the DEIR) documents groundwater quality in several wells west of the Eastside Canal, and these wells have concentrations of TDS, arsenic, and other constituents that are far greater than the limited data presented in the DEIR (e.g. TDS concentrations in well DMW12A and B reached 9,200 and 4,760 ppm, respectively). Yet the information from this study was not disclosed or referenced in the DEIR. Rather, the much more limited data from the "representative well" was provided.[24]

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[21] Attachment K [Initial Study/Mitigated Negative Declaration, Assessment of Potential Groundwater].

[22] At face value, this data brings into question one of the primary objectives of the Project: "Recover banked groundwater of suitable water quality that can be blended, as needed, to meet water quality standards for pump-in to the California Aqueduct (Aqueduct)." If the water quality in both areas is comparable, it would seem there is no need to recover water east of the Eastside Canal (and outside the BVGSA) and induce or create the environmental impacts identified in these comments. This would also indicate that the Palms Area-Only Layout would be the far superior Alternative (DEIR p. 5-4).

[23] Attachment J [GEI, Water Quality Review of Groundwater Wells for the "Palms" Recovery Project, Feb. 17, 2017.]

[24] Attachment H [Dr. E. John List, Technical Memorandum, p. 1 (January 14, 2021)].

(iii) California Aqueduct Water Quality

Table 3-5 (DEIR p. 3-52) lists purported average and maximum concentrations of Total Dissolved Solids ("TDS") and other constituents in the Aqueduct upstream and downstream of the Project. For example, the concentration of TDS is listed as 416 ppm and 436 ppm upstream and 263 ppm and 434 ppm downstream, respectively, for average and maximum values. The upstream average is clearly erroneous. The background value used for current recovery programs is 239 ppm. The DEIR references the DWR Pump-in Policy which also lists upstream TDS values. None of these values approach 416 ppm. The clearly incorrect values for TDS and other constituents in the DEIR results in an incorrect blending evaluation later in the document (DEIR p. 3-85) and a DEIR that does not comply with CEQA standards as an informational document.

In summation, the DEIR must be revised to disclose all available water level and quality data and provide a thorough evaluation of that data, so that the public and decisions makers can understand the potential impacts of the Project.

B. Impact Analysis

The impact analysis was conducted with the limited and/or incorrect data discussed above. As a result, the analysis cannot reliably predict the environmental impacts of the Project.

(i) Groundwater Levels

A superposition groundwater model was used to evaluate groundwater level changes expected from the Project. The model is intended to simulate the impacts of the project. However, there are several weaknesses in the application of this type of model for this Project.

- Use of a superposition model should be limited to a linear aquifer system with relatively uniform thickness and linear boundary conditions (such as aquifer pumping tests). Use of a superposition model with non-linear boundary conditions such as transient recharge and recovery operations at many locations surrounding the Project may yield unreliable results.

- The Palms Project MODFLOW model was derived from the USGS Central Valley Hydrologic Model (CVHM) and is re-districitized to a refined model grid with fewer model layers and averaged hydraulic properties. It is a completely new MODFLOW model that should be calibrated to existing site conditions and hydraulic stresses prior to use for predictive simulations. This did not occur.

- During model "validation" it became apparent that the Palms Project superposition model could not simulate historical long-term changes in head associated with recharge and recovery pumping without adding the significant operations of nearby water banking projects. This demonstrates that the boundary conditions are non-linear, and simulation

results are dependent on activities located away from the Palms Project site.

- The Palms Project Recovery Scenarios A & B were then simulated using the superposition model without including the other water banking projects in the area. As such these results may overestimate recharge mounding and underestimate recovery drawdown.

A detailed review of the model is provided in Attachment L.

In addition to the listed weaknesses, the groundwater modeling report incorporates the inaccurate southeasterly flow directions described above, instead of relying on the more robust data provided in the Negative Declaration for the Palms Project Recharge Phase, which indicates a westerly flow direction. The operational scenario used to evaluate groundwater level changes is also unrealistic. It assumes the recharge of 100,000 AF of water in 8 months in the Palms recharge ponds. The recharge rate to accommodate the modeled scenario, 0.36 feet/day, is too high for this area. The lower recharge rates that would be expected for the area are indicated by the much more limited volumes of water historically recharged in the ponds: 14,164 AF in 2017 and 13,002 AF in 2019. With respect to the modeling results, an exaggerated recharge volume overestimates the extent of the predicted groundwater mound, which then underestimates the extent of the ensuing drawdown during Project pumping. Incorporating this overstated recharge mound, the DEIR states that the maximum drawdown adjacent to the Project is no more than 10 feet after four years of pumping the 100,000 AF recharge volume. However, the actual absolute drawdown reaches at least 35 feet. The DEIR also lacks a survey of wells in the area. A thorough evaluation of the likelihood of impacts to adjacent well owners cannot be conducted without this information. The DEIR should correct the deficiencies in the model discussed above, complete a survey of wells in the area, and then conduct more realistic banking scenarios.

(ii) Water Quality

The groundwater analysis does not consider the environmental impacts of recovering better quality groundwater outside the District and BVGSA, without replenishment, to blend with the poorer quality groundwater that will be recovered within the District where recharge occurs. As stated earlier, the District intends to recover water from lands within the KGAGSA in an area where no water has been or will be recharged or replaced by the District. Contrary to the limited data provided in the DEIR, the groundwater quality in the area outside the District is much better quality that that within the District where the recharge for the project occurs (GEI, 2017 [Attachment J]). The Project, by pumping groundwater outside the District without replenishment or replacement, will essentially be mining good quality groundwater in an effort to make the project feasible. This aspect of the project will clearly create significant and unmitigated environmental impacts and contribute to undesirable results in conflict with SGMA.

(a) SGMA Considerations

SGMA regulations identify six sustainability indicators that Groundwater Sustainability Plans ("GSP") must consider. They are groundwater-level declines, groundwater storage reductions, water quality degradation, land subsidence, interconnected surface-water depletions, and seawater intrusion. The undesirable results pertinent to this Project are one or more of the following effects related to these indicators:

1. Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon. Overdraft during a period of drought is not sufficient to establish a chronic lowering of groundwater levels if extractions and groundwater recharge are managed as necessary to ensure that reductions in groundwater levels or storage during a period of drought are offset by increases in groundwater levels or storage during other periods;

2. Significant and unreasonable reduction of groundwater storage;

3. Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies.

Because the Project will not replenish groundwater by recharging water on the lands outside the District where Project recovery will occur, it will result in a significant and unmitigated reduction in groundwater storage within the KGAGSA and West Kern Water District GSA ("WKGSA"). This reduction in storage is reflected in the hydrographs developed for the cumulative impact analysis for the Project. Water levels is wells RMW-89-WKWD, RMW-58-RRWSD, and RMW-059-RRWSD are all projected to drop below established Minimum Thresholds (DEIR Figures 4-2 and 4-3, p. 4-9 and 4-10) It should be noted that the recovery portion of the project within the KGAGSA is immediately adjacent to the Kern Water Bank and West Kern Water District recharge basins (DEIR, Figures 2-1 and 3-9, p. 2-2 and 3-71). Absent these facilities, the water level impacts from the Project would be even greater. The Project will also deplete good quality groundwater without replenishment. Even if this will not degrade groundwater quality within the KGSGSA and WKGSA, the Project will reduce the volume of good quality water available for beneficial uses within the KGAGSA and WKGSA.

The Project proponents may claim that the water they are recharging within the District will migrate into the recovery area outside the District thereby sustaining groundwater storage. However, if this were to occur, clearly the Project would be inducing the migration of poor-quality groundwater within the District into an area of better-quality groundwater outside the District, another significant and unmitigated environmental impact and an undesirable result under SGMA regulations.

(b) Surface Water Impacts

The potential for impacts resulting from the discharge of Project water into the California Aqueduct are described under Impact HYDRO-2, which states: "The Recovery Project could have impacts to the water quality of the Aqueduct, if drinking water standards are not met." This statement is misleading and incorrect. The standard for discharges to the Aqueduct include degradation standards. That is, discharges to the Aqueduct must not degrade the existing quality of water in the Aqueduct if unmitigated. For most, if not all constituents, these values are lower than drinking water standards. (For example, the background concentration of arsenic in the Aqueduct is typically 2 ppb, whereas the drinking water standard is 10 ppb). Under no circumstances are discharges to exceed drinking water standards.

With respect to the analysis of potential impacts to surface water in the Aqueduct, the results of blending calculations were used to determine the expected quality of delivered water. The calculations used the quality data from the "representative well" (Table 3.9. p 3-85) for water recovered west of the Eastside Canal. As stated earlier, several wells in the area west of the Eastside Canal exhibit much poorer water quality than the "representative well." As a result, the calculations significantly underestimate the resultant water quality. The blended Project water was then compared to upstream values in the Aqueduct. Because Project water exceeded the upstream values in the Aqueduct (incorrectly) reported in the DEIR, the following five (5) mitigation measures were proposed.

MM HYDRO-1 states: "Isolation aquifer zone testing or installation of nested monitoring wells will be conducted to identify aquifers with poor quality water prior to new well construction until the aquifers and water quality is better understood and then may be discontinued."

MM HYDRO-2 states: "If needed, patches will be installed into a constructed well to improve water quality from the well. The depth of the pump may also be modified to improve water quality."

MM HYDRO 3 through 5 consist of groundwater quality monitoring, updating blending calculations, and following monitoring and reporting requirements in DWR's pump-in policy. Note that MM HYDRO-2 is the only mitigation measure that has the potential to improve the quality of recovered Project water, but lacks performance standards. In addition, Project operations will alter groundwater conditions through time. As such, Project monitoring must not be discontinued. Notably, ongoing groundwater monitoring is a key facet of all the banking programs in Kern County.

There are several problems related to the analysis completed for this environmental impact. First, the blending calculations used the quality data from a single "representative well," which does not reflect the significantly worse quality conditions in the area. Second, the analysis assumes drinking water standards rather than more restrictive degradation standards apply. Third, Project water is compared to incorrect values for upstream Aqueduct quality. The result of these compounding errors is intended to suggest that the project is feasible with the mitigation measures listed above. However, an analysis using the water quality from most of the wells west

of the Eastside Canal indicates the TDS of the resultant blend would be nearly 1,000 ppm and the sulfate concentration would be over 300 ppm. Both of these high contaminant values exceed the respective drinking water standards for these constituents and would preclude the delivery of Project water to the Aqueduct. These compounding errors must be corrected and the analysis for this impact re-evaluated, taking into consideration relevant and representative quantitative data, to determine if the Project is even feasible, in addition to being necessary to adequately evaluate the Project's environmental effects, and to identify specific and enforceable mitigation measures that comply with CEQA standards.

Finally, the data revealed in the GEI memo indicates very high concentrations of TDS underlying a portion of the Palms recharge basins. Recharging very good quality water from the Kern River and SWP may actually be a waste and unreasonable use under California water law in violation of Article X, Section 2 of the California Constitution, and SGMA. It should also be noted that groundwater pumping in the Palms Recharge Basin area could also induce the migration of extremely poor-quality western water to the east, another significant environmental impact not evaluated in the DEIR.

A detailed review of the DEIR regarding water quality impacts is provided in Attachment H, prepared by Dr. E. John List, Ph.D., P.E.

C. Memorandum of Understanding and Operating Plans

The District executed a *Memorandum of Understanding Regarding Operation and Monitoring of the Buena Vista Water Storage District Groundwater Banking Program* on January 1, 2003 (MOU). The MOU applies to planned banking facilities within the District, but specifically excludes wells located outside the District boundary.[25] The MOU also clearly states that: "Recovery of banked water shall be from the Project Site and recovery facilities shall be located therein. Recovery from outside the Project Site may be allowed with the consent of the District or entity having jurisdiction over the area from which the recovery will occur and upon review by the Monitoring Committee."[26] The Palms Project recovery wells located outside the District have not been reviewed or approved by the KGAGSA.

The MOU also prescribes minimum operating criteria, mitigation measures, and project monitoring requirements. Measures to prevent significant adverse impacts from occurring may include: (1) spreading out recovery areas; (2) providing buffer areas between recovery wells and neighboring overlying users; (3) limiting the monthly, seasonal, and/or annual recovery rate; (4) providing sufficient recovery wells to allow rotation of recovery wells or the use of alternate wells; (5) providing adequate well spacing; (6) adjusting pumping rates or terminate pumping to reduce impacts; and (7) imposing time restrictions between storage and extraction to allow for downward percolation of water to the aquifer. The MOU also stipulates water quality is to be at least maintained and, where possible, enhanced. Some of the measures prescribed in the MOU to protect water quality include: 1) giving storage priority to the best quality water available,

[25] Attachment M, ¶ 1.
[26] *Id.* ¶ 2(b)(11).

2) removing more salts than are stored, 3) controlling the migration of poor quality water, and 4) extracting poorer quality groundwater where practicable (and where blending with excellent quality water from elsewhere in the project results in the water quality objectives of downstream users being met). None of these requirements have been described in the DEIR or evaluated for their effectiveness in eliminating significant impacts or consistency with the Project.

The Kern Water Bank, Pioneer and Rosedale water banking projects on the Kern Fan in the Project vicinity have also developed an Operating Plan that provides mitigation measures for impacts to landowner wells. The Plan designates measures to prevent, eliminate or mitigate significant adverse impacts resulting from water banking project recovery operations. The Plan includes, in part, the following components:

1. Formation of a Joint Operating Committee (JOC): The JOC consists of representatives of each of the banking projects and meets as needed during recovery years to evaluate groundwater conditions, model results, landowner claims, and any other topics of concern. The JOC evaluates all claims and approves or rejects such claims.

2. Evaluation of Groundwater Conditions: Groundwater models are used to evaluate With Project versus Without Project groundwater levels and predict potential groundwater impacts to nearby wells. The models are updated regularly and compared to actual conditions during years in which recovery occurs. The models are used to: 1) forecast with-project and without-project groundwater levels at the outset of recovery programs; 2) forecast any localized areas for special attention and/or monitoring; 3) attempt to identify domestic wells at risk of impacts; and 4) determine if mitigation triggers (thresholds) have been met.

3. Mitigation measures: The mitigation measures, if warranted, will include one or more of the following:

    a. Providing a short-term emergency water supply to domestic well owners. Short-term emergency supplies shall be provided as soon as reasonably possible, but in all cases within 14 days of notification to the JOC of such needs;

    b. Providing funds to lower a well pump;

    c. Providing funds to complete a connection to an M&I water provider;

    d. Supplying an equivalent water supply from an alternate source;

    e. Providing funds to replace the affected well with a deeper well that meets Kern County well ordinance standards;

f. Reducing or adjusting recovery pumping as necessary to avoid the impact; or

g. With the consent of the affected landowner, providing other acceptable mitigation.

None of these requirements have been described in the DEIR or evaluated for impact mitigation or consistency with the Project.

4. INADEQUATE DESCRIPTION OF PROJECT BASELINES.

A fundamental goal of an EIR is to inform decision makers and the public of any significant impacts that a project is likely to have on the physical environment, as it exists at the time of the preparation of the DEIR, without the proposed project. In order to do so, an EIR must delineate in sufficient detail the environmental conditions that actually exist at the time of the preparation of the DEIR.

The EIR must define an existing conditions "baseline" against which project impacts can be described and quantified.[27] The physical conditions that exist at the time of the notice of preparation of the DEIR normally constitute the required environmental baseline against which the project's impacts are described and evaluated. In certain narrow conditions (e.g. where the physical conditions at the time of the notice of preparation for the DEIR would provide a misleading analysis), the DEIR may also evaluate the effects of the projects against another, alternative baseline that would provide the public with an adequate evaluation of the project's effects against actual, and not hypothetical, conditions. Where the lead agency chooses an environmental baseline that does not reflect existing physical conditions, the lead agency must explain why the selected baseline is appropriate, and why an existing conditions baseline would not be appropriate or would be misleading.[28]

The DEIR here fails to describe the environmental baseline for each of the resource categories it addresses. In some cases this failure includes omission of any description of the relevant physical conditions at the time of the filing of the Notice of Preparation for the DEIR on June 16, 2020.

(i) The Biological Resources Baseline is Inadequate.

The biological resources section describes the environmental setting in terms of vegetation cover types, and listed observations of special status species and plant communities in the Project vicinity, as shown on state regulatory agency databases, and then summarily indicates that "existing conditions" are the baseline. However, in doing so, the biological resources section fails to include any surveys that are at a sufficient level of detail to determine the actual presence or absence of threatened, endangered and other special status species in the Project vicinity. Rather, the DEIR relies on limited biological resource surveys, performed at

[27] CEQA Guidelines, § 15125.

[28] *Id.;* see also *Neighbors for Smart Rail v. Exposition Metro Line Construction Auth.* (2013) 57 Cal.4th 439, 447-448.

a time of the year which is not relevant to all of the potential species of concern, and fails to describe the survey methods at all.

Accordingly, the "existing conditions" are not adequately described in the DEIR. In the absence of adequate and complete biological surveys, the DEIR is unable to describe adequately actual conditions, or evaluate effects on biological resources. Rather they represent the theoretical conditions, assuming the data in state regulatory agency databases is sufficiently specific to derive conclusions regarding the exact Project location.

A review of biological resources portions of the DEIR by Biologist James W., Jones, Jr., dated January 11, 2021, is attached (Attachment O).

(ii) The Hydrology Baseline is Inadequate.

The DEIR does not appear to use conditions at the time of the Notice of Preparation for the DEIR on June 16, 2020. The DEIR addresses only the Buena Vista Groundwater Sustainability Agency's GSP, but acknowledges that there are no less than four others that affect the groundwater levels in the Kern Subbasin. As the Project is proposed in the Kern Subbasin, it is clear that any actions impacting the portion of the basin covered by the BVGSA's GSP, will also influence the groundwater levels in areas under the authority of other Groundwater Sustainability Agencies and Groundwater Sustainability Plans. Yet, the DEIR does not describe, let alone analyze, the Project's groundwater impacts in the context of those other agencies and plans.

The Project proposes to recover and distribute water that is "banked" within the groundwater aquifer, thereby having an inherent effect on the groundwater levels within the Kern Subbasin. Because the DEIR describes the baseline as including only the portion of the Kern Subbasin under the authority of the BVGSA, the baseline provides an improper and artificially truncated geographic scope of the groundwater environmental baseline. Moreover, the Project proposes to extract water outside of the BVGSA, and within the jurisdiction of the KGAGSA. The DEIR must therefore discuss not only the BVGSA, but at a minimum must also discuss the KGAGSA, its current status and properly analyze any impacts the Project may have on achievement of SGMA standards within the KGAGSA.

The DEIR also fails to describe why it is reasonable for groundwater quality to limit the baseline to conditions between Stockdale Highway on the north, BVWSD southern boundary on the south, Dunford Road on the west, and Morris Road on the east. While the DEIR recognizes that the groundwater aquifer can be effectively delineated into three discrete areas, but neither correlates those delineations with the chosen boundaries for groundwater quality analysis nor identifies whether those boundaries are reasonable on their own.

The baseline for the evaluation of impacts on hydrology and water quality should include the identification of all landowner wells within the potential area of hydrologic influence of the Project. As BV is aware, the recovery of banked water has the potential to lower groundwater levels and impact the operation of individual domestic and agricultural wells. In the absence of

an identification of landowner wells, the DEIR is not able to evaluate adequately the potential impacts of the Project on domestic and agricultural water supplies.

In addition to a comparison of project effects against the existing conditions baseline, CEQA requires an evaluation of project impacts against a "no project" baseline. The no project baseline is required to be based on "what would be reasonably expected to occur in the foreseeable future if the project is not approved."[29] In evaluating the potential future impacts of the Project, the DEIR assumed a continuation of current surface water availability over a 50-year planning horizon under a range of climatic conditions." (DEIR, pp. 4- 6.). The assumption of continuation of current surface water availability over the next 50 years is unreasonable and misleading.

The DWR estimates that "[b]y the end of this century, California's Sierra Nevada snowpack is projected to experience a 48-65% loss from the historical April 1 average." (https://water.ca.gov/Programs/All-Programs/Climate-Change-Program/Climate-Change-and-Water [visited 4.29.20].) Reductions in the Sierra Nevada snowpack, and increasingly stringent environmental restrictions on State Water Project exports are projected to reduce materially the reliability of water deliveries from the State Water Project.

As is extensively documented in the 2010 Final EIR and 2016 Revised Final EIR[30] regarding the Monterey Amendments to the State Water Project water supply contracts, future additional water supplies from the SWP and CVP are constrained significantly by environmental regulations. SWP Table A water allocations have been restricted materially over the last decade. State Water Project contractors are requesting an allocation of their full Table A amounts. The 2010 and 2016 Revised Monterey Amendment EIRs projected that Article 21 water supplies will be increasingly limited because of environmental restrictions, climate change impacts, and because SWP contractors are now requesting all of their Table A water.

There is intense competition for Article 21 water when it is available. There are similarly material limitations on additional Kern River supplies. As Buena Vista is aware, there are multiple pending applications pending before the State Water Resources Control Board for the appropriation of unappropriated Kern River water. The CEQA documents for some of these applications describe the impacts of the use of Kern River water on the environment. The DEIR ignores this information in its unreasonable assumption that surface water supplies relied upon by the Project will remain unchanged for the next 50 years. The DEIR is required to describe a realistic no project baseline that takes into consideration project impacts on climate change and other limitations on surface water supplies projected to occur over the life of the Project.

5. THE RANGE OF ALTERNATIVES IS INADEQUATE.

An EIR must "describe a range of reasonable alternatives to the project . . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen

[29] CEQA Guidelines, § 15126.6, subd. (e)(2).

[30] The 2010 Monterey Plus EIR and the 2016 Revised Monterey Plus EIR are provided under separate cover.

any of the significant effects of the project . . . ."[31] The DEIR includes a no project alternative, which appears to include water banking without a method for recovery in perpetuity, the preferred alternative, and a single variation on the pumping amounts contemplated by the preferred alternative (the so-called Reduced Recovery Alternative). No other alternatives were carried forward for detailed study in the DEIR. The DEIR asserts that this is because other alternatives that were considered but rejected would either have greater significant impacts on the environment or because they were found to be infeasible.[32]

Specifically, the DEIR considered, and rejected three other alternatives, without evaluating the alternatives in detail.[33] These alternatives considered a recovery alternative that would allow private landowners to take control of the recovery pumping, but was rejected primarily because it wouldn't include constructing new District-controlled water distribution infrastructure. The DEIR does not indicate any reason that infrastructure for pumping recovered water could not have been incorporated into this alternative, and offers no reason other than the absence of that infrastructure for its rejection.

The DEIR does not justify adequately its decision to summarily dismiss the Landowner Recovery Alternative or the Palms Area-Only Alternative, and the DEIR therefore fails to evaluate a reasonable range of alternatives. For the Palms Area-Only Layout, the DEIR only evaluated a layout of 34 recovery wells, without considering reduced recovery variations for this alternative or fewer recovery wells. The DEIR concludes without adequate analysis on the grounds that the groundwater quality would not be sufficient for blending and then transportation through the Aqueduct.

Even if the alternatives do not accomplish all of a project's goals and objectives, CEQA requires that alternatives be evaluated and compared against the proposed Project.[34] One of an EIR's major functions "is to ensure that *all reasonable alternatives* to proposed projects are thoroughly assessed by the responsible official."[35] Similar to the discussion of alternatives that the California Supreme Court found inadequate in *Laurel Heights Improvement Association*, the DEIR's discussion of these alternatives is cursory and does not reflect an adequate discussion of alternatives as CEQA requires.

As documented above, proposal to recharge water on the west side in an area of poor quality, and to recovery water on the east side in an area of good water quality, has significant and adverse water quality and hydrological impacts. Buena Vista's only justification for mixing water of differing quality is so the Project water meets Aqueduct water quality standards so that the water can be transferred to undefined "partners" in southern California. There is an obvious

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[31] CEQA Guidelines, § 15126.6, subd. (a).

[32] DEIR, pp. 5-3 through 5-6.

[33] *Id.*

[34] CEQA Guidelines, § 15126, subd. (d)(3); *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 400

[35] *Laurel Heights Improvement Assn. v. Regents of University of California, supra*, 47 Cal.3d at p. 400, citing *Wildlife Alive v. Chickering* (1976) 18 Cal.3d 190, 197, emphasis added.

alternative to avoid and minimize these water quality and hydrology impacts – an alternative that does not require moving recovered water to the Aqueduct for sale to southern California.

The first stated objective of the Project is to "increase conjunctive management on the west side of the county by improving the District's ability to meet demands during periods when water supply is limited. (DEIR, p. 2-5.) The second stated objective is to "improve the conveyance of water throughout the District. *Id.* Because this objective may be achieved without sending water to southern California, the DEIR is required to evaluate an alternative that restricts use of Project water to landowners within the District – avoiding the need to mix water to meet Aqueduct water quality standards.

The DEIR also does not evaluate an alternative that includes recharge on the off-District lands. Such an alternative may reduce the many environmental impacts the project currently causes.

The DEIR does not evaluate any alternative to the operation of the recharge ponds. The Kern Water Bank is located immediately to the east of the Project. The Kern Water Bank provides a real-life, successful, example of a feasible alternative to the Project that would minimize and mitigate the potential effects of the Project – on groundwater, water quality and biological resources. The DEIR should be revised to include a water banking operation including the enforceable commitments to the protection of the biological resources included in the Kern Water Bank HCP/NCCP. The commitments should include a detailed description of (i) the biological resource objectives of the Project, (ii) enforceable standards for minimizing and mitigating the impacts of Project operations on listed and special status species, and (iii) conveyance of conservation easements to the California Department of Fish and Wildlife that provide long-term conservation protection for listed species.

The Project's highly-engineered recharge ponds are devoid of vegetation, and they will be aggressively managed to eliminate vegetation. The highly-engineered recharge ponds will have none of the environmental values provided by the mosaic of seasonal wetland and upland habitat conserved by the Kern Water Bank HCP/NCCP.[36] Instead, the highly-engineered recharged ponds shown in the DEIR create the risk of creating a biological sink by attracting migratory birds and other species, but without food, cover, buffers and other elements necessary to conserve these populations. The DEIR is devoid of any analysis of this risk.

6. THE DEIR'S EVALUATION OF THE PROJECT'S EFFECTS DOES NOT COMPLY WITH CEQA'S INFORMATIONAL STANDARDS.

The DEIR addresses only four resource areas with direct impacts – biological resources, cultural resources, hydrology and water quality, and geological resources. This truncated direct impacts discussion and analysis fails to comply with CEQA's directives. CEQA requires a discussion of all of a proposed action's impacts on the environment -- both direct, indirect, and

[36] A detailed descriptions of the environmental values and requirements of the Kern Water Bank HCP/NCCP is included in the 2016 Revised Monterey Amendment included in the Authority's files.

cumulative.[37] Here, the DEIR summarily states that all of the effects in each resource area that is not discussed in the DEIR were found to not be significant (e.g., air quality, GHG, etc.).[38]

With respect to air quality and greenhouse gases (GHG) specifically, the DEIR's reasoning is that the construction impacts would be minimal and temporary, but does not include any real analysis of the Project's potential impacts during operation. For example, the DEIR does not specify the type of recovery pump that would be used nor does it specify that the recovery pumps would be monitored for their efficiency and level of GHG emissions.

With respect to energy, the DEIR fails to substantially consider the Project's potential impacts. The DEIR states only that the "Recovery Project would be limited to the recovery of previously banked water at generally higher groundwater levels which would result in lower energy usage."[39] However, what the Project proposes is a use that would not exist in the absence of the Project, and energy use required to operate the recovery wells that would not exist absent the Project. This impact should be discussed in sufficient detail for the public and decision makers to understand why the Project's energy use would be "less than significant."

With respect to air quality, the DEIR acknowledges that part of the basis for the Project is the change from row crops to permanent crops. The District has a gross irrigable acreage of about 50,000 acres. The DEIR states about half the District lands are planted with permanent crops, as growers migrate away from row crops. The DEIR estimates that the conversion to permanent crops may increase the water demand by 1 acre-foot per acre. The DEIR does not, however, analyze potential air quality impacts associated with the projected indirect effect of conversions from row crops to tree crops. The DEIR also does not analyze the potential water supply impacts of increasing demand associated with changes in crop patterns that could be attributable to the Project.

The failure of the DEIR to provide an adequate analysis of the Project's impacts on hydrology and water quality is discussed above in Section 2. The DEIR's evaluation of other effects also does not comply with CEQA informational standards.

(i) Agricultural Impacts.

While the DEIR discloses that the primary beneficiaries of any additional or more reliable water capacity that is generated by the Project would be the agricultural operations in the area, there is no separate discussion of the Project's potential impacts on agriculture. In fact, there is no discussion of agricultural impacts at all.[40] Moreover, the DEIR's section on cumulative impacts and growth inducing impacts does not at all acknowledge that the presence of a more

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[37] CEQA Guidelines, § 15126.2; see also *Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 367-370.

[38] DEIR, p. 3-1 through 3-5.

[39] DEIR, p. 3-3.

[40] *Stanislaus National Heritage v. County of Stanislaus* (1996) 48 Cal.App.4th 182 [an EIR is required to evaluate impacts on sources of water].

reliable or greater water supply might cause alterations to the patterns of agricultural uses in the area.

The Notice of Preparation for the DEIR indicates that "[t]he EIR will also explain why other effects were determined to not be potentially significant and were not discussed in detail in the EIR. For example, the Recovery Project site is in an agricultural area, would not damage scenic resources, or produce light and glare, therefore no significant aesthetic impacts are anticipated . . . . Impacts to air quality, agriculture and forestry resources, geology, hazards and hazardous materials, population and housing, mineral resources, and wildfire are also expected to be less than significant, or less than significant with mitigation incorporated …" However, the DEIR does not contain any of this discussion or explanation. Rather, the DEIR simply summarily states that these impacts are expected to be less than significant. The only discussion of the basis for these conclusions is set forth in the Initial Study that was circulated along with the District's Notice of Preparation. This, too, provides only cursory explanation as to why the increase in reliability and stability of the agricultural water supply would not alter agricultural use patterns in the vicinity of the Project.

The DEIR should include evaluation of changes in agricultural production, which the DEIR acknowledges are ongoing, and the effects of that agricultural production. The 2016 Monterey Amendment EIR provides an example of a feasible approach to the analysis of potential indirect effects from change in agricultural patterns related to the Project.

(ii) Biological Resources.

The DEIR acknowledges that Project construction, in particular, could have a potentially significant impact to a number of different, sensitive species, some of which are listed under the California Endangered Species Act, federal Endangered Species Act, or are identified as fully protected species under California law. Specifically, the DEIR indicates that two state fully protected species have a moderate likelihood of occurring in the Project area – the blunt-nosed leopard lizard, and the white-tailed kite.

The DEIR includes no material evaluation of the Project's impacts on the blunt-nosed leopard lizard or the white-tailed kite. Nor does the DEIR include analysis of the feasibility of avoiding take of the lizard or kite. Instead, the DEIR defers the evaluation of impacts to the blunt-nosed leopard lizard to pre-construction surveys. Deferral of the analysis of effects violates CEQA.[41]

The DEIR concludes that there will be no waters of the U.S. impacted, but does not document the basis for this conclusion. The DEIR does not include a delineation of potential waters of the U.S. prepared in accordance in federal standards and procedures.[42]

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[41] *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2017) 40 Cal.4th 412, 441 [invalidating EIR for long-range development plan that deferred water supply analysis].

[42] If one exists, it has not been disclosed to the public.

Blunt-Nosed Leopard Lizard. The DEIR notes that special status wildlife could be substantially adversely affected by construction activities, and that this is considered a potentially significant impact, but concludes that the limited extent of Project construction activities would sufficiently guard against impacts and therefore no mitigation is required. Notably, this does not account for potential construction impacts to blunt-nosed leopard lizard habitat that occurs in the northwestern portion of the Project area.

The mitigation measure specific to blunt-nosed leopard lizard indicates that temporary exclusion fencing would be placed at the direction of a qualified biologist, but does not indicate that a pre-construction survey would be conducted to verify that no blunt-nosed leopard lizard are within the project area that would not be fenced off by the exclusion fencing. This raises the likelihood that blunt-nosed leopard lizards may be within the construction area. Because the blunt-nosed leopard lizard is a fully protected species, any impact to the species is a significant impact, as there is no authorization for incidental take of fully protected species.

The July 2020 comment letter of the California Department of Fish and Wildlife ("CDFW") on the Project makes this point. Indicating that the Project should include appropriate protocol surveys for the blunt-nosed leopard lizard in the DEIR and prior to any ground-disturbing or vegetation-disturbing activities. The DEIR does not contain any of these measures. The DEIR asserts that the pre-construction installation of exclusionary fencing will be sufficient. However, as noted by CDFW, the protocol surveys are designed to optimize the detectability of blunt-nosed leopard lizard in a way that simple installation of exclusionary fencing does not. The DEIR should be revised to include the results of protocol-level surveys of this species. Protocol-level surveys conducted as part of the DEIR will also allow for the consideration of alternative Project configurations that avoid incidental take of this fully-protected spaces – before the EIR is certified and the Project is approved.

White-Tailed Kite. The white-tailed kite is a fully-protected species under California law, and no take of the species outside of very limited exceptions that do not apply to the Project can be authorized.[43] The DEIR notes the potential for white-tailed kite to occur within the construction area, and specifically within the laydown yard, but indicates that a more generalized pre-construction survey for special status bird and raptor species will be sufficient to mitigate and avoid any impacts to the white-tailed kite.

As there is no method for permitting incidental take of this species under California law, the DEIR should provide a more detailed description as to why this non-specific mitigation measure is sufficient to avoid take of the kite.

San Joaquin Antelope Squirrel. The San Joaquin Antelope Squirrel (also known as the Nelson's antelope squirrel) is listed as a threatened species under the California Endangered Species Act.[44] As CDFW notes, the species is known to occur in the area of the Project, and the Project contains suitable habitat that represents some of the "only remaining undeveloped land in

[43] Fish & Game Code, § 3511.

[44] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline.

the vicinity, which is otherwise intensively managed for agriculture." It does not appear that the District performed any assessments to determine whether the squirrel actually occurs within the Project area or to determine if the Project is likely to impact the squirrel.

The DEIR fails to include mitigation measures to avoid or mitigate the potential impacts of the Project on the squirrel. These failures are compounded by the fact that the DEIR does not data from any detailed biological surveys, nor does the DEIR include any data from the "reconnaissance" level surveys. The DEIR fails to properly identify, assess, and disclose the Project's potential impacts on the San Joaquin antelope squirrel.

A review of biological resources portions of the DEIR by Biologist James W., Jones, Jr., dated January 11, 2021, is attached (Attachment O).

B. The DEIR Fails To Properly Analyze Indirect and Cumulative Impacts.

The evaluation of cumulative effects in the DEIR violates CEQA informational standards.[45] CEQA requires the evaluation of the cumulative impacts of the project when added to the impacts of past, present, and reasonably foreseeable future projects.[46] The term "cumulative impacts" refers to two or more individual effects, which, when considered together, are considerable or which could compound or increase other environmental impacts.[47]

The DEIR identifies three other projects that it includes as part of the cumulative impacts analysis. The DEIR limits the scope of the projects considered as part of the cumulative impacts analysis to other groundwater recovery projects. No other types of projects are included in the DEIR's analysis or are even identified. Significantly, the DEIR includes only projects that are currently scheduled for construction, omitting any other projects that are currently under consideration or which may be approved before the Final EIR is adopted for this Project.

This DEIR omits any evaluation of the projects that have undergone or are currently undergoing their own CEQA evaluation including the Kern Fan Groundwater Storage Project, the Onyx Ranch South Fork Valley Water Project, the Stockdale Integrated Banking Project, and the McAllister Ranch Groundwater Banking Project.[48] These are just a handful of examples of projects occurring in the area immediately adjacent to the proposed Project that are not mentioned, discussed, or included in the DEIR's cumulative impacts analysis. As each and every one of these projects has the potential to impact groundwater supplies, overall water

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[45] *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1213-1214; see also *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1984) 151 Cal.App.3d 61, 72-73.

[46] CEQA Guidelines, § 15355, subd. (b).

[47] *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 739; CEQA Guidelines, § 15130, subd. (a)(1).

[48] https:/ceqanet.opr.ca.gov/Project/2020049019 [Kern Fan Groundwater Storage Project]; https:/ceqanet.opr.ca.gov/Project/2018021061 [Onyx Ranch]; https:/ceqanet.opr.ca.gov/Project/2013091076 [Stockdale Integrated]; https:/ceqanet.opr.ca.gov/2020060267/2 [James and McAllister Ranch, BV applicant]. The EIRs for the recently approved Kern Fan Groundwater Storage Project are provided under separate cover.

availability and quality, as well as the potential to impact biological resources, cultural resources, and a variety of other resources.

The DEIR reasons that because there are no significant water quality impacts[49], there would be no cumulative impacts. As discussed above, the DEIR's analysis of direct water quality impacts is faulty and therefore the DEIR lacks substantial evidence for its conclusion that there would be no significant water quality impacts. The DEIR analyzes the Project's water quality impacts in a vacuum, fails to evaluate the cumulative water quality impacts of multiple banking projects pumping non-project water or groundwater into the Aqueduct. It does not evaluate the hydrology and water quality effects of extracting higher quality groundwater from one area of the basin without recharging it, while relying on water deposited in an entirely different part of the basin. The failure to analyze the Project's impacts on groundwater at its point of extraction is a substantial error and cannot serve as the basis to summarily conclude that there are no cumulative impacts to water quality.

The DEIR fails to evaluate the potential indirect impacts of the operation and maintenance of the Project on the biological resources for the adjacent Kern Water Bank Habitat Conservation Plan/Natural Communities Conservation Plan ("HCP/NCCP"). There is no disclosure of whether the Project may disrupt the frequency of intermittent wetland habitat at the Kern Water Bank HCP/NCCP by reducing water to the HCP/NCCP lands from the State Water Project or from the Kern River.

Finally, the DEIR fails to analyze the Project's potential impacts on private wells, including landowner wells both inside and outside of Buena Vista's service area. There is no analysis regarding whether the proposed extraction for the Project would render landowner wells unusable or require them to be deepened or relocated entirely.

C. The DEIR Improperly Defers Mitigation of Various Project Impacts.

While CEQA allows mitigation to be deferred in certain instances, it requires that enforceable performance standards in order to render deferred mitigation permissible.[50] Mitigation Measure CUM-1 fails to sufficiently address the potential cumulative impacts of the Project and does not at all address the Project's impacts to groundwater quality and levels within the KGAGSA. Here, the issue is not that the mitigation is deferred, it is that there is no mitigation at all.

The DEIR acknowledges that other banking projects in the area have adopted operating plans with specific and enforceable performance standards to minimize the potential impact of recovery operation on private domestic and agricultural wells. The Project has the same potential to impact domestic and agricultural wells. The DEIR does not describe or commit to achieve specific performance standards similar to the performance standards adopted by other banking projects.

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[49] A conclusion that is itself faulty, for the reasons described, supra, in section 3.

[50] *Sacramento Old City Assn. v. City Council* (1991) 229 Cal.App.3d 1011, 1029.

The DEIR defers species specific surveys to determine presence or absence until pre-construction, and defers any survey for Swainson's Hawk until some undisclosed point in time, up to 14 days prior to construction activities.[51]

With respect to the blunt-nosed leopard lizard, the deferred mitigation fails to even provide for appropriate surveys. Mitigation Measure BIO-1 provides that there will be temporary exclusion fencing installed prior to construction activities, but does not provide for any pre-construction protocol surveys to identify the presence of the blunt-nosed leopard lizard. Because this is a fully protected species, the failure to provide a specific and enforceable mitigation measure violates CEQA. The DEIR must be revised to provide for specific and enforceable mitigation for the Project's potential impacts to blunt-nosed leopard lizard.

7. OTHER COMMENTS.

For all of the reasons described above including in sections 2 and 3, the Project as described fails to adequately evaluate the Project's compliance with the California law regarding reasonable and beneficial use of water and the management of groundwater resources in compliance with the SGMA. SGMA prohibits one agency within a basin from impacting existing conjunctive use or storage programs within the basin.[52] The Project described in the DEIR will impact existing storage and conjunctive use programs within the Kern basin.[53] This is because it proposes to extract groundwater out of the area under the jurisdiction of a neighboring groundwater sustainability agency.[54]

The KGAGSA has jurisdiction over the area in which the Project proposes to install new extraction wells. The water extracted from those wells would then be pumped out of the KGAGSA's jurisdiction, in violation of the standards set by the KGAGSA's members and the adopted GSP. The DEIR is required to evaluate the potential conflict with SGMA and the KGAGSA's GSP.

CEQA requires that an EIR include a list of all agencies that are expected to use the EIR in their decision making.[55] These are the responsible agencies under CEQA.[56] Here, while the DEIR identifies one agency that would rely on the DEIR for subsequent decision making, it fails entirely to identify the entities that would be required to use or rely on the DEIR to authorize the proposed extractions of water.[57]

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[51] DEIR, p. 6-5, Mitigation Measure BIO-2b.

[52] Water Code, § 10726.2, subd. (b).

[53] DEIR, at p. 4-13.

[54] We incorporate by reference the comments of the KGAGSA on the DEIR.

[55] CEQA Guidelines, § 15124, subd. (d)(1)(A) [requiring "[a] list of the agencies that are expected to use the EIR in their decision-making . . . ."].

[56] CEQA Guidelines, § 15381; Pub. Resources Code, § 21069; see also *RiverWatch v. Olivenhain Municipal Water Dist.* (2009) 170 Cal.App.4th 1186, 1205-1206.

[57] DEIR, § 2.3, p. 2-7 [identifying the California Department of Fish and Wildlife as the only responsible or trustee agency expected to use the EIR].

The DEIR fails to identify the following responsible agencies: KGAGSA; Kern County Local Agency Formation Commission (LAFCO); California Department of Water Resources; State Water Resources Control Board; Regional Water Quality Control Board; the Kern Water Bank Authority; and the Rosedale-Rio Bravo Water Storage District.

For over four decades the California courts have held that annexation approvals by a LAFCO are an action that is subject to CEQA. The proposed annexation is part of the Project, and the LAFCO is prohibited from approving any annexation regarding the Project prior to the certification of a Final EIR that evaluates all of the direct, indirect, and cumulative effects of the Project. CEQA prohibits LAFCO's approval of the annexation application prior to the certification of a final EIR for the Project, a determination by the LAFCO that the final EIR is adequate for its use, and that LAFCO makes the findings required by CEQA.[58]

The DWR is a responsible agency because it has the authority to review, comment on, and approve groundwater sustainability plans and any amendments or changes thereto including GSA boundary adjustments. If any changes to either the GSA for the KGAGSA, or for the neighboring BVGSA, and/or their respective boundaries, are required in order to implement the Project, the Department of Water Resources will necessarily be responsible for reviewing, commenting on, and approving those changes. The Project would additionally require approval of DWR in order to use the Aqueduct including for non-project water pump-in and conveyance to Southern California purchasers, banking partners or others.[59] The Kern Water Bank Authority and the Rosedale-Rio Bravo Water Storage District are responsible agencies because the Project will require the approval by these agencies of amended memoranda of understanding concerning operating plans to minimize impacts on local groundwater supplies.

8. CONCLUSION.

The DEIR violates CEQA. KWBA objects to the certification of the Palms Groundwater Recovery DEIR and approval of the Palms Groundwater Recovery Project. CEQA requires Buena Vista to complete the additional analyses described in this letter, revise the DEIR to incorporate the additional analysis, and to circulate a revised DEIR for additional public review and comment.

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[58] CEQA Guidelines, § 15096, subd. (e), (h).

[59] CEQA separately requires the lead agency to provide notice to and solicit comments from responsible agencies. (CEQA Guidelines, §§ 15082, 15086, 15124; Pub. Resources Code, §§ 21080.4, 21104.) It is KWBA's understanding that these additional responsible agencies were not provided notice nor were comments solicited from them. The DEIR additionally violates CEQA for this reason.

Very truly yours,

Jonathan Parker
General Manager
Kern Water Bank Authority

RDT:snc

ATTACHMENTS

Attachment A	Memorandum from V. Whitney, Chief Division of Water Rights at State Water Resources Control Board to Katherine Mrowka, Chief Watershed Unit 3, Division of Water Rights, State Water Resources Control Board Re Petitions to Revise Status of Kern River on State Water Board Fully Appropriated Streams List (October 2, 2008)
Attachment B	State Water Resources Control Board, Order WR-2010-0010: Order Amending Declaration of Fully Appropriated Streams to Remove Designation of the Kern River as Fully Appropriated
Attachment C	State Water Resources Control Board, Order WR-2010-0016: Order Denying Reconsideration
Attachment D	*North Kern Water Storage District v. State Water Resources Control Board*, Case No. S-1500-CV 270613 NFT, Judgment Denying Petition for Writ of Administrative Mandate (July 21, 2011
Attachment E	*North Kern Water Storage District v. State Water Resources Control Board*, F063989, Opinion (April 18, 2013)
Attachment F	Kern Water Bank Authority v. Buena Vista Water Storage District, Complaint Before State Water Resources Control Board
Attachment G	Application No. A031675 of the Buena Vista Water Storage District
Attachment H	Dr. E John List, Technical Memorandum, January 14, 2021
Attachment I	*Curriculum Vitae* of Dr. E John List
Attachment J	GEI, Water Quality Review of Groundwater Wells for the “Palms” Recovery Project, Feb. 17, 2017
Attachment K	Initial Study/Mitigated Negative Declaration, Assessment of Potential Groundwater Impacts for the Palms
Attachment K-1	Initial Study/Mitigated Negative Declaration, Figure 12

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ATTACHMENTS

Attachment L	Wood Environmental & Infrastructure Solutions, Review of Draft EIR for the Palms Groundwater Recovery Project (January 15, 2021)
Attachment M	Memorandum of Understanding Regarding Operation and Monitoring of the Buena Vista Water Storage District Groundwater Banking Program (January 1, 2003)
Attachment N	Annotated DEIR Figure 2-2.
Attachment O	Comments of Biologist, James W. Jones, Jr.)