GBJPA
Groundwater Banking
Joint Powers Authority

transmittal

date December 18, 2020

☑ attached ☐ via regular mail
☐ via messenger ☐ via overnight mail

to Commenting Parties

project Kern Fan Groundwater Storage Project

Final Environmental Impact Report (EIR)

items 1 Electronic Copy of the Final EIR

comments In compliance with the California Environmental Quality Act (CEQA) Section 21092.5(a), the Groundwater Banking Joint Powers Authority (Authority) is providing a written response to each agency that submitted comments on the Kern Fan Groundwater Storage Project Draft EIR at least 10 days prior to the Authority's Board Meeting, where the Board will consider the Kern Fan Groundwater Storage Project for approval. The written responses are provided in the Final EIR.

The Authority Board will hold a virtual public meeting on the Kern Fan Groundwater Storage Project on December 28, 2020 at 1:00 PM.

Join Zoom Meeting:
https://us02web.zoom.us/j/87878804927?pwd=YjVDcm92V3lYSHdsdXlDNGFUemd1dz09
Meeting ID: 878 7880 4927
Passcode: 198164

Join Meeting by Phone:
+1 669-900-6833
Meeting ID: 878 7880 4927
Passcode: 198164

If you have any questions, please contact Eric Averett at the Authority:
P.O. Box 20820 Bakersfield, CA 93390-0820; Email: eaverett@rrbwsd.com

sent by Jennifer Jacobus, ESA

cc Eric Averett, Authority

KERN FAN GROUNDWATER STORAGE PROJECT

Final Environmental Impact Report
State Clearinghouse #2020049019

Prepared for
Groundwater Banking Joint Powers Authority:
Rosedale-Rio Bravo Water Storage District
and
Irvine Ranch Water District

December 2020

ESA

KERN FAN GROUNDWATER STORAGE PROJECT

Final Environmental Impact Report
State Clearinghouse #2020049019

Prepared for
Groundwater Banking Joint Powers Authority:
Rosedale-Rio Bravo Water Storage District
and
Irvine Ranch Water District

December 2020

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ESA

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Delray Beach	Petaluma	Sarasota
Destin	Portland	Seattle
Irvine	Sacramento	Tampa
Los Angeles	San Diego	
Oakland	San Francisco	

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TABLE OF CONTENTS

Kern Fan Groundwater Storage Project
Final Environmental Impact Report

Chapters 1 through 7 and Appendices A through H are part of the Draft Environmental Impact Report (Under separate cover)

List of Figures

List of Tables

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CHAPTER 8
Introduction

This Final Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.) and CEQA Guidelines (California Administrative Code Section 15000 et seq.). This Final EIR incorporates, by reference, the Draft EIR prepared by the Groundwater Banking Joint Powers Authority (Authority) for the Kern Fan Groundwater Storage Project (proposed project) (State Clearinghouse No. 2020049019) as it was originally published. Revisions to the Draft EIR are provided in Chapters 10 and 11 of this Final EIR**.**

8.1 CEQA Requirements

According to the CEQA Guidelines Section 15132, the Final EIR shall consist of the following:

- The Draft EIR or a revision of that draft;
- Comments and recommendations received on the Draft EIR either verbatim or in summary;
- A list of persons, organizations, and public agencies commenting on the Draft EIR;
- The responses of the lead agency to significant environmental points raised in the review and consultation process; and
- Any other information added by the lead agency.

This Final EIR document for the Kern Fan Groundwater Storage Project presents:

- The written comments received on the Draft EIR and the list of commenting parties (Chapter 9) along with a response to each comment (Chapter 10); and
- Revisions made to the Draft EIR in response to comments received or otherwise added by the Authority (Chapter 11).

8.2 Public Participation Process

On April 8, 2020, a Notice of Preparation (NOP) of an EIR for the proposed project was published for a 30-day review period and circulated to the California Office of Planning and Research (OPR), Kern County Clerk, Orange County Clerk, and local, State, and federal agencies, including Responsible and Trustee agencies, as well as organizations and persons who expressed interest in the proposed project. The NOP comment period extended through May 8, 2020. The NOP provided a general description of the proposed project, a description of the proposed project area, and an overview of environmental topics to be evaluated within the EIR.

The NOP was made available on the Rosedale-Rio Bravo Water Storage District (Rosedale) and Irvine Ranch Water District (IRWD) websites. A copy of the NOP and comment letters are appended to the Draft EIR. Eight comment letters were received in response to the NOP.

On April 29, 2020, in accordance with *CEQA Guidelines* Section 15082, Rosedale and IRWD virtually held a public scoping meeting to describe the proposed project, to identify the environmental topics that would be addressed, and to describe the CEQA process for the EIR. To notify the public of the Scoping Meeting, Rosedale and IRWD published the legal notification in the *Bakersfield Californian* and the *Orange County Register*, and posted information about the meeting on Rosedale's and IRWD's websites. Rosedale and IRWD provided an opportunity for attendees to submit written or verbal comments on the scope of the environmental analysis to be included in this Draft EIR. The meeting was facilitated using Zoom, a virtual communication program, in compliance with pandemic related orders of the State of California. No written comments were submitted at the scoping meeting. Verbal comments raised during the scoping meeting included inquiries on specific locations for proposed facilities including recharge and recovery facilities, and the proposed turnout location from the California Aqueduct (Aqueduct).

Once the Draft EIR was complete, a Notice of Completion (NOC) was submitted to the OPR as required by CEQA (CEQA Guidelines Section 15085), along with copies of the Draft EIR for distribution to public agencies via the State Clearinghouse (CEQA Guidelines Section 15087(f)). At the same time, a Notice of Availability (NOA) of the Draft EIR was posted with the Kern County Clerk and Orange County Clerk (CEQA Guidelines Section 15087(d)). The NOA also was published in the *Bakersfield Californian* and *Orange County Register* (per CEQA Guidelines Section 15087(d)). Printed copies of the Draft EIR were made available for public review to the following public libraries per CEQA Guidelines Section 15087(g), and were made available at the Rosedale and IRWD offices if requested, due to restrictions and facility closures and the need for social distancing required in response to COVID-19: Beale Memorial Library, 701 Truxtun Avenue, Bakersfield, CA 93301; and Irvine/Heritage Park Library, 14361 Yale Avenue, Irvine CA 92604. The Draft EIR was also made available on the Rosedale and IRWD websites.

The Draft EIR was circulated for a 45-day public review period from October 16, 2020 to November 30, 2020. Responses to all comments received on the Draft EIR are addressed in this document, which together with the Draft EIR and changes and corrections to the Draft EIR constitute the Final EIR.

8.3 Final EIR Certification and Approval

As the lead agency, the Authority has the option to make the Final EIR available for public review prior to considering the project for approval (CEQA Guidelines Section 15089(b)). The Final EIR must be available to commenting agencies at least 10 days prior to consideration for approval.

Prior to considering the proposed project for approval, the Authority will review and consider the information presented in the Final EIR and will certify that the Final EIR has been adequately prepared in accordance with CEQA. Once the Final EIR is certified, the Authority Board of Directors may proceed to consider project approval (CEQA Guidelines Section 15090, Section

15096(f)). Prior to approving the proposed project, the Authority must make written findings and adopt statements of overriding considerations for each unmitigated significant environmental effect identified in the Final EIR in accordance with Section 15091 of the CEQA Guidelines. There were no unmitigated significant environmental effects identified in the Draft EIR.

8.4 Notice of Determination

Pursuant to Section 15094 of the CEQA Guidelines, the Authority will file a Notice of Determination (NOD) with the Kern County Clerk and State Office of Planning and Research within five working days of project approval.

8.5 Mitigation Monitoring and Reporting Program

CEQA requires lead agencies to "adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects" (CEQA Guidelines Section 15097). The mitigation measures included in this Final EIR will be included in the Mitigation Monitoring and Reporting Program (MMRP) for the proposed project and implemented by the Authority.

CHAPTER 9
Public Comments

This chapter contains the comments received during the public review period for the Draft EIR (October 16, 2020 to November 30, 2020).* The commenting persons and/or agencies are listed below in **Table 9-1**. The comments have been bracketed and numbered, and responses to comments are provided in Chapter 10. The responses are labeled to correspond to the comment letters and numbers that appear in the margins of the comment letters.

TABLE 9-1
AGENCIES, ORGANIZATIONS, AND PUBLIC COMMENTS RECEIVED

	Commenting Person/Agency	Date of Comment
1	Dudley Ridge Water District	November 12, 2020
2	Metropolitan Water District of Southern California	November 24, 2020
3	California Department of Water Resources, Division of Safety of Dams	November 24, 2020
4	California Department of Water Resources	November 25, 2020
5	Kern County Water Agency	November 30, 2020
6	West Kern Water District	November 30, 2020
7	Kern Water Bank Authority	November 30, 2020
8	City of Bakersfield	November 30, 2020
9	California Department of Fish and Wildlife*	December 2, 2020

* The comment letter submitted by the California Department of Fish and Wildlife (CDFW), dated December 2, 2020, was not received within the public review period; therefore, no response is required. Pursuant to CEQA, a lead agency is required to consider comments on the Draft EIR and to prepare written responses if a comment is received within the public comment period. (Pub. Res. Code §21091(d); CEQA Guidelines §15088) When a comment letter is received after the close of the public comment period (as was the letter from CDFW listed above), however, a lead agency does not have an obligation to respond. (Pub. Res. Code §21091(d)(1); Pub. Res. Code §21092.5(c)) Nonetheless, the Authority has elected to respond CDFW's letter for informational purposes, but without waiving its position that written responses to late comment letters are not required by law.

DUDLEY RIDGE WATER DISTRICT

286 W. CROMWELL AVENUE
FRESNO, CALIFORNIA 93711-6162

PHONE (559) 449-2700
FAX (559) 449-2715

November 12, 2020

Groundwater Banking Joint Powers Authority
P.O. Box 20820
Bakersfield, CA 93390-0820
Attn: Eric Averett, General Manager

Sent via email to eaverett@rrbwsd.com

This letter is in response to the Draft EIR for the Kern Fan Groundwater Storage Project (SCH#2020049019).

First, please acknowledge that the Dudley Ridge Water District ("District") is in full support of the Kern Fan Groundwater Storage Project ("Project"). The following comments are intended in a constructive manner, such that the Final EIR can be certified in a condition that will not require additional environmental reviews to cover important operational features of the Project...features that are fundamental to the Project. DRWD-1

Other than mentioning in section ES.3 that the Irvine Ranch Water District ("IRWD") is a landowner in the District, there is no mention of the connection between IRWD and the District, although the need for IRWD to exchange Article 21 water for the District's Table A water is a fundamental component of the Project. DRWD-2

Section 2.6 (Project Operations) does not explain the exchange process with the District. DRWD-3

Section 2.8 (Project Approvals) does not indicate that approvals will also be needed by the District and most likely, from the Department of Water Resources for a SWPAO conveyance agreement to allow the exchange of Article 21 Water with the District's Table A water. As the facilities to accomplish such exchanges are located within Kern County Water Agency ("KCWA"), KCWA would need to be part of said SWPAO conveyance agreement. DRWD-4

Included in this transmittal is a copy of the most recent IRWD presentation to the District, which conveys the pertinent features missing from the Draft EIR. DRWD-5

Respectfully,

Dale K. Melville, Assistant Manager-Engineer

CC: Fiona Sanchez, IRWD

G:\Dudley Ridge WD - 1029\DOCUMENTS\400\IRWD Prop 1 grant\Draft EIR-Oct. 2020\20201112 comments to DEIR.docx

KERN FAN GROUNDWATER STORAGE PROJECT

November 11, 2020

PRESENTATION OVERVIEW

- Kern Fan Groundwater Storage Project overview
- Project operations and benefits
- Exchange with IRWD
- Dudley Ridge Water District dry year water supply
- Agreements
- Project Schedule

KERN FAN GROUNDWATER BANKING PROJECT AUTHORITY

Rosedale-Rio Bravo Water Storage District (Rosedale)

Established in 1959

Provides water to over 27,500 acres of irrigated agricultural lands. A member agency of Kern County Water Agency.

Irvine Ranch Water District (IRWD)

Established in 1961

Provides retail water, sewage and recycled water service to over 181 square miles in Orange County. Owns land within Dudley Ridge Water District.

Rosedale & IRWD have a long, successful history of jointly developing groundwater storage projects; Recently Formed Groundwater Banking JPA

PROJECT FACILITIES AND CAPACITIES

New Conveyance from California Aqueduct

- New turnout
- New 10-mile canal with up to 500 cfs capacity
- 3 lift stations

1,050 Acres of Recharge Basins

- Estimated 100,000 AF/year of recharge capacity
- 100,000 AF storage capacity

12 Recovery Wells

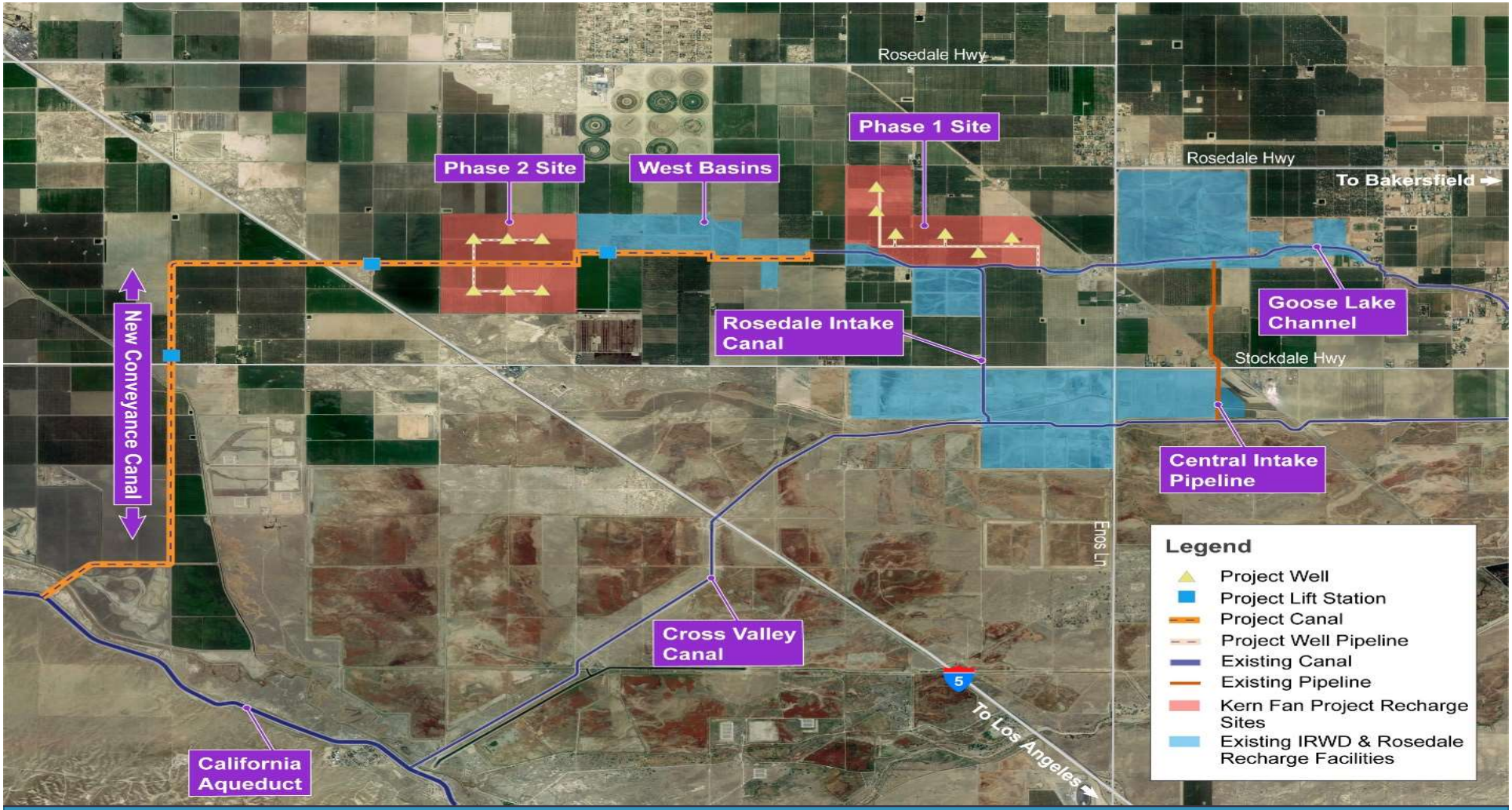
- Combined capacity up to 70 cfs

Stores "new" water otherwise lost to the ocean

- Article 21 water and other wet year supplies

Improves flexibility in operation of State's water systems

- Will not negatively impact the SWP or water rights



PRELIMINARY PROJECT FACILITIES MAP

PROJECT OPERATIONS AND BENEFITS

- Project will recharge and store water otherwise lost to ocean
  - ✓ Unallocated Article 21 water
    - Via Dudley Ridge Water District & Kern County Water Agency
  - ✓ Recharge other wet-year water supplies as available
  - ✓ A new water supply

- Ecosystem Benefits:
  - ✓ Pulse flows to benefit Delta fish species
  - ✓ Intermittent wetland habitat in Kern County
- Water Supply Benefits:
  - ✓ Dry year water supply for Rosedale, IRWD and DRWD
  - ✓ Improved groundwater levels
- Emergency Response:
  - ✓ Droughts and Delta levee failures

PROJECT OPERATIONS

Water Releases Coordinated to Provide Ecosystem Benefits
(e.g. chinook salmon, steelhead trout & green sturgeon)

Lake Oroville

Table A

DWR releases short-term ecosystem pulse flows in critical years after 1-for-1 exchange (18,000 AF at 2,400 CFS)

1-for-1 exchange of SWP System water for Table A water to make water available for ecosystem benefits

Sacramento-San Joaquin Delta

System Water

San Luis Reservoir

California Aqueduct

New and existing conveyance to transport Article 21 water

Kern Fan Project: Storage Allocation
100,000 AF

25% Ecosystem Benefit Pool (SWP System Water) 25,000 AF	**37.5%** DRWD/IRWD 37,500 AF	**37.5%** KCWA/Rosedale 37,500 AF
DRWD & KCWA/Rosedale Service Areas	DRWD/IRWD Service Areas	KCWA/Rosedale Service Area

DRWD EXCHANGE WITH IRWD

- IRWD takes Article 21 water through DRWD
  - Diverts to Kern Fan Project
    - 25% stored in ecosystem account
    - Remainder stored for IRWD and DRWD

- DRWD facilitates exchange of IRWD's Article 21 water for Table A:
  - An in-ground exchange from DRWD's Kern Water Bank account, or
  - Under high SWP allocation, DRWD delivers Table A to IRWD's Water Bank
    - Similar to existing DRWD/IRWD 1:1 Exchange Program (Non-SWP for SWP water)
  - DWR approval may be needed for exchange

DRWD DRY YEAR WATER PURCHASE

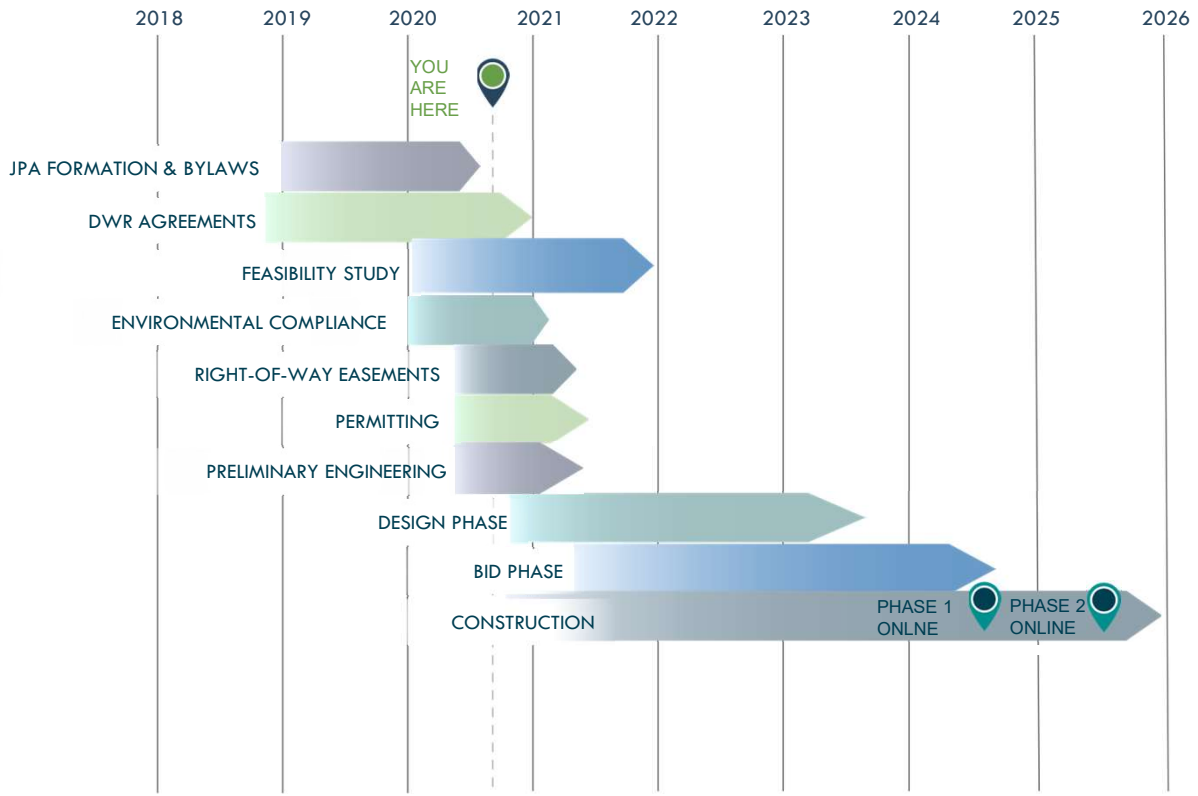
- Dry year water supply benefit for DRWD
  - New water supply reserved in storage for DRWD
  - When DRWD calls on water, IRWD determines quantity of stored Article 21 that can be recovered for DRWD
    - Water can also be transferred in-ground to Kern Water Bank for recovery
  - IRWD will establish proposed price per AF each year
    - Using current cost basis of Kern Fan Project
    - Takes into account current capital and operating costs and grant funding
    - Purchase price expected to be competitive with other dry year water supplies

AGREEMENTS

- IRWD-DRWD Dry Year Water Purchase and Exchange Agreement
  - Exchange of IRWD's share of banked Article 21 for Table A water
  - In dry years, DRWD can purchase its share of banked Article21water
- DWR Exchange Agreement
  - DRWD to assist IRWD in working with DWR on agreement for exchange of Article 21 for Table A
  - Agreement similar to existing DWR Agreement for 1:1 Exchange
  - Potential for DWR to amend existing Agreement
- Separate agreement with DWR for exchange of Table A in Lake Oroville with ecosystem account

PROJECT SCHEDULE

Early construction activities expected to begin in December 2021



CONTACT INFORMATION

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Water Resources Manager
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Welch@irwd.com

Fiona Sanchez
Director of Water Resources
Office (949) 453-5325
sanchezf@irwd.com

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

November 24, 2020 **Via Electronic Mail**

Mr. Eric Averett
Groundwater Banking Joint Powers Authority
P.O. Box 20820
Bakersfield, CA 93390-0820

Dear Mr. Eric Averett:

Notice of Availability of a Draft Environmental Impact Report
for the Kern Fan Groundwater Storage Project (Project)

The Metropolitan Water District of Southern California (Metropolitan) reviewed the Notice of Availability of a Draft Environmental Impact Report (DEIR) for the Kern Fan Groundwater Storage Project (Project). The DEIR was prepared pursuant to the California Environmental Quality Act (CEQA) by the Groundwater Banking Joint Powers Authority as the Lead Agency (Authority) formed by Rosedale-Rio Bravo Water Storage District and Irvine Ranch Water District. The proposed Project includes the development of water recharge and recovery facilities in the Kern Fan area of Kern County to recharge, store, recover, and deliver the following: State Water Project (SWP) water, including Article 21 water; Central Valley Project (CVP) water, including Section 215 water; Kern River water available to the Authority through agreement(s) with existing right holders; and water from other sources when available. The proposed project provides ecosystem benefits downstream from the SWP's Lake Oroville and supply reliability benefits in Rosedale's service area in Kern County and Irvine Ranch Water District's service area in Orange County. MWD-1

This letter contains Metropolitan's response to the public notice as a potentially affected public agency. Metropolitan recognizes the value of projects that can improve the management of surplus water supplies that otherwise would not be put to beneficial use. Metropolitan's general comment is that the Project be operated in such a way that does not negatively impact SWP contractors, including Metropolitan. Metropolitan's comments focus on ensuring that the Project does not limit the California Department of Water Resources' (DWR) ability to operate the SWP or impair the water quality of the California Aqueduct. MWD-2 MWD-3

SWP WATER DELIVERY OPERATIONS

The Project should not have negative impacts to the operation of the SWP. The DEIR states that "relative to baseline conditions, the use of unregulated water for recharge would not result in significant impacts to other legal users of water". However, the DEIR does not disclose the operational analysis to support a finding of no impact. The Project needs to ensure no harm to non-participating SWP contractors. MWD-4

The DEIR is unclear on how water exchanges will work to allow pulse flows from Oroville. While we understand that this is one of the many topics for future discussion with DWR, it is an important aspect of this Project. We encourage the Authority to work with DWR and SWP contractors to ensure that the Project description is consistent with SWP contracts. MWD-5

WATER QUALITY

The project should not impair the water quality of the California Aqueduct. At a minimum, the project has to follow the California Department of Water Resources Water Quality Policy and Implementation Process for Acceptance of Non-Project Water (DWR's Process) to protect the water on the California Aqueduct. MWD-6

The DEIR indicates that Total Dissolved Solids (TDS) and nitrate in the wells are below the Maximum Contaminant Level (MCL) and should not impact the water in the California Aqueduct. However, arsenic concentrations could be as high as three times the MCL. In addition, 1,2,3-TCP concentrations, above the MCL, have been detected in the overall project area. The DEIR does not clearly identify mitigation strategies that will be followed to comply with DWR's Process and there is a concern if water of an acceptable quality will be available for introduction to the California Aqueduct. MWD-7

We appreciate the opportunity to provide input to your planning process and we look forward to receiving future documentation and plans for this project. For further assistance, please contact Ms. Jolene Ditmar (213) 217-6184 or jditmar@mwdh2o.com. MWD-8

Very truly yours,

Sean Carlson
Team Manager, Environmental Planning Section

JD:rdl
Sharepoint\Groundwater Banking Joint Powers Authority\NOA EIR Kern Fan Groundwater Storage Project

DEPARTMENT OF WATER RESOURCES
1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

November 24, 2020

Mr. Eric Averett
Groundwater Banking Joint Powers Authority
Post Office Box 20820
Bakersfield, California 93390-0820

Notice of Completion & Environmental Document Transmittal
Kern Fan Groundwater Storage Project
SCH# 2020049019
Kern County

Dear Mr. Averett:

The Division of Safety of Dams (DSOD) has reviewed the Notice of Completion and the October 2020 Draft Environmental Impact Report for the Kern Fan Groundwater Storage Project (Project). The documents describe the proposed construction and operation of water conveyance, recharge, and recovery facilities including 'basin berms approximately 3 to 6 feet in height above ground', associated piping including up to 22 feet of excavation, recovery wells, and appurtenant conveyance facilities. Insufficient information is provided in the Project description to make an accurate jurisdictional determination with regards to the described work, and it is unclear whether some or all the work will be subject to State jurisdiction for dam safety. Therefore, the applicant, Groundwater Banking Joint Powers Authority, needs to submit preliminary plans with cross-sections so that DSOD can make a jurisdictional determination. DSOD-1 DSOD-2

As defined in Sections 6002 and 6003, Division 3, of the California Water Code, dams 25 feet or higher with a storage capacity of more than 15 acre-feet, and dams higher than 6 feet with a storage capacity of 50 acre-feet or more are subject to State jurisdiction. The dam height is the vertical distance measured from the maximum possible water storage level to the downstream toe of the barrier. DSOD-3

If the dam(s) is subject to State jurisdiction, a construction application, together with plans, specifications, and the appropriate filing fee must be filed with DSOD for this project. All dam safety related issues must be resolved prior to approval of the application, and the work must be performed under the direction of a Civil Engineer registered in California. Erik Malvick, our Design Engineering Branch Chief, is responsible for the application process and can be reached at (916) 565-7840. DSOD-4

If you have any questions or need additional information, you may contact me at (916) 565-7827.

Sincerely,

Rick Draeger

Richard Draeger, Regional Engineer
Southern Region
Field Engineering Branch
Division of Safety of Dams

cc: Governor's Office of Planning and Research
State Clearinghouse

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY **GAVIN NEWSOM**, *Governor*

DEPARTMENT OF WATER RESOURCES
1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

November 25, 2020

Mr. Eric Averett
General Manager, Rosedale-Rio Bravo Water Storage District
Groundwater Banking Joint Powers Authority
P.O. Box 20820
Bakersfield, California 93390-0820
(661) 589-6045
eaverett@rrbwsd.com

Re: SCH# 2020049019 Kern Fan Groundwater Storage Project Draft Environmental Impact Report (DEIR)

Dear Mr. Averett,

The California Department of Water Resources' (DWR) State Water Project Division of Operations and Maintenance (O&M), State Water Project Analysis Office (SWPAO), California Aqueduct Subsidence Program (CASP) staff, and Water Storage Investment Program (WSIP) staff have reviewed the proposed Kern Fan Groundwater Storage Project DEIR (the "Project"). O&M, SWPAO, CASP staff, and WSIP staff are providing these comments pursuant to DWR's regulatory responsibilities under Water Code section 12899.1, Cal. Code Regs. Tit. 23, §600 et seq. and Cal. Code Regs. Tit. 14 §15096. DWR-1

Brief Project Description

The Groundwater Banking Joint Powers Authority (Authority) seeks to develop, construct, and operate a groundwater bank that would allow the Authority to manage sources of water supply available to Rosedale-Rio Bravo Water Storage District (Rosedale) and Irvine Ranch Water District (Irvine) by using available underground storage in the local San Joaquin Valley Groundwater Basin.

To accomplish this, the proposed Project would recharge, store, recover and deliver State Water Project (SWP) water, including Article 21 water; Central Valley Project water, Kern River water, and water from other sources, when available.

The proposed Project is being developed, in part, pursuant to funding available from the WSIP. The WSIP is administered by the California Water Commission; the Project is a WSIP project that has been selected for accelerated permitting in accordance with the Governor's Water Resilience Portfolio objectives.

The proposed Project would be implemented in two phases; each phase would construct recharge and recovery facilities on up to 640 acres of land within the project area. Water would be conveyed to and from the proposed recharge and recovery facilities in and around the Phase 1 and 2 areas through existing facilities and a new

DWR-2

turnout and conveyance system (Kern Fan Conveyance Facilities) connecting to the California Aqueduct. DWR-2

DWR has the following comments on the DEIR:

Preliminary Notices

DWR's Division of Safety of Dams (DSOD) is submitting a separate comment letter on this Project. Jurisdictional issues involving dams are handled exclusively by DSOD, separate from the divisions commenting herein. All responses to DSOD's comment letter should be directed to DSOD specifically and should exclude any of DWR's divisions and staff indicated herein. Likewise, all responses to this comment letter should exclude any comments intended for DSOD. DWR-3

DWR's Sustainable Groundwater Management Office (SGMO) has regulatory authority for ensuring that local groundwater agencies comply with the Sustainable Groundwater Management Act. DWR is informing the Authority that SGMO has no participation in the drafting of this comment letter, nor was SGMO solicited for advice or comments before the preparation of this letter. DWR-4

DWR is a Responsible Agency

The Project intends to make use of the SWP. In particular, the expected turn-out and turn-in proposed in the Project would require several agreements to be executed with DWR. Specifically, the Project would need, at minimum, a Turnout Agreement and an Operations Agreement between the Authority and DWR. Without these agreements and DWR approval, the Project cannot happen. Thus, DWR should have been included as a Responsible Agency from the outset of the Project, as well as after DWR notified the Authority in response to the Project's Notice of Preparation that DWR was likely a Responsible Agency (DWR letter dated 5/8/2020). DWR-5

Inadequate Description of the Project

The DEIR mentions multiple times intent to construction a new turnout from the California Aqueduct, but the Project description includes insufficient information on this construction. The general construction schedule is adequately described (page 2-16), but does not consider potential impacts of ongoing or simultaneous construction activities in the vicinity involving the maintenance of the California Aqueduct. The DEIR does not provide a reasonably specific location (see 2-6, 2-12, and 2-15) of where exactly the turnout will be placed, nor does the analysis of construction activities adequately address potential impacts to the Aqueduct and other SWP facilities. DWR-6

The turnout construction, as described, as well as the Project alternative, may not be responsive to the known and anticipated needs of the California Aqueduct's long-term maintenance. CASP's primary objective is addressing and preventing subsidence impacts to the Aqueduct through ongoing or proposed projects, including near-term DWR-7

rehabilitation projects under CASP necessary to continue deliveries of allocated SWP water. Among these projects are CASP's efforts to repair portions of the Aqueduct in the geographic area described, but not specified, in the proposed Project. The only mention of construction impacts to SWP refers to generalized use of cofferdams to prevent disruptions to SWP operations (pages 2-15, 3.11-19). Without specific details of the turnout construction location, the proposed Project may conflict with CASP projects by attempting to construct a turn-out in a location under rehabilitation by CASP. DWR-7

3.7. Geology and Soils

DWR has been monitoring ground subsidence approximately two miles south of the general area of the proposed Project since 1994. Current monitoring shows that the Kern Water Bank Authority Water District has produced non-adverse fluctuation in the subsidence levels during extended periods of drought. The DEIR coverage of the existing land subsidence issues is sufficient (page 3.7-10, and 3.7-22, 23), but the Authority should include language in Impact 3.7-3 analysis (page 3.7-22) in the EIR that ensures that the Authority *will continue* to monitor potential land subsidence caused by aquifer compaction or consolidation due to groundwater pumping or overdraft, both in isolation as well as cumulatively (see 3.10-4, 5 for a list of other groundwater banking operations) in the basin, throughout the Project life. The DEIR should also specifically discuss any potential subsidence impacts the Project may have on SWP facilities or the California Aqueduct, particularly during construction and severe drought conditions. DWR-8 DWR-9

3.10. Hydrology and Water Quality

The sources of water for the proposed Project are identified as: SWP, CVP, Kern River water, and other available resources (pages 2-1, 2-7). The Authority must ensure that Kern River water and "other available water" resources are of acceptable water quality, as set forth by the National Pollutant Discharge Elimination System program administered through the State Water Resources Control Board. According to the DEIR, the Authority will comply with any DWR water quality policy provisions for pumping groundwater into the Aqueduct (2-18). Assurances that the Project will comply with DWR water quality provisions should be articulated in section 3.10, within the State regulatory setting discussion beginning on page 3.10-19. DWR-10

DWR's Requests and Additional Comments

DWR requests the following information be included in the EIR:

1. List DWR as a Responsible Agency. DWR-11
2. Inclusion of more accurate and descriptive construction information, including specific locations of potential turnouts. Please include more additional construction window and timeline details, if possible. DWR-12

3. Additional language explaining that the Authority will have ongoing subsidence monitoring, and develop a subsidence monitoring program, if necessary. DWR-13

4. Analysis specific to assessing potential subsidence impacts to the California Aqueduct and SWP facilities, as a result of either construction activities or operation of the Project. DWR-14

5. Additional language in section 3.10 of the EIR explaining that the Authority will comply with DWR's water quality control provisions. DWR-15

DWR requests the Authority include DWR within the review of construction documents and construction scheduling as soon as possible. DWR-16

If you have any questions or need additional information, please contact David Gordon at david.gordon@water.ca.gov. Please provide DWR with notice of any future project documents, when available, by informing David Gordon. DWR-17

Sincerely,

Casey Pancaro

Casey Pancaro
Attorney

cc: David Gordon
David Okita
David Sandino
Jagruti Maroney
Marianne Kirkland
Nicole Darby
Leroy Ellinghouse

Phone No. (661) 634-1400

Mailing Address
3200 Rio Mirada Drive
Bakersfield, CA 93308

November 30, 2020

50 - Environmental

Mr. Eric Averett
Groundwater Banking Joint Powers Authority
c/o Rosedale-Rio Bravo Water Storage District
P.O. Box 20820
Bakersfield, CA 93390-0820

Re: Kern Fan Groundwater Storage Project Draft Environmental Impact Report

Dear Mr. Averett:

The Kern County Water Agency (Agency) would like to thank you for the opportunity to review and comment on the Draft Environmental Impact Report (DEIR) for the Kern Fan Groundwater Storage Project (Project) proposed by the Groundwater Banking Joint Powers Authority.

The Agency was created by the California State Legislature in 1961 to contract with the California Department of Water Resources for State Water Project (SWP) water. The Agency has contracts with water districts throughout Kern County to deliver SWP water. The Agency also manages and/or is a participant in multiple groundwater banking projects, including the Kern Water Bank (KWB), Pioneer Property and Berrenda Mesa banking projects. Additionally, the Agency maintains and operates the Cross Valley Canal (CVC). Therefore, the Agency is uniquely qualified to provide comments. KCWA-1

As you know, the Agency is generally supportive of projects that seek to improve the water supply and reliability of Kern County water users. However, the proposed Project has the potential to significantly impact other water users within Kern County. KCWA-2

Comment 1: The DEIR incorrectly characterizes the Pioneer Project portion of the Long Term Operations Plan.

The DEIR states that Rosedale-Rio Bravo Water Storage District's (Rosedale) "Long Term Operations Plan is based upon the Project Recovery Operations Plan Regarding Pioneer Project" (pg. 1-11). The document incorrectly characterizes the Pioneer Project portion of the Project Recovery Operations KCWA-3

Plan by overstating what the Agency has agreed to and depicting the Pioneer Project portion as long-term. Therefore, the Final Environmental Impact Report (FEIR) should clarify that the Pioneer Project portion of the Project Recovery Operations Plan as short-term. KCWA-3

Comment 2: The DEIR fails to identify and discuss potential limitations of in-lieu recovery operations.

The proposed Project anticipates storing up to seventy-five percent of unallocated Article 21 water for the benefit of Rosedale and Irvine Ranch Water District (Irvine Ranch). The DEIR specifies that Rosedale may use in-lieu recovery by exchange of Rosedale's allocation of Agency SWP water to return water to Irvine Ranch previously banked in the Project (pg. 2-17). The DEIR does not identify or discuss the implications or potential impacts of using SWP water for in-lieu recovery by exchange. The document fails to analyze Rosedale's existing banking return obligations and annual SWP water commitments. Furthermore, the proposed Project anticipates storing up to twenty-five percent of unallocated Article 21 water in an "Ecosystem Account" for the California Department of Water Resources (DWR) to use as necessary to alleviate stress on endangered and threatened species in the Sacramento-San Joaquin River Delta (pg. 2-6). The DEIR does not address how recovery from the "Ecosystem Account" by exchange of SWP water may impact or be impacted by Rosedale's existing return obligations, including whether or not returns to DWR may be limited due to other commitments. Therefore, the DEIR should be amended to include a discussion and analysis of Rosedale's existing return obligations and how SWP water used for the proposed Project's anticipated in-lieu recovery , including return of DWR "Ecosystem Account" water, will impact or be impacted by its existing program obligations. KCWA-4

Comment 3: The DEIR Project Approvals list is incomplete.

The DEIR project approvals section incorrectly limits the Agency's approval over the proposed Project to "approval for construction and operation of a new turnout on the California Aqueduct" (pg. 2-20). The Agency's approval of the proposed Project should include approval to deliver, exchange and convey water; therefore, the FEIR should amend the project approvals by the Agency to include approval of and agreements for authorizing use of the California Aqueduct to deliver, exchange and convey water. KCWA-5

Comment 4: The DEIR fails to analyze the potential impacts to the SWP, SWP allocations and SWP Contractors due to the pre-release of water from Lake Oroville for pulse flow.

The DEIR indicates that unallocated Article 21 water will be stored in the proposed Project for future ecosystem benefits (pg. 2-6). The document explains that DWR, in consultation with the California Department of Fish and Wildlife (CDFW), "will determine when water from the Ecosystem Account would be needed for such ecosystem benefits" (pg. 2-6). DWR will recover "Ecosystem Account" water through a 1:1 exchange with Rosedale, in which, DWR will release water from Lake Oroville for ecosystem benefits (pg. 2-6). The DEIR does not provide any analysis or discussion of how or when the determination to release water from Lake Oroville will occur. There is no discussion of the quantity of water or frequency of release. Further, there is no analysis of the potential impacts to the SWP, SWP allocations and/or SWP contractors (Contractors). Therefore, the DEIR should be amended to include the methodology, quantity of water and frequency of release from Lake Oroville as well as the potential impacts to the SWP, SWP allocations and Contractors as a result of the pre-release water for pulse flow. KCWA-6

Comment 5: The DEIR fails to analyze hydraulic impacts to existing turnouts in the California Aqueduct.

The proposed Project anticipates construction of conveyance facilities including a new turnout from the California Aqueduct (pg. ES-6). The DEIR provides a discussion of the alternative alignments of the proposed conveyance facilities including the placement of a new Aqueduct turnout in Pool 28 (pgs. 6-4 to 6-8). Construction of a new turnout in Pool 28 has the potential to significantly impact CVC operations including, but not limited to, impacts from lowered DWR operating criteria. While some analysis is provided for the potential impacts to groundwater and water quality, the DEIR fails to provide any hydraulic analysis or potential hydraulic impacts to the existing turnouts in the California Aqueduct. Therefore, the DEIR should be amended to include a hydraulic analysis for the potential impacts to existing turnout facilities in the California Aqueduct for each alternative alignment. KCWA-7

Agency staff looks forward to continuing to work with Rosedale to ensure the Agency's concerns are adequately addressed. If you have any questions, please contact Craig Wallace of my staff at (661) 634-1400.

Sincerely,

Holly Melton
Water Resources Manager

RICHARD C. SLADE & ASSOCIATES LLC
CONSULTING GROUNDWATER GEOLOGISTS

MEMORANDUM

November 30, 2020

To: Groundwater Banking Joint Powers Authority
P.O. Box 20820, Bakersfield, CA 93390-0820
Attn: Eric Averett, General Manager
Sent via email (eaverett@rrbwsd.com)

Cc: Mr. Greg Hammett
General Manager
West Kern Water District
Sent via email (GHammett@wkwd.org)

RCS Job No. 369 KRN21

From: Anthony Hicke and Richard Slade
Richard C. Slade & Associates LLC (RCS)

Re: Comments Regarding Draft Environnemental Impact Report (DEIR)
Kern Fan Groundwater Storage Project (SCH# 2020049019)
Prepared for Groundwater Banking Joint Powers Authority
Dated October 2020
Kern County, California

Introduction

Provided herein are comments related to the basic hydrogeologic elements discussed in the referenced DEIR for the Kern Fan Groundwater Storage Project, as proposed by the Groundwater Banking Joint Powers Authority (GBJPA) On behalf of West Kern Water District (WKWD), RCS reviewed the DEIR documentation and has prepared this Memorandum with hydrogeologic comments. WKWD-1

In general, WKWD supports the proposed Kern Fan Groundwater Storage Project and its long-term goals. WKWD looks forward to a successful outcome and cooperative management of various similar projects in the region.

Comments

1. Page 3 13, Table 3 2 The Palms Groundwater Banking Project (described herein as the "BV Palms Project"), as proposed by the Buena Vista Water Storage District, is listed on Table 2-3. However, the cumulative analyses presented in the DEIR do not appear to explicitly consider the effects on neighboring wells if the BV Palms Project wells were to recover stored groundwater at the same time that groundwater recovery operations were occurring at: the subject Kern Fan Groundwater Storage Project, the nearby Rosedale Rio Bravo Drought Relief Project (DRP) and the Stockdale Integrated Banking Project. WKWD-2

MEMORANDUM

As stated on Page 3.10-35, effects of water level drawdown would be additive when considering that multiple projects in the region could be pumping simultaneously. Figure 3.10-11 shows the location of WKWD Well NW-1 (the nearest WKWD-owned well to the subject Project), and the potential impacts of the proposed Project on WKWD Well NW-1. As stated in Appendix H, page 9 of the Technical Memorandum by Thomas Harder & Co. (October 12, 2020), "Project groundwater pumping is predicted to result in up to ten feet of additional drawdown at the nearest banking project well (WKWD NW-1) and a cumulative of up to 16 feet of drawdown at this well when the DRP and Stockdale Integrated Banking project are taken into account." Hence, it does not appear that extractions from the BV Palms Project were included as part of the cumulative analysis in the subject DEIR. WKWD-3

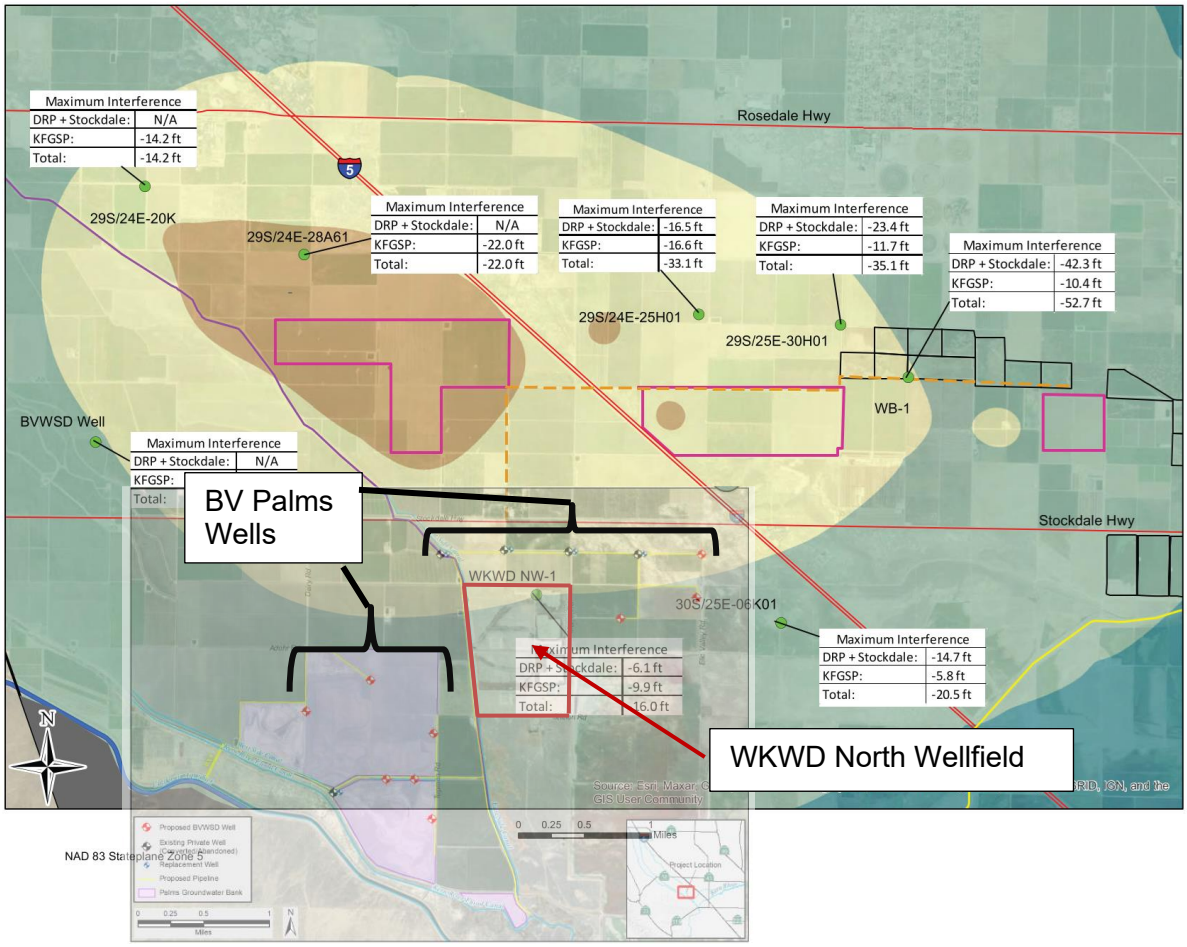
Provided on the next page is an overlay drawing prepared using figures from both the subject Kern Fan Groundwater Storage Project and the BV Palms project. The drawing illustrates the fact that a number of BV Palms extractions wells lie between the WKWD North Wellfield and the Kern Fan Groundwater Storage Project. If extraction is occurring in the BV Palms project at the same time extractions are occurring at the Kern Fan Groundwater Storage Project, at the Drought Relief Project (DRP) and at Stockdale the Integrated Banking Project, the impacts to WKWD North Wellfield wells could be greater than anticipated by the modeling.

2. Page 3.10-40 states that negative impacts are considered by the Long Term Project Recovery Operations Plan Regarding Rosedale-Rio Bravo Water Storage District Projects (Long Term Operations Plan) to be "project-related decreases in groundwater levels that are 30 feet or greater." Based on the available data, t is feasible that the WKWD North Wellfield wells could be impacted by water level reductions greater than 30 ft, if the Kern Fan Groundwater Storage Project, the Drought Relief Project (DRP), the Stockdale the Integrated Banking Project, and the BV Palms project are performing recovery operations at the same time. If this were to occur, how would the Long Term Operations Plan or other mitigation measures address the impacts to the WKWD wells? WKWD is not a signatory to the Long Term Operations Plan. WKWD-4

An additional concern is that without clear direction in the DEIR in the case of a cumulative impact on WKWD, mitigation of the issue may be drawn into a situation where the various entities that operate the four projects mentioned above may not agree on the cause of the impact on WKWD, and this may inhibit timely mitigation response(s) WKWD-5

3. Does the Long Term Operations Plan include any mitigation measures with respect to changes in water quality that may result from operation of the project? The WKWD Wells are used for potable supply purposes, and pumped groundwater is delivered for domestic uses within the WKWD service area. Significant changes in water quality could impact the ability of WKWD to deliver water for potable use. WKWD-6

MEMORANDUM



Overlay drawing above adapted from Figure 3.10-11 of the subject Kern Fan Groundwater Storage Project DEIR and Figure 1-1, "Buena Vista Water Storage District, 2020. Notice of Preparation and Initial Study of an Environmental Impact Report and Public Scoping Meeting for the Palms Groundwater Recovery Project. Prepared by GEI Consultants, June 2020."

KERN WATER BANK AUTHORITY

November 30, 2020

VIA EMAIL AND FIRST-CLASS MAIL
Groundwater Banking Joint Powers Authority
P.O. Box 20820
Bakersfield, CA 93390
Attn: Eric Averett, General Manager
Email: eaverett@rrbwsd.com

Re: Kern Water Bank Authority's Comments on the Kern Fan Groundwater Storage Project Draft Environmental Impact Report;
State Clearinghouse No. 2020049019

Dear Mr. Averett,

1. Introduction and Summary.

The Kern Water Bank Authority ("KWBA") submits the following comments on the Draft Environmental Impact Report ("DEIR") for the proposed Kern Fan Groundwater Storage Project ("Project") (SCH No. 2020049019) proposed by the Groundwater Banking Joint Powers Authority ("Authority"), a joint powers authority formed by responsible agencies Rosedale-Rio Bravo Water Storage District ("Rosedale") and Irvine Ranch Water District ("Irvine" or "IRWD"). As currently structured, the DEIR fails to comply with the California Environmental Quality Act ("CEQA") for multiple, independent reasons. The Kern Water Bank Authority objects to the approval of the Project.[1] It requests that the Authority revise the DEIR to address the comments provided herein, and to recirculate the revised DEIR for additional public review and comment. KWBA-1

The DEIR:

- Does not include a stable, finite, consistent, and comprehensible project description; KWBA-2
- Does not describe and evaluate the whole of the action; KWBA-3
- Fails to describe or evaluate a reasonable range of alternatives, including alternative locations and configurations of the Project, and alternative Project operations, to KWBA-4

[1] As Rosedale and Irvine are aware, the KWBA owns and has operated, for approximately twenty-five (25) years, the Kern Water Bank groundwater recharge and recovery project ("KWB") on about 20,000 acres located immediately south of a large portion of the project areas described in the DEIR. (DEIR, Fig. 2-1). Additional detailed information regarding the KWBA and the KWB, including its facilities and operations, is located at www.kwb.org/.

minimize potential effects on groundwater, water quality, sensitive receptors, public infrastructure, and biological resources; KWBA-4

- Fails to evaluate the significance of the effects of the Project as compared against a valid CEQA environmental baseline; KWBA-5
- Fails to include sufficient information to adequately evaluate impacts on groundwater and water quality; KWBA-6
- Fails to provide quantitative analysis of the Project impacts on other resources; KWBA-7
- Does not evaluate the impacts of the Project on sources and uses of Project water; KWBA-8
- Fails to adequately evaluate significant cumulative effects by artificially constraining the evaluation of cumulative effects only to other water banking projects; KWBA-9
- Defers evaluation of significant effects and the formulation of enforceable mitigation measures and project conditions; KWBA-10
- Fails to survey biological resources using approved survey protocols and feasible best practices; KWBA-11
- Does not disclose material uncertainties in the groundwater model; KWBA-12
- Does not describe mitigation measures and/or Project features and conditions in sufficient detail to allow the public to understand whether the measures, features and conditions will reduce the Project's significant impacts to levels that are less than significant; KWBA-13
- Improperly concludes that effects are less than significant without first evaluating those effects absent the proposed mitigation measures and Project conditions; KWBA-14
- Fails to provide mitigation measures that are sufficiently specific to be enforceable; and KWBA-15
- Defers specific mitigation measures without adopting an enforceable performance standard. KWBA-16

These and other fatal defects in the DEIR are described in additional detail below.

2. The DEIR Fails to Provide Sufficient Information to Serve its Purpose as an Informational Document.

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 KWBA-17

the environment.[2] 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 action with which it disagrees.[3] An EIR that does not provide sufficient information subverts the purposes of CEQA if it omits material necessary to informed decision-making and informed public participation.[4]

KWBA-17

The DEIR fails as an informational document because it fails to include quantitative analysis of several material project impacts. This failure of the DEIR infects nearly every section, including the Project description, environmental baseline, alternatives, hydrology and water quality, biological resources, and cumulative effects.

3. The Project Description Does Not Comply with CEQA Informational Standards.

CEQA requires an EIR to include an "accurate, stable, and finite" description of the project.[5] The DEIR fails to provide a legally sufficient project description that complies with CEQA. More specifically, the Project Description is contradictory and confusing, and the DEIR fails to identify the precise location and boundaries of the Project or its facilities, fails to sufficiently describe the objectives sought to be served by the Project, and fails to provide an adequate description of the Project's technical, economic, and environmental characteristics and other important details.

KWBA-18

a. Project Area. The Project Area covers over 25 square miles, but the proposed project recharge and recovery facilities would only be constructed on 1300 acres or 2 square miles somewhere within or near the Rosedale service area (i.e., the "Kern Fan Project Properties"). (*e.g.,* DEIR, p. 2-1.) Yet the Project Description also states that "The proposed areas for the project facilities are shown in Figure 2-1; based on availability of lands for purchase, the proposed recharge and recovery facilities may be located in the Phase 1 area, Phase 2 area, or *anywhere within the project boundary* (see Figure 2-1)" (DEIR, p. 2-1). The Phase 1 area measures approximately 8 miles from east to west and 2 to 2.5 miles from north to south and encompasses approximately 19.5 square miles. The Phase 2 area measures approximately 2 miles from east to west and 2.5 miles from north to south and encompasses approximately 5.7 square miles, for a combined total area of over 25 square miles. Furthermore, the groundwater modeling used to simulate Project impacts includes some recharge and recovery facilities *that are not in either the Phase 1 or Phase 2 areas.* (See, e.g., DEIR, Appendix H, Figure 2; enclosed Figure 1). The "project boundary" does not seem to be defined anywhere in the DEIR. If it includes the whole of RRBWSD rather than just the Phase 1 and 2 areas, the project area would reach 70 square miles. Yet the modeled recharge and recovery facilities only encompass 2 square miles (~8% of the Phase 1 and 2 Areas alone), and as explained below is insufficient to evaluate the full potential environmental impacts of the entire Project as broadly defined in the DEIR.

KWBA-19

b. Project Scope. The scope of the Project is poorly defined with many important details missing. The Project Description states one of the project objectives is to: "Provide operating flexibility

KWBA-20

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

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

[4] *Id*.

[5] *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193.

for Rosedale's existing and future conjunctive use programs." (DEIR, p. 2-3) The project would also be "Subject to agreements between Rosedale and IRWD… and "the project facilities may be integrated with the other facilities operated in Rosedale's Conjunctive Use Program." (DEIR, p. 2-6) Also stated on page 2-6 of the DEIR: "Subject to agreements between Rosedale and IRWD, the operation of storage for the Authority members would be integrated with storage in Rosedale's Conjunctive Use Program and IRWD's Strand and Stockdale Integrated Banking Projects to store Article 21, Section 215, and other water supplies as well as for implementing exchange programs with SWP and CVP contractors." A description of how the Project will be integrated with other projects and programs is not provided. It appears the DEIR is attempting to obtain CEQA clearance for the Project and unspecified integration of the programs and future programs without evaluating the potential environmental impacts of such integration or the whole of the Project. The details of such other projects and programs, including their facilities, and how they will be integrated or coordinated and/or operated in conjunction with the Project are entirely missing from the DEIR. Without disclosure of such details, it is not possible to evaluate or determine the full direct, indirect or cumulative environmental effects of the same or what mitigation may be appropriate for such effects.

KWBA-20

c. Conveyance Facilities. The DEIR fails to include a clear description of the location of the conveyance facilities that are part of the Project. (See DEIR, p. 2-12.) The DEIR does generally describe several options for the location of conveyance facilities, but does not propose a specific option, or include an adequate comparative evaluation of the environmental effects of the options. Instead, the DEIR states vaguely that "[w]ater would be conveyed to and from a new turnout at the California Aqueduct and a new conveyance system approximately 10 miles long . . .." (*Id.*) There is no adequate description of the location along the California Aqueduct that this new turnout and conveyance system would be located. It is simply not possible for the Authority, any responsible agency, or the public to evaluate the potentially significant impacts of the Project without having any idea where the conveyance would be located, without a clear description of the sources of water for the Project, and without a description and evaluation of the recovery and recharge elements of the Project. The CVC and Kern Water Bank canal are used to deliver significant volumes of water from the Aqueduct within the Project's Kern Fan Conveyance Facilities Area. Depending on the proximity of the proposed turnout for the Project, deliveries to the CVC and KWB canal could be hampered. The EIR should evaluate this potential and provide mitigation measures as needed.

KWBA-21

d. Ecosystem Account. A major facet of the Project is the establishment of an Ecosystem Account for DWR. The DEIR relies on the Ecosystem Account to minimize effects of the Project, yet this program is not assured. The Account would provide for the storage of up to 25,000 AF of unallocated Article 21 water in an account for DWR. This account would be apparently used by DWR to "alleviate stress on endangered and threatened species in the Sacramento-San Joaquin River Delta." However, this program is: "Pursuant to the award of funds under the WSIP…" (DEIR, p. 2-6) and is not a certainty. The DEIR should describe how the Project will change and what replacement measures and performance standards will apply if the funds are not awarded, and how that change might affect the environmental benefits and impacts of the Project.

KWBA-22

e. Sources and Uses of Project Water Supplies. The proposed water supplies for the Project are poorly defined. As stated in the Project description: "The Project would receive, recharge and store SWP Article 21 water, which is a surplus supply managed by DWR. Other water supplies also may be

KWBA-23

secured and acquired by the Authority, Rosedale or IRWD from various sources that may include federal, State, and local supplies through transfers, balanced and unbalanced water exchange agreements, water purchases or temporary transfers, or other available means. Sources may also include supplies from the Kern River water depending on annual hydrologic availability, water rights and regulatory considerations described below." (DEIR, p 2-7.)

KWBA-23

The DEIR does not analyze the environmental effects of utilizing these various undefined supplies or how diverting such supplies to project recharge basins will impact the water or other rights of other parties including those holding or seeking to appropriate Kern River supplies. If the DEIR is intended to apply to the use of these various generally defined supplies, how can the public evaluate the impacts of the Project on these water supplies? For example, the DEIR should identify, describe and evaluate who has what existing rights to the supplies that will be recharged by the project and how such rights and the environment will be impacted by the project's diversion of such supplies.[6]

KWBA-24

The DEIR acknowledges that the water stored in the Project will provide an important water supply for agricultural, industrial, and municipal uses. A material share of the water will be transferred out of Kern County to provide a water supply for the municipal and industrial uses in the Irvine Ranch Water District. The existing water supply (e.g., Colorado River, SWP) for some of these uses is constrained by environmental restrictions and other limitations. Accordingly, the DEIR is required to include sufficient quantitative data regarding the potential uses of the water stored by the Project, and to analyze quantitatively the effects of such uses of the Project water. The analysis should include the extent to which the supply of water is available from local water supplies.

4. The Environmental Baseline Does Not Comply With CEQA Standards.

The fundamental goal of an EIR is to inform decision makers and the public of any significant impacts a project is likely to have on the physical environment, as it exists at the time 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.[7] The physical conditions that exist at the time of the notice of preparation of the DEIR normally constitute the required environmental baseline. In certain narrow exceptions (e.g. where the conditions at the time of the NOP would provide a misleading analysis), the DEIR may also evaluate the effects of the project against another baseline that would provide the public with an adequate evaluation of effects against actual, and not hypothetical, conditions. Where a lead agency chooses an environmental baseline that is different from existing conditions, it is required to explain why the selected baseline is appropriate, and why an existing conditions baseline would be inappropriate.[8]

KWBA-25

The DEIR here fails to describe the environmental baseline for each resource category, in some cases without even describing the relevant conditions as of the time of the filing of the Notice of

KWBA-26

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[6] *E.g., Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2017) 40 Cal.4th 412; Stanislaus *National Heritage v. County of Stanislaus* (1996) 48 Cal.App.4th 182.

[7] CEQA Guidelines, § 15125.

[8] *Id.; Neighbors for Smart Rail v. Exposition Metro Line Construction Auth.* (2013) 57 Cal.4th 439, 447-48.

Preparation. As just one example, the Biological Resources section simply states that "existing conditions" are the baseline without any description of what those "existing conditions" are. For the Biological Resources, the DEIR entirely omits any description of the existing occupancy of threatened and endangered species in the Project area. It apparently fails to describe the existing presence of threatened and endangered species because the DEIR "surveys" are based entirely on "reconnaissance" surveys conducted over two days in July 2020. KWBA-26

The DEIR fails to document how a superficial two-day "reconnaissance" survey covering tens of thousands of acres in the middle of the summer could possibly provide an adequate basis for establishing a baseline for evaluating impacts on migratory species or other species found in Kern County only during certain seasons and hydrological conditions. The DEIR references generalized information on sensitive species derived from the California Natural Diversity Database ("CNDDB"), but then notes that this information is out of date. (DEIR, pp. 3.4-12, 3.4-13.) The DEIR cannot on the one hand rely on highly generalized CNDDB information as the environmental baseline, and then disclaim the accuracy and adequacy of this same information. The superficial information referenced in the DEIR does not provide decision makers or the public with enough information to understand the extent to which sensitive species may occur in the Project area. Nor does it provide them with sufficient information to assess the Project's potential local and regional impacts on these resources. KWBA-27

It is well established that an adequate evaluation of effects of a project of this size and magnitude on threatened and endangered species and other special status species (e.g. fully protected species, state-candidate species, migratory birds, raptors) requires detailed, site-specific surveys. The surveys should be conducted over a sufficient period of time, and over the appropriate seasons, to identify the presence and habitat of the species and the potential effect of the project on the species. Some of the species in the Project area only occur intermittently depending on precipitation and other variables. Some of the species are wide-ranging in the Project area and move in and out of the Project site. For that reason, the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife have adopted species-specific protocols for conducting surveys of listed and special status species. Lead agencies throughout the State of California now routinely use the wildlife agency survey protocols to obtain adequate information necessary for EIRs to describe the existing condition of biological resources, and to assess project impacts against those conditions. KWBA-28

The baselines used for the evaluation of hydrology effects is 2012 and 2015-2016. The DEIR does not document why 2012, 2015 or 2016 accurately describes the existing hydrologic conditions, or that such baselines are sufficiently informative CEQA baselines. Nor does the EIR explain why existing conditions (i.e., 2020 conditions) is not the required CEQA baseline. (DEIR, § 3.10.1.) The DEIR does not discuss the hydrology baseline in terms of wet, normal, dry, and drought years. The DEIR cannot adequately evaluate potential effects of the Project on surface and groundwater without considering Project effects over a reasonable range of water year types. KWBA-29

5. The Evaluation of the Project's Effects Does Not Comply with CEQA Information Standards.

a. Hydrology. The DEIR's analysis of effects on hydrology and water quality is seriously flawed. The Project has the potential to cause significant impacts related to groundwater levels, local water supply wells, and water quality. Nevertheless, the DEIR does not propose enforceable mitigation KWBA-30

measures or project conditions to mitigate and minimize these effects.[9] Moreover, much of the information about the Project's effects on hydrology (and other resources including biological) is improperly buried in and scattered throughout the DEIR appendices.[10]

KWBA-30

i. Groundwater Modeling and Scope of Analysis. As discussed in more detail below, the groundwater modeling (see DEIR, Appendix H) is deficient for a number of reasons including because the modeling and its scope of analysis ignores and does not evaluate the full impacts of the proposed project including future activities that are a reasonably foreseeable consequence of approval of the proposed project. Among other problems, the modeling and impact analysis improperly:

KWBA-31

- Assumes a period of recovery (e.g., only 2 consecutive 10-month periods during a drought) that is shorter and potentially less impactful to groundwater levels than what is described or permitted by the project description or which occurred during the recent drought periods including during the baseline period;

KWBA-32

- Uses recovery well spacing that is less concentrated and less impactful to groundwater levels than is described or permitted in the project description;

KWBA-33

- Assumes the project will recharge for only a 10-month period at a time and unrealistically evaluates associated impacts (e.g., impacts from raising water levels) when other banking projects are recovering water which is also contrary to baseline conditions and past practice among banking programs operating in the area;

KWBA-34

- Fails to consider and/or adequately discuss cumulative recovery or recharge impacts in light of other nearby existing and future probable banking projects recovering or recharging at the same time, which is a past, existing and reasonably foreseeable future operational scenario; and

KWBA-35

- Does not consider impacts of operating the proposed project in conjunction or in "coordination" or "integration" with other banking or groundwater recovery projects or programs of Rosedale and/or Irvine.

KWBA-36

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[9] The only mitigation measure related to water quality is HAZ-1, which states: "Prior to initiating ground disturbance and construction activities, for project facilities located on lands previously used for active agriculture production, the Authority shall collect representative samples of soils to be analyzed for total petroleum hydrocarbons and pesticides. Rosedale shall avoid if feasible or otherwise remove from the site soils identified as containing hazardous quantities of contaminants and dispose of such soils in accordance with applicable hazardous waste regulations." Among other deficiencies, there is no discussion of how this mitigation measure reduces impacts below the threshold of significance or who decides based on what criteria if the proposed avoidance or actions are feasible or not.

KWBA-37

[10] *E.g., California Oak Foundation v. City of Santa Clarita* (2005) 133 Cal.App.4th 1219, 1239.

The "integration," "coordination" and/or "conjunctive" operation of the Project with the other groundwater projects and programs exacerbates the proposed project's impacts, including (for example) if the integration permits recharge in one or more of the existing program's spreading basins and recovery of the water by pumping from a project well or wells located in a portion of the aquifer distant from the where the water was recharged. Although such an operation could result in additional potentially significant water level and water quality impacts, those impacts have not been modeled or otherwise evaluated. Accordingly, the hydrologic impact analysis does not cover or evaluate all or the full extent of project activities and is otherwise not CEQA compliant.[11] KWBA-38

The groundwater modeling baseline used historical groundwater conditions for a previously calibrated model. An operational scenario was superimposed on an incorrect baseline in an effort to determine project impacts on groundwater levels. The scenario consisted of recharging water in 2012 in "example areas" and then recovering that water from specific "planned" wells in two ten-month periods in 2015 and 2016. However, the operational scenario is flawed and does not adequately simulate both groundwater mounding and groundwater drawdown impacts as described below. KWBA-39

ii. Maximum Mounding During Recharge. The model superimposes a recharge program on the historical baseline from March 2012 through December 2012 to evaluate the potential for shallow groundwater impacts. Use of this baseline period to judge project recharge impacts is improper. This period represents a time when the banking programs in the area, including those in Rosedale, were recovering over 170,000 AF of groundwater rather than recharging water. Therefore, the operational scenario superimposes Project recharge over pumping level drawdown from Rosedale's and others' projects, and cannot represent cumulative recharge conditions or assess recharge impacts (direct, indirect or cumulative). Such methodology essentially ignores short-term and long-term impacts by using recovery impacts (water level drawdowns) to artificially offset the Project's recharge impacts (water level increases). This is also misleading and unrealistic and unreasonable because typically recharge and recovery events have not occurred at the same time historically and certainly not during 2012 baseline conditions which was a recovery year. The model should simulate cumulative maximum mounding conditions by superimposing a recharge event during times when other area banking programs are recharging water (e.g. 2011). In addition, the operational scenario only considers 10 months of recharge during a single year. This is unrealistic and contrary to the historical baseline, which includes consecutive years of recharge for all Kern Fan banking programs (e.g., 2005 and 2006). KWBA-40

In addition, because the project area is so large in comparison to the purported footprint of the Project's facilities, "example" areas were utilized for the model simulation in Appendix H. Three specific recharge areas are simulated (see Appendix H, Figure 2; enclosed Figure 1). One 160-acre recharge basin is in the Phase 1 area, one 640-acre recharge basin is in the Phase 2 area, and one 480-acre recharge basin located between the Phase 1 and Phase 2 area. These basin areas represent only a small fraction of the 25-square-mile Phase 1 and 2 areas (~8%). In fact, the easternmost recharge basin used in the analysis is 6 miles west of the eastern boundary of the Phase 1 area. All three recharge basins KWBA-41

[11] *E.g., Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 396; *Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 27; *Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818; *San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal.App.4th 645; CEQA Guidelines, §§ 15126, 15165.

are also ½ to 1 mile north of the area boundaries. Using these example areas, the model predicts that groundwater levels would rise no closer than 64 feet of the ground surface. However, the model does not consider a worst-case or reasonably foreseeable scenario where the recharge basins are located adjacent to other banking projects and/or the Cross Valley Canal ("CVC") in the north half of Sections 4, 5 and 6, T30S/R26E, where groundwater levels are much shallower after significant recharge events. Nor does the analysis consider consecutive years of recharge (e.g. similar to 2005 and 2006). Based on past experience, recharge in these areas and under the scenarios described above could impact the CVC (especially in Section 6) and domestic septic systems in other areas. However, the DEIR provides no analysis of these potential impacts and offers no mitigation for them. KWBA-41

iii. Drawdown during Recovery of Stored Water. The model simulates the recovery of 90,000 AF of water in two 10-month periods from March 2015 – December 2015 and March 2016 – December 2016 in 12 wells located at specific locations. (DEIR, Appendix H, p. 6.) This scenario improperly does not consider continued recovery beyond these two periods, and only considers recovery from very limited areas within the 25-square-mile Phase 1 and 2 Project areas. KWBA-42

The basic premise of the simulation is that the wells will only be used to recover 90,000 AF in two 10-month periods. The 90,000 AF is roughly the volume of water that could be recovered after the recharge of approximately 117,000 AF in a single year in Project basins. However, no total project storage or recovery limit is proposed for the Project, and water stored in multiple years and water from other Rosedale/IRWD programs can be recovered by the Project wells, which may cause greater drawdown level impacts. In fact, based on Rosedale's other recovery programs' past operations and the recovery operations of other Kern Fan banking programs that occurred for much longer periods during the most recent droughts (consecutively from 2007-2010 and 2012-2016, inclusive), it should be assumed the Project wells may be used to recover more water and over much longer periods that the two 10-month period scenario presented in the model. As such, the model simulation does not reliably predict and ignores potentially significant Project drawdown impacts. KWBA-43

iv. Locations of Recovery Wells. Of the 12 wells used in the model simulation, seven (7) are in the Phase 2 area, four (4) are in the area between the Phase 1 and Phase 2 areas and one (1) in is western portion of the Phase 1 area (see Appendix H, Figure 2; enclosed Figure 1). Only five (5) are located in the recharge basins used in the simulation. These locations will not simulate the expected impacts from the well locations proposed in the Project description, which states: "The proposed project would consist of construction of up to 1,300 acres of recharge basin facilities and up to 12 recovery wells on the *Kern Fan Project Properties*." (DEIR, p. ES-6). The wells are spread out over a wider area which diminishes drawdown impacts. Furthermore, the proposed locations are in the western portion of the Project areas. Based on experience, wells located in other areas could have significantly greater impacts on adjoining projects and especially sensitive domestic wells. KWBA-44

v. Lack of Mitigation Measures and Groundwater Level Impacts including to Landowner Wells and SGMA Undesirable Results. Rosedale's Long Term Operations Plan and the Project Recovery Operations Plan (which is a joint plan with adjoining banking programs) are mentioned in the project description. The Joint Project Recovery Operations Plan is a voluntary program with a limited duration, which has been in effect since February 2017 and expires in about 2 years absent a mutually agreed upon extension. Rosedale's Long Term Operations Plan uses a 30-foot trigger for KWBA-45

mitigation measures.[12] This trigger is twice the 15-foot trigger used on the Joint Project Recovery Operations Plan for domestic wells, which joint plan includes potential impacts from several other banking programs. Rosedale's stand-alone Long Term Operations Plan should incorporate a trigger for domestic wells that is significantly less than the current 30-foot trigger and be a mitigation measure. The modeling conducted pursuant to the Joint Recovery Project Operations Plan indicates Rosedale's recovery from its existing banking programs contributes approximately one-third (1/3) of the total or cumulative impacts from all of the banking programs in the region subject to such plan. Therefore, a trigger for domestic wells of five (5) feet or less for the proposed project should be included as mitigation. KWBA-45

The DEIR also assumes without data, analysis, reasoning or explanation that one or both of such operations plans will result in less than significant direct, indirect and cumulative groundwater level impacts. The DEIR should evaluate and specify whether environmental impacts would be significant in the absence of mitigation, so that the project's potential environmental consequences will be adequately disclosed, the need for mitigation identified, and the sufficiency of proposed mitigation measures considered.[13] In fact, this is the method of analysis used in the 2016 Monterey Plus Project Revised Final EIR to evaluate Kern Water Bank project groundwater level impacts, which resulted in mitigation for groundwater level impacts. Based on the discussion in the DEIR, it is not possible to understand why or conclude that groundwater level impacts of the project will be less than significant. KWBA-46

Furthermore, the DEIR concludes that least on a short-term basis the project's recovery wells will draw water levels near, down to and in some cases below Minimum Thresholds ("MT"), specified in terms of maximum groundwater level depths below the ground surface, set by Rosedale's Groundwater Sustainability Plan ("GSP") to avoid undesirable results under the Sustainable Groundwater Management Act, Water Code section 10720 et seq. ("SGMA"). SGMA requires Groundwater Sustainability Agencies to develop minimum thresholds as quantitative values for several sustainability indicators to avoid undesirable results. Undesirable results, including significant and unreasonable degraded water quality, may occur when groundwater levels reach or exceed minimum thresholds.[14] KWBA-47

The modeling conducted for the Project indicates groundwater levels are predicted to drop very near, to and below established Minimum Thresholds during recovery operations. Importantly, this will occur even as a result of the flawed recovery scenario that ignores and minimizes impacts, as described above, which only simulates a limited recovery program (see Drawdown during Recovery of KWBA-48

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[12] Under the plans, mitigation is required upon presentment of a claim for damage when the influence of recovery pumping by the banking program(s) subject to the plan(s) exceeds the applicable trigger, with the trigger being expressed in terms of feet (e.g., 15 or 30 feet) below what that groundwater level would have been without the banking project at a particular well location.

[13] *Lotus v. Department of Transp.* (2014) 223 Cal.App.4th 645, 656.

[14] *E.q.,* 23 Cal Code Regs § 354.28; DRAFT Best Management Practices for the Sustainable Management of Groundwater, Sustainable Management Criteria BMP, available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Best-Management-Practices-and-Guidance-Documents/Files/BMP-6-Sustainable-Management-Criteria-DRAFT.pdf, p. 8.

Stored Water). As such, the analysis provided in the DEIR predicts significant and unreasonable undesirable results will occur. However, no mitigation measures are provided to prevent these impacts. KWBA-48

According to the GSP, the MTs were set at the levels they were in part to avoid recovery of groundwater that exceeds the public health standard or Maximum Contaminant Level for arsenic.[15] The DEIR's Hydrogeological Analysis, Appendix H, at pages 9 and 10, concludes with the following finding: "In order to avoid the undesirable result of producing groundwater level [sic] with arsenic concentrations above the Maximum Contaminant Level, Project management actions (e.g., limiting groundwater pumping or wellhead treatment) may be necessary when groundwater levels are at Minimum Thresholds." KWBA-49

Notwithstanding the deficiencies in the modeling and scope of impact analysis noted above, there is substantial evidence in the DEIR that the project's recovery operations will have at least short-term significant effects due to groundwater level reductions and impede sustainable groundwater management of the Kern County Subbasin and/or conflict with or obstruct implementation of Rosedale's GSP, yet the DEIR improperly fails to include any adequate analysis, discussion or explanation of why no mitigation (including the management actions recommended by Appendix H) is required.[16] KWBA-50

b. Water Quality.

The concentrations of arsenic and 1,2,3-TCP in groundwater recovered from portions of the Project area exceed drinking water standards, yet no mitigation measures related to proposed well placement or the impacts of recovered water quality are proposed. As described in Section 3.10 of the DEIR: "…the concentration of arsenic ranges from about 1 µg/L to about 30 µg/L, and the MCL for arsenic in drinking water is 10 µg/L" (DEIR, p. 3.10-13) and "TCP [1,2,3-TCP] concentrations above the MCL (0.005 µg/L) has also been detected in the Kern Fan area. Recent data from 24 banking recovery wells in the area ranged from below the non-detection limit of 0.00053 µg/L up to 0.054 µg/L (THC 2020a). Half of the wells were non-detect. The other half of the wells had results of 0.01 to 0.05 µg/L." (DEIR, p. 3.10-14.) Although groundwater quality across the project areas is quite variable, the DEIR does not but should describe where the elevated levels of arsenic and TCP are located. KWBA-51

The water recovered by the Project has the potential to exceed the limits provided in DWR's pump-in policy, both in the proposed new conveyance facility and in water delivered to the Aqueduct via the CVC, depending on where the recovery wells are located. The DEIR fails to describe what drinking or other water quality standards apply to pump water into the Aqueduct and does not list such standards as mitigation. The DEIR also fails to explain how the Project is going to comply with them and not, for example, degrade Aqueduct water quality or exceed applicable standards including Maximum Contaminant Levels.[17] Mixing models are currently available and used for proposed pump-ins of non- KWBA-52

[15] Located at http://www.kerngwa.com/assets/rosedale-rio-bravo-management-area-plan.pdf, *in passim* and pp. 68-78 and Appendix G.

[16] See, e.g., DEIR, Hydrology and Water Quality, Impact 3.10-2 and Impact 3.10-5.

[17] An EIR must show how and why compliance with an applicable law or regulatory standard will reduce impacts below applicable thresholds of significant. (*e.g., Oakland Heritage Alliance v. City of Oakland* (2011) 195 Cal.App.4th 884.) KWBA-52

project (non-SWP) water into the Aqueduct by Kern County banking programs.[18] The DEIR provides no analysis of these potential water quality impacts or impacts on water quality of other banking programs, or any potential means to limit these impacts (e.g. locating recharge and recovery facilities in areas with better groundwater quality). The Project is also intended to be "coordinated" or "integrated" with other Rosedale and Irvine programs. It appears the groundwater quality across the Project area is quite variable. The Project should ensure that recharge and recovery will be balanced to the extent necessary to eliminate mining good quality water. KWBA-52 KWBA-53

The Project may also rely on the dilution provided by other banking programs with better water quality to meet these water quality requirements. However, other existing projects rely on these same dilution factors to be able to operate. The DEIR provides no analysis of the potential cumulative impacts to other existing or probable future programs from this aspect of the Project's recovery program. KWBA-54

The water quality analysis also does not consider the distribution of arsenic and TCP in the aquifer. Some areas of the aquifer could provide better quality water than others. Yet the DEIR does not reveal the areal extent of these contaminants, let alone provide a rationale for well placement (or for that matter, recharge basin placement) in light of this issue. KWBA-55

In summary, the DEIR provides no mitigation measures whatsoever with respect to the recovery of contaminated groundwater.[19] The DEIR must fully analyze water quality impacts resulting from the project's recovery program. If the recovery program is not well defined, reasonably foreseeable or worst-case scenarios must be presented. KWBA-56

In addition to the above, two statements regarding water quality need further clarification.

- The following statement is made on page 3.10-36 of the DEIR: "In addition, as the water placed in the recharge basins infiltrates through the soil column down to the aquifer, the water quality would be anticipated to further improve because the soil would filter out some of the chemical constituents." This statement should be substantiated with a description of the processes expected and the constituents that would be affected. KWBA-57

- The following statement is made on page 3.10-37 of the DEIR: "The proposed recharge water does not have elevated concentrations of arsenic and its addition would be expected to reduce the concentrations of arsenic in the deeper portions of the aquifer." This statement KWBA-58

[18] CEQA has required quantitative analysis of impacts in similar situations. (*e.g., Berkeley Keep Jets Over the Bay Comm. v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1381; *Cadiz Land Co. v. Rail Cycle* (2000) 83 CaL.App.4th 74, 93; *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692; *Citizens to Preserve the Ojai v. County of Ventura* (1995) 176 Cal.App.3d 421.)

[19] As previously mentioned, the only mitigation measure related to water quality is HAZ-1, which states: "Prior to initiating ground disturbance and construction activities, for project facilities located on lands previously used for active agriculture production, the Authority shall collect representative samples of soils to be analyzed for total petroleum hydrocarbons and pesticides. Rosedale shall avoid if feasible or otherwise remove from the site soils identified as containing hazardous quantities of contaminants and dispose of such soils in accordance with applicable hazardous waste regulations."

suggests significant mixing between the shallow and deep parts of the aquifer. This has not been observed in the Kern Fan aquifer. KWBA-58

c. Impacts on Water Supplies.

The Project proposes to obtain water from both the State Water Project, the Central Valley Project, and the Kern River. However, the DEIR fails to provide analysis of the potential impacts on these sources, or on competing uses of water or water rights from these sources.

As is extensively documented in the 2010 Final EIR and 2016 Revised Final EIR 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.[20] There is intense competition for Article 21 water when it is available. There are similarly material limitations on additional Kern River supplies. As the Authority 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. KWBA-59

It is not clear from the DEIR's analysis whether it is in fact relying on prior studies performed by the Department of Water Resources or some other entity. To the extent that the DEIR relies on prior studies, the DEIR needs to be revised to explicitly cite to the analysis it is relying on and must summarize the analysis performed. As currently written, the DEIR does not provide sufficient information to conclude that the water supplies proposed for the Project are sufficient, nor does it provide sufficient information to conclude that the Project's impacts to water supplies will not be significant.

d. Other Water Impacts.

The DEIR describes a conveyance canal for the Project as follows: "The proposed project includes a new turnout, additional canals and/or pipelines, and pump stations (collectively the "Kern Fan Conveyance Facilities") to convey water to and from the California Aqueduct and proposed recharge and recovery facilities. The exact locations of the new conveyance facilities have not yet been determined but would have up to 500 cfs of conveyance capacity." KWBA-60

The CVC and Kern Water Bank canal are used to deliver significant volumes of water from the Aqueduct within the Project's Kern Fan Conveyance Facilities Area. Depending on the proximity of the

[20] The Rosedale-Rio Bravo Water Storage District was a party to litigation over the 2010 and 2016 Revised Monterey Amendment EIRs, and these documents are matters of public record and are in the agency files of the Rosedale-Rio Bravo Water Storage District. The 2010 and 2016 Monterey Amendment Final EIRs are incorporated by reference.

proposed turnout for the Project, deliveries to the CVC and KWB canal could be impacted. The EIR should evaluate this potential and provide mitigation measures as needed. KWBA-60

e. Biological Resources.

As discussed above, the information relied upon to establish the environmental baseline to evaluate the Project's effects on biological does not comply with CEQA informational standards. The DEIR's conclusion that the Project will not have a significant effect on biological resources relies on the alleged wetland "habitat" benefits of the Project recharge ponds. The development of intermittent wetland habitat described for the project is subject to unspecified grant funding requirements and is therefore uncertain. As stated on page 2-14 of the DEIR: "… recharge basin design, **subject to grant funding requirements**, would be intended to create intermittent wetlands and bird habitat. The recharge basins **may** be constructed at multiple water depths to benefit both shorebirds and waterfowl. Shorebirds prefer mudflats to a depth of up to 6 inches with sparse vegetation (<40%) while waterfowl prefer depths of 6 inches to above 18 inches with a combination of open water and wetland cover; and dry land (berms or islands) is important for resting areas with dense vegetation (IRWD and Rosedale 2020). **Subject to grant funding requirements**, project berm and island banks would be built at a 4:1 slope with a minimum 1.5-foot freeboard, which would result in at least a 6 to 10-foot-wide vegetative strip above the water line with vegetation extending into shallow water areas." As described later in the document: "Specific features would be incorporated into the design, operation and maintenance of the proposed recharge basins such that during the recharge periods, hydric soil conditions would form allowing for the development of habitat for shorebirds and migratory birds." (DEIR, p. 2-16). Then on page 3.4-41 of the DEIR: "[R]echarge basins would be constructed at multiple water depths to benefit both shorebirds and waterfowl." These assertions regarding basin design are subject to grant funding requirements and none are listed as actual mitigation measures. The document should evaluate the potential effects on benefits and impacts should the described features not be incorporated in the project. Alternatively, the features should be included as mitigation measures. KWBA-61

With respect to the blunt-nosed leopard lizard, the DEIR notes that potential habitat for the lizard occurs on site, and then defers evaluation of impacts to the lizard and feasibility of avoidance to pre-construction surveys. (DEIR, p. 3.4-29.) The blunt-nosed leopard lizard is a Fully Protected Species, as well as listed as endangered under both the federal and state Endangered Species Act.[21] Take of the blunt-nosed leopard lizard is prohibited unless authorized pursuant to a Natural Community Conservation Plan approved by the California Department of Fish and Wildlife ("CDFW"). For that reason, CDFW notes "detection of species presence on a project site is crucial." (CDFW, *Blunt-nosed leopard lizard survey methodology* (October 2019) at p. 1.) KWBA-62

Other deficiencies with respect to the DEIR's analysis and mitigation of the Project's impacts on special status wildlife and plant species, including the Blunt-Nosed Leopard Lizard, Swainson's Hawk, San Joaquin Kit Fox, Nelson's Antelope Squirrel, and other biological resources are specified in the attached comment letter from Senior Biologist, Jim Jones, to Jon Parker, which is enclosed herewith and incorporated herein by reference. KWBA-63

The DEIR defers all evaluation of impacts and potential for avoidance. The DEIR provides no evaluation of the Project's potential impact to the blunt-nosed leopard lizard, despite noting that the KWBA-64

[21] Fish & Game Code, § 5050.

reconnaissance survey indicated that there is potential habitat on site. This type of deferral is improper and cannot properly serve as the basis for the DEIR's conclusion that the Project's biological resources impacts will be less than significant. KWBA-64

The DEIR does not include any proposed delineation of "waters of the United States" or "waters of the State" in compliance with the definitions of those terms adopted under federal and state law. It is not possible for the public to understand the potential impact of the Project (and the purported intermittent wetland benefits of the recharge ponds) on U.S and state waters without a delineation of federal and state waters. The DEIR acknowledges that the Project conveyance facilities will have impacts on federal and state waters, but does not describe the location of the conveyance facilities in any material detail, and does not include a specific conveyance facility option in the Project description as required by CEQA. KWBA-65

In short, the deferral of evaluating these impacts and failure to provide adequate quantitative data to assess whether the Project will have impacts to these biological resources and what degree of impact the Project may have renders the DEIR inadequate as an informational document. Quantitative evaluation of the Project's potential impacts must be included in the DEIR to allow decision makers and the public to fully evaluate the Project and its potential impacts. KWBA-66

6. The DEIR Fails to Evaluate A Range of Reasonable Alternatives.

CEQA requires the DEIR to describe and evaluate a range of reasonable alternatives to the Project.[22] The alternatives analysis is the "heart" of the EIR. The purpose of the alternatives requirement is to identify reasonable alternatives to the proposed project so that the lead agency and the public are able to compare the impacts of the proposed project against the effects feasible alternatives. CEQA imposes a substantive obligation on the lead agency to select the alternative that reduces the Project's significant impacts. KWBA-67 KWBA-68

a. The DEIR's Analysis of a Single Project Alternative Is not a "Reasonable Range."

The DEIR does not comply with CEQA standards for the evaluation of alternatives. The DEIR identifies only a single project alternative – the Antelope Valley Water Bank Alternative – and then immediately dismisses this alternative on the grounds that the alternative is not located in Kern County. Clearly, the identification of a single alternative designed not to accomplish most of the project objectives does not constitute a "range" of reasonable alternatives. Indeed, CEQA requires that range to include alternatives that will achieve ***most***, ***but not all***, of the Project objectives. Here, the DEIR does not evaluate a single alternative that could achieve most of the Project objectives. KWBA-69

Aside from the fact that Antelope Valley Alternative is the only Project alternative that is identified in the DEIR, the DEIR fails to provide a meaningful comparison between the Project and this alternative. Specifically, the DEIR does not provide a detailed comparison of the effects of this alternative as compared to the Project. KWBA-70

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

The DEIR rejects this alternative not on the basis that it only accomplishes one project objective, but on the basis that the Project (and not this alternative) does not have significant and unavoidable impacts due to Project mitigation. This misses the point of the alternatives analysis entirely. There is nothing in CEQA that permits an agency to reject an alternative solely based on the fact that the proposed project itself would not have significant impacts based on the mitigation measures included. CEQA requires that an EIR contain both a full discussion of a reasonable range of alternatives and mitigation measures. One is not a substitute for the other. KWBA-71

It is additionally improper to reject the only alternative actually considered based on the Project's mitigation measures because the Project's mitigation measures are not sufficiently specific or enforceable. KWBA-72

b. The DEIR Fails to Analyze Alternative Locations for Project Conveyance Facilities.

As noted above, the DEIR does not clearly describe the specific locations for Project conveyance facilities, and does not even propose a specific alternative for Project conveyance facilities as required by CEQA case law. The DEIR does not describe or analyze in any meaningful detail the effects of alternative locations of conveyance facilities. A detailed analysis of the effects of the alternative conveyance facility locations is particularly important here because of the DEIR's acknowledgement of the potential impact of the conveyance facilities on the Kern Water Bank and on other water supply facilities. The Kern Water Bank is subject to the requirements of the Kern Water Bank Habitat Conservation Plan/Natural Community Conservation Plan ("Kern Water Bank HCP/NCCP"). The location of the Project conveyance facilities on the Kern Water Bank land will likely adversely impact the biological resources of the Kern Water Bank, and interfere with the Kern Water Bank Authority's achievement of the biological objectives of the Kern Water Bank HCP/NCCP. KWBA-73

c. The DEIR Fails to Analyze An Alternative Water Banking Operation Similar to the KWBA Habitat Conservation Plan/Natural Communities Conservation Plan.

The DEIR claims that the Project will have intermittent wetland and other biological resource benefits similar to the environmental benefits of the Kern Water Bank HCP/NCCP. The DEIR's claim is misleading in the extreme. The DEIR does not include any commitments to the conservation and restoration of biological resources that are remotely similar to the binding conservation commitments in the Kern Water Bank HCP/NCCP. The DEIR indicates that the Project recharge basins will be similar to photos of examples of highly-engineered recharge basins that are devoid of vegetation, and that are aggressively managed to eliminate vegetation. The proposed highly-engineered recharge basins 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.[23] Instead, the highly-engineered recharge basins 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. KWBA-74

[23] 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.

The Kern Water Bank is located immediately to the south 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. KWBA-75

d. The DEIR Fails to Analyze Alternatives that Would Avoid or Substantially Lessen Significant Groundwater Level Impacts to Nearby Wells and Public Infrastructure and Water Quality Contamination

"An EIR shall describe a range of reasonable alternatives, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."[24] Courts have emphasized that an EIR's discussion of alternatives must "contain facts and analysis, not just the agency's bare conclusions or opinions," must include "meaningful detail," and in some cases must include "quantitative, comparative analysis" of the relative environmental impacts of project alternatives.[25] KWBA-76

As discussed above, the DEIR's alternative discussion should be expanded to include additional action alternatives.[26] Given the project's significant impacts to groundwater levels and water quality, as discussed above, the DEIR should consider as part of its alternative analysis alternatives that include the following analysis and elements that would reduce the intensity of such impacts: KWBA-77

1) An alternative that avoids or substantially lessens the significant direct, indirect and cumulative groundwater level drawdown impacts including to neighboring wells, which should include:

a) An analysis that corrects the flaws in the modeling scenario described above (including with respect to the unrepresentative and unrealistic duration of the simulation and the improper locations of the Project's recovery wells) and determines and quantifies the full extent of groundwater level drawdown impacts; KWBA-78

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24 CEQA Guidelines, § 15126.6, subd. (a).

25 *Laurel Heights Improvement Association v. The Regents of the University of California* (1988) 47 Cal.3d 376, 404, 406; *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 735.

26 *E.g., Mann v. Community Redevelopment Agency* (1991) 233 Cal.App.3d 1143, 1150-1151 ["four alternatives… represent enough variation to allow informed decision making"]; *Sequoyah Hills Homeowners Association v. City of Oakland* (1993) 23 Cal.App.4th 704, 712-714 [court upholds alternative analysis with three action alternatives in addition to "no project"].

b) Reducing the number of and/or increasing the spacing between Project recovery wells such that Rosedale's SGMA MT's are not reached or exceeded by Project groundwater extraction;
c) Locating Project recovery wells a sufficient distance away from existing banking facilities and wells to avoid or substantially lessen significant cumulative drawdown impacts; and
d) Locating Project recovery wells a sufficient distance away from existing domestic wells to avoid or substantially lessen significant drawdown impacts to sensitive receptors including drinking water supplies.

KWBA-78

2) An alternative that that avoids or substantially lessens significant direct, indirect and cumulative water quality impacts, which should include:

a) An analysis that identifies and quantifies the aerial extent of groundwater contamination;
b) An appropriate evaluation and quantification of the potential impacts related to the recovery, conveyance and discharge of the contaminated water by the Project; and
c) Locating Project recharge and recovery wells and facilities a sufficient distance from known groundwater contamination to avoid or substantially lessen significant impacts to groundwater and surface water including the CVC and Aqueduct supplies.

KWBA-79

3) An alternative that avoids or substantially lessens direct, indirect and cumulative significant recharge impacts, which should include:

a) An analysis that corrects the flaws in the modeling scenario described above (including with respect to the unrepresentative and unrealistic timing and duration of the Project recharge simulation) and determines and quantifies the full extent of shallow groundwater impacts; and
b) Locating Project recharge basins sufficient distance away from sensitive receptors and public infrastructure, including the CVC and septic tanks, to avoid or substantially lessen significant shallow groundwater impacts.

KWBA-80

7. The DEIR's Analysis of Cumulative Impacts is Insufficient.

CEQA requires an EIR to evaluate the cumulative impacts of a proposed project resulting from the incremental impact of the project [under review] when added to other past, present and reasonably foreseeable probable future projects.[27] CEQA requires identification of other ongoing, planned, and approved projects in the relevant area of impact. The list of relevant cumulative projects is not restricted to projects that are the same as the proposed project. Rather, the list should include other projects that

KWBA-81

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

have ***effects*** that, when added to the Project effects, are potentially significant. The EIR is then required to evaluate the extent to which the Project will contribute to the cumulative effects of other projects, whether those contributions are substantial, and identify mitigation measures to mitigate and minimize the significant effects. KWBA-81

The DEIR limits the cumulative effects analysis to other water banking projects, which as discussed above does not analyze certain cumulative banking project impacts. A cumulative impacts analysis is required to consider all past, present, and foreseeable projects with the potential to cause cumulative effects on the same resources that the Project impacts. For example, the EIR should evaluate the cumulative effects of the Project on biological resources in the southern San Joaquin Valley when combined with the effects of other relevant projects in this region. KWBA-82

Because the DEIR artificially limits the projects included in the cumulative impacts analysis, the DEIR fails to establish an adequate baseline for the analysis of the Project's cumulative effects. This error is compounded by the lack of an identified threshold of significance for cumulative effects. Absent an appropriate cumulative impacts baseline, and threshold of significance against which to measure the Project's contribution to cumulative effects, the DEIR fails to analyze whether the Project will substantially contribute to cumulatively significant impacts. KWBA-83

8. The DEIR's Mitigation Measures and Project Mitigation Elements Do Not Comply with CEQA Standards.

CEQA requires the DEIR to identify feasible and enforceable mitigation measures to reduce significant effects to less than significance. The description is required to distinguish between measures included in the project and measures proposed to be adopted by the lead agency.[28] Measures are required to be "fully enforceable" through "legally binding instruments."[29] Mitigation measures are required to be described in sufficient detail and specificity to be enforceable. Formulation of adequate mitigation may not be deferred to future studies. Where it is not feasible to formulate a specific, enforceable measure, the EIR is require to describe enforceable performance standards that will reduce effects to less than significance.[30] KWBA-84

The DEIR violates the above standards. It does not describe specific and enforceable mitigation measures or project elements relied upon to reduce significant effects. It fails to demonstrate that it is not feasible to formulate detailed and enforceable mitigation measures. Nor does it identify enforceable performance standards in lieu of specific and adequate mitigation measures. The DEIR defers the formulation of a large number of measures to subsequent studies (e.g., biological resource surveys) are improperly deferred, and mitigation measures are contingent on that deferred analysis. Specific examples of the DEIR's improper deferral of mitigation are: KWBA-85

- BIO-1 – improperly defers surveys for the blunt-nosed leopard lizard; requires undefined mitigation based on outcome of deferred surveys; KWBA-86

[28] CEQA Guidelines, § 15126.4, subd. (a)(1)(A).
[29] CEQA Guidelines, § 15126.4, subd. (a)(1)(D)
[30] CEQA Guidelines, § 15126.4, subd. (a)(1)(B).

- BIO-3 – improperly defers surveys for Swainson's hawk; requires measures that are inexact based on the outcome of deferred surveys;
- BIO-5 – improperly defers evaluation of whether the Project site includes San Joaquin kit fox habitat; requires undefined mitigation based on the outcome of the evaluation;
- BIO-6 – improperly defers survey for Tipton kangaroo rat; requires undefined mitigation based on the outcome of deferred surveys;
- BIO-7 – improperly defers survey for Nelson's antelope squirrel; requires undefined mitigation based on the outcome of surveys;
- BIO-8 – improperly defers survey for American badger; requires undefined mitigation based on the outcome of surveys;
- BIO-9 – improperly defers surveys for special-status plant species; requires development of an undefined revegetation/restoration plan depending on outcome of surveys;
- BIO-10 – improperly defers development of an operations and maintenance plan;
- BIO-11 – improperly defers development of a pesticide use plan.

KWBA-86

The above are merely examples of the DEIR's mitigation measures that improperly deferred mitigation. Additionally, the DEIR relies throughout on ill-defined Project features and elements that are not enforceable to mitigate Project impacts. Relying on uncertain features and elements to mitigate project impacts flatly fails to meet CEQA's enforceability standards for mitigation measures. An example of this improper reliance on unenforceable and speculative mitigation is the DEIR's reliance on the Rosedale Operations Plan to mitigate groundwater impacts of the Project. Finally, the DEIR's discussion of appropriate mitigation measures is necessarily deficient due to other related deficiencies in other aspects of the DEIR, including of improper project description, failure to evaluate a reasonable range of alternatives, and improper analysis of the Project's impacts. It is not possible to determine appropriate mitigation in light of such deficiencies.

KWBA-87

KWBA-88

9. Conclusion.

The Kern Water Bank Authority objects to the approval of the Kern Fan Groundwater Banking Project. It requests that the Groundwater Banking Authority revise the DEIR to address the comments above, and to recirculate the revised DEIR for additional public review and comment. KWBA-89

Sincerely,

Jonathan Parker, General Manager[31]
Kern Water Bank Authority

Enclosures:
-Figure 1, prepared by Jonathan Parker
-Comment Letter on DEIR re Biological Resources, prepared by Senior Biologist Jim Jones to Jonathan Parker

[31] Jonathan Parker is a Professional Geologist (4728) and Certified Hydrogeologist (110) in the State of California, has a BS and MS Degree in Geology from California State University, Northridge, and a Certificate in Hydrogeology from California State University, Bakersfield. Mr. Parker has been the General Manager of the Kern Water Bank Authority since 1999. As the KWBA's General Manager, Mr. Parker has administered the KWB in accordance with the Kern Water Bank HCP/NCCP and interacted with wildlife agencies and has guided the development of most of the KWB's infrastructure and has provided hydrogeologic oversight for the development of a three-dimensional model to simulate KWB project operations and effects on groundwater levels including cumulative effects. Mr. Parker is familiar with how Kern Fan groundwater banking and extraction programs operate and individually and cumulatively affect environmental resources including groundwater levels and potential impacts to nearby wells and other facilities during recovery and recharge operations and is familiar with their potential effects on CVC and Aqueduct water quality and applicable water quality pump-in requirements for such conveyance facilities.

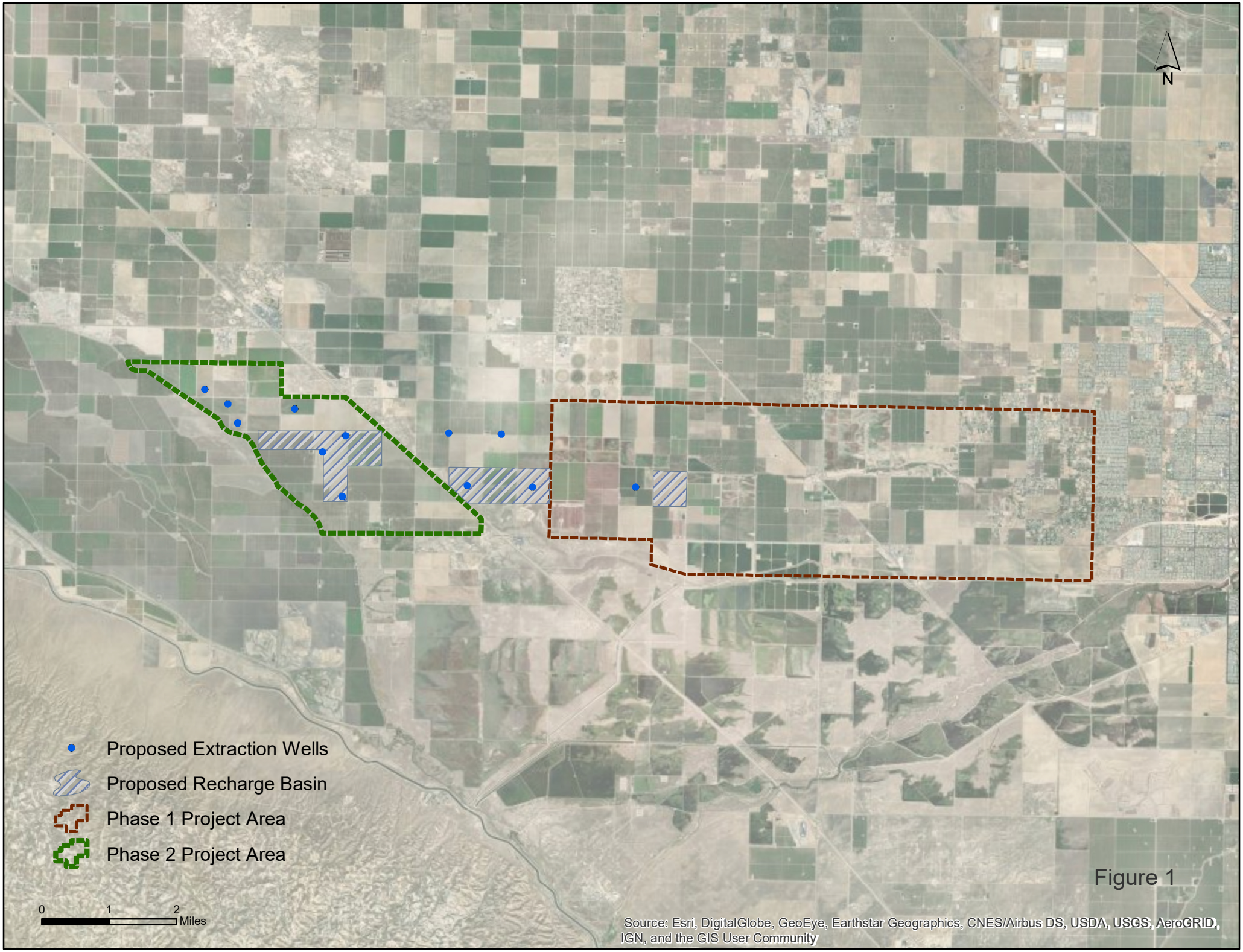
N
Proposed Extraction Wells
Proposed Recharge Basin
Phase 1 Project Area
Phase 2 Project Area
0
1
2
Miles
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 1

November 28, 2020

Jonathan Parker
Kern Water Bank Authority
1620 Mill Rock Way, Suite 500
Bakersfield, California 93311

RE: Comments on the Draft Environmental Impact Report for the Kern Fan Groundwater Storage Project - SCH# 2020049019

Dear Mr. Parker:

South Valley Biology has reviewed the subject Draft Environmental Impact Report (DEIR). Please see the following observations/comments.

Section 3.4. Biological Resources:

3.4-1: Environmental Setting – The DEIR states that the Tupman and 8 surrounding USGS quadrangles were queried for the CNDDB and CNPS database searches, however, only 7 surrounding quadrangles are listed. The Rio Bravo quadrangle is missing. The same statement is included on 3.4-13. KWBA A-1

3.4-16: Swainson's hawks are known to nest in many locations within the Conveyance Facilities area and elsewhere in and adjacent to the other portions of the project area. This species frequently nests and forages at the Tule Elk Reserve and the Kern Water Bank. KWBA A-2

3.4-17: Tricolored blackbirds frequently nest and forage within the Conveyance Facilities area and elsewhere within other portions of the project areas. This species has adapted to use mesquite trees/shrubs for nest sites when cattails and tules are not available or adequate for their purposes. KWBA A-3

3.4-17: Nelson's antelope squirrels have seen an expansion of their populations in recent years into areas that were previously unoccupied for many years. This is the case at the nearby Coles Levee Ecosystem Preserve and at the Kern Water Bank. The areas that support suitable habitats for this species, particularly within the Conveyance Facilities area should be considered potentially occupied by this species until focused surveys using approved CDFW survey methodology are conducted. KWBA A-4

3.4-18: Tipton kangaroo rats are known to occur on at least two areas within the Conveyance Facilities area and likely occur on other areas with appropriate habitats. The only reliable way to determine presence of this species is to conduct live trapping where suitable burrows are present. KWBA A-5

3.4-18: San Joaquin kit fox are known to occur in many areas within the Conveyance Facilities area and other portions of the project areas. This species has adapted to utilize a variety of natural and human habitats throughout much of the southern San Joaquin Valley. This species should be considered KWBA A-6

potentially present in all areas of the project until appropriate focused surveys are conducted to determine presence and use of the project areas. KWBA A-6

3.4-19: Horn's milk vetch is known to occur within the Conveyance Facilities area. Habitats are existing earthen water conveyances and groundwater recharge basins. KWBA A-7

Impact 3.4-1 – Special Status Species.

The DEIR states on page 3.4-31 that there is a medium potential (i.e. the project areas provide marginal habitat for a particular species) for seven special-status plant species to occur within the Conveyance Facilities project area. Further, it is noted on page 3.4-7 and page 3.4-12 that access was not granted to the majority of the Conveyance Facilities project area as it is located on private property. Consequently, and as is acknowledged in the DEIR, the entirety of vegetation communities present within the Conveyance Facilities project area could not be described at the time of the preparation of the DEIR. Still, the DEIR notes in Mitigation Measure BIO-9 that if a special-status plant species is found to be present, and avoidance of the species and/or habitat is not feasible, the Authority shall prepare and implement a Revegetation/Restoration Mitigation Plan. Although it is noted that this future plan will guide activities during construction and operations and maintenance to avoid and minimize impacts to special-status plant species, no specific performance standards are provided that would allow for a determination of whether or not this future formulated plan would be effective in reducing impacts to a less than significant level. Further, the mitigation measure should note that the Revegetation/Restoration Mitigation Plan would be subject to review and approval by the California Department of Fish and Wildlife (CDFW). Also, as it cannot be determined if take can be avoided until after completion of several protocol-level surveys combined with identifying the specific location(s) of the conveyance facilities, the proposed Project may need to obtain an Incidental Take Permit (ITP) pursuant to Fish and Game Code section 2081(b) or some other permit or agreement with CDFW.

KWBA A-8

KWBA A-9

KWBA A-10

Blunt-Nosed Leopard Lizard

On page 3.4-16, the DEIR notes that the blunt-nosed leopard lizard is considered to have a medium potential to occur on-site. The DEIR further states that although there are numerous California Natural Diversity Database (CNDDB) occurrences for this species, the majority of the CNDDB observations for the species within and adjacent to the project areas are over 25 years old. However, as pointed out by CDFW, the CNDDB records voluntary submissions of species detections; hence, this species may be present in locations not identified in the CNDDB.

KWBA A-11

With respect to the potential for impacts to the blunt-nosed leopard lizard during construction activities, the DEIR notes that with implementation of Mitigation Measure BIO-1 that impacts will be less than significant. However, this measure only discusses conducting protocol level surveys in accordance with the CDFW *Approved Survey Methodology for the Blunt-nosed Leopard Lizard*. It does not specify what actions would be taken if this species is observed within the project areas, which at minimum would require further consultation with CDFW. Conducting protocol level surveys does not in and of itself guarantee that impacts would be reduced to a less than significant level. Although it does note that the

KWBA A-12

Authority shall initiate appropriate project modifications to protect blunt-nosed leopard lizard, including avoidance, minimization, restoration, preservation, or compensation, there is no requirement to consult with the CDFW in the event that the species is determined to be present within the project areas. Pursuant to the California Endangered Species Act (CESA) and Fish and Game Code, the blunt-nosed leopard lizard is classified as endangered and fully protected, as such no take can be authorized unless the proposed Project acquires a Natural Community Conservation Plan (NCCP). As currently written, the use of the terms minimization, restoration, preservation, or compensation in this mitigation measure does not indicate complete avoidance.

KWBA A-12

Swainson's Hawk

On page 3.4-16, the DEIR notes that suitable nesting habitat occurs in the project areas and that two adult Swainson's hawks were observed flying over the Phase 2 project area and is considered to be present on-site. The DEIR further notes on page 3.4-32 that with implementation of Mitigation Measure BIO-3 impacts would be less than significant. This measure requires that nesting surveys be completed if construction activities are initiated within the nesting season in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*. If a nest is identified, a qualified biologist would establish the appropriate buffer zone around the nest where construction activities would be avoided. Hence, this measure assumes that avoidance can be established and does not consider the possibility that a ½-mile no-disturbance nest buffer may not be feasible which would require consultation with CDFW to determine if take can be avoided or if an ITP is warranted.

KWBA A-13

San Joaquin Kit Fox

Special-Status Species – BIO-5: BIO-5 discusses that a USFWS approved "early evaluation" will be conducted to determine if the project sites represent San Joaquin kit fox (SJKF) habitat. However, there is no discussion or explanation as to why the project will be utilizing the USFWS's protocol to conduct an early evaluation for SJKF as laid out in their San Joaquin Kit Fox Survey Protocol for the Northern Range, June 1999. Since this protocol is for the northern part of the kit fox's range, the DEIR should explain why an out of area protocol is nevertheless appropriate at the far southern end of kit fox range. Additionally, the USFWS did not provide Scoping comments on the DEIR, only the Fresno office of CDFW provided Scoping Comments. The CDFW in their Scoping Comments did not specify that the USFWS's northern range protocol be utilized. The CDFW only recommended that a "SJKF habitat assessment" be conducted to determine if the project area or its immediate vicinity contain suitable habitat for SJKF. As written, it is incorrect to assume utilizing the protocol for the northern part of the SJKF range is acceptable for the far southern part of the SJKF's range.

KWBA A-14

KWBA A-15

On page 3.4-18, the DEIR notes that the San Joaquin kit fox is considered to have a high potential to occur in the project areas. However, it is noted that implementation of Mitigation Measure BIO-5 would reduce potential impacts to a less than significant level. This measure requires that the USFWS "early evaluation" be completed in accordance with the most recent San Joaquin Kit Fox Survey Protocol, and, if necessary, subsequent surveys to determine measures for avoidance, minimization, restoration,

KWBA A-16

preservation, or compensation. Given that this species has a high potential to occur on the project areas this measure should also recognize the potential need to obtain a Section 2081 ITP if it is determined that incidental take cannot be avoided. In comparison, the discussion related to impacts to wetlands (DEIR p. 3.4-40), it is noted that if wetlands are present on-site, the Authority would be required to obtain a Section 404 Permit from the United States Army Corps of Engineers, a Section 401 from the Regional Water Quality Control Board, and a 1602 Streambed Alteration Agreement from the CDFW or written documentation that one is not required. Although a Section 2081 ITP may not be required, the need to consult with CDFW in the event that the species is determined to be present on-site would be warranted to ensure that adequate mitigation measures to protect the species would be implemented.

KWBA A-16

Nelson's Antelope Squirrel

On page 3.40-17, the DEIR notes while suitable habitat for the species exists in the project areas, the Nelson's antelope squirrel is considered to have a medium potential to occur. However, with implementation of Mitigation Measure BIO-7 impacts would be reduced to a less than significant level. This measure requires that if this species is observed on the project areas the Authority shall determine the *appropriate* project modifications to protect Nelson's antelope squirrel, including avoidance, minimization, restoration, preservation, or compensation. However, if it is determined that this species is present, the language in this measure does not allow for any meaningful determination that any proposed measure would meet specific performance standards and thereby be effective in mitigating potential impacts to a less than significant level. Further, there is no requirement to consult with the CDFW in the development of this plan to ensure that the measures proposed would in fact be effective in reducing potential impacts from this activity to a less than significant level.

KWBA A-17

Operations & Maintenance Activities and Impacts to Special-Status Wildlife and Plant Species

On page 3.4-34, the DEIR notes that operations and maintenance activities could pose a significant impact to special-status wildlife and plant species, but concludes that implementation of Mitigation Measure BIO-10 would reduce impacts to a less than significant level. Mitigation Measure BIO-10 notes that the Authority shall develop an Operations and Maintenance Plan that details how special-status plant and wildlife species, nesting birds and sensitive natural communities will not be impacted by operations and maintenance activities. However, this measure does not provide any specific performance standards or any other details that would allow for any meaningful determination that this future plan would in fact be effective in mitigating potential impacts to a less than significant level. Further, there is no requirement to consult with the CDFW in the development of this plan to ensure that the measures proposed would in fact be effective in reducing potential impacts from this activity to a less than significant level.

KWBA A-18

It is further noted on page 3.4-34 that application of pesticides, rodenticides and herbicides can be detrimental to special-status species, especially smaller animals such as the Tipton kangaroo rat and the Nelson's antelope squirrel. However, it is concluded that implementation of Mitigation Measure BIO-11 would reduce impacts to a less than significant level. Mitigation Measure BIO-11 states that the Authority shall develop a Pesticide Use Plan that details how pesticides, rodenticides, and/or herbicides will not impact special-status plant and wildlife species, nesting birds, wetlands and jurisdictional

KWBA A-19

features, and sensitive communities. However, no additional details or performance standards are provided that would allow for a meaningful determination of whether this future formulated plan would be effective in reducing impacts to a less than significant level. Also, there is no requirement to consult with the CDFW or any other resources agency to ensure that the measures that will be included in this future plan will in fact be effective and reduce potential impacts to a less than significant level. Hence, this mitigation measure provides no explanation or factual information to support a conclusion that potential impacts to all of these sensitive resources would be less than significant.

KWBA A-19

Impact 3.4-6: HCP and NCCP: The DEIR states that it has not been determined if Conveyance Facilities will be located on the Kern Water Bank property. If no facilities are located thereon, then there would be no impacts to the Kern Water Bank property. However, if Conveyance Facilities do end up being sited on Kern Water Bank property, there could be impacts to habitat and listed species.

Mitigation Measure BIO-14 commits the project to initiate discussions with the Kern Water Bank Authority (KWBA) to ensure the Conveyance Facilities avoid impacts to covered species within the KWBA HCP/NCCP area. The DEIR does not discuss what actions would be taken to avoid impacts to listed species habitat on the Kern Water Bank's property, or what type of compensation or habitat restoration may be implemented to reduce such impacts. The DEIR does not specify or discuss if the project proponents would be complying with the KWBA HCP/NCCP's measures during construction and operation on KWBA property. The DEIR does not specify whether the new Joint Powers Authority would be subject to these or similar requirements, or if they would be exempt as discussed for the Bakersfield Metro HCP which does not apply to the Joint Powers Authority.

KWBA A-20

If you have any questions or need additional information, please do not hesitate to contact me.

Sincerely,

James W. Jones, Jr.

James W. Jones, Jr.
President and Senior Biologist III

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AND SRI LANKA

November 30, 2020

VIA EMAIL eaverett@rrbwsd.com

Eric Averett
Groundwater Banking Joint Powers
Authority
P.O. Box 20820
Bakersfield, CA 93390-0820

Re: City of Bakersfield's Comments to Environmental Impact Report for Kern Fan Groundwater Storage Project.

Dear Mr. Averett:

On behalf of the City of Bakersfield ("City" or "Bakersfield"), we submit the following comments to the Draft Environmental Impact Report ("DEIR") for the Kern Fan Groundwater Storage Project ("Project") issued by the Rosedale-Rio Bravo Water Storage District ("Rosedale") on behalf of the Groundwater Banking Joint Powers Authority ("Authority") on October 16, 2020. BAK-1

We previously submitted comments to the Notice of Preparation ("NOP") for the Project on behalf of the City on May 8, 2020. In the NOP comments, the City raised a number of concerns with the Project and identified a number of issues, and impacts, that the Authority should identify and review in the DEIR for the Project. The Authority, however, failed to sufficiently address or respond to the City's comments in the DEIR. The Authority in particular failed to provide data, information and analysis in the DEIR that is necessary and required for an EIR for a project that calls for the transfer of a potentially significant amount of local water supplies, including Kern River water supplies, to Southern California. BAK-2

The City is still concerned that the "out-of-county" water sales or transfers proposed through the Project could cause substantial harm to the local environment, the local groundwater BAK-3

basin, the City's water resources and supplies, the Kern River, and the water resources of the entire southern San Joaquin Valley. BAK-3

The City also has significant concerns with the DEIR. As explained herein, the City maintains that the DEIR does not comply with the policy, purpose or specific requirements of the California Environmental Quality Act ("CEQA"). The DEIR omits or obscures critical, necessary details of the Project, and consequently fails to properly disclose and asses all potential impacts of the Project on the local environment and water resources. The DEIR also fails to properly consider reasonable, feasible alternatives for the Project, including the "no project" alternative. BAK-4

1. BAKERSFIELD HAS SIGNIFICANT CONCERNS WITH AND OBJECTIONS TO THE PROJECT

Bakersfield will not repeat all of its practical and legal concerns with regard to the Project in these comments. The City's comments to the NOP set forth the City's extensive and detailed questions, concerns and objections to the Project. The City attaches a copy of the comments to the NOP as Exhibit A, and incorporates such comments as part of the City's comments to the DEIR. (*See Woodward Park Homeowners Assn., Inc. v. City of Fresno* (2007) 150 Cal.App.4th 683, 712, noting that comments to an NOP were preserved for a later challenge to an EIR.) BAK-5

The City points out that the DEIR fails to address the following questions, uncertainties and deficiencies that the City raised in its comments to the NOP regarding the Project.

A. Potential Transfer of Local Water Supplies Out of Area

The City is concerned that the Project will involve the transfer or sale of local water supplies, including the waters of the Kern River, out of Kern County to the Irvine Ranch Water District ("Irvine"). The DEIR indicates that Irvine is a California Water District that provides water "to approximately 422,000 residents encompassing 181 square miles in central Orange County." (DEIR, p. ES-4.) The DEIR indicates that one of the primary purposes and goals of the Project is to increase Irvine's water supply. Specifically, one of the "Project Objectives" is to provide Irvine's "customers and existing partners with increased water supply reliability during periods when other supply sources may be reduced or interrupted." (DEIR, p. ES-6.) BAK-6

The DEIR expressly states that the Project will involve the use of Kern River water. The DEIR states: "The proposed project would be operated such that surplus surface water from the SWP, CVP, **Kern River** and other available water sources would be recharged and stored for subsequent recovery." (DEIR, p. ES-6, emphasis added.) The DEIR also expressly states that Kern River water "available" to Irvine through "agreement(s) with existing right holders" will be recharged, stored, recovered and delivered through the Project, including to Irvine's service area in Southern California. (DEIR, p. 2-1.) The DEIR further indicates that up to 37,500 acre-feet of "storage capacity" in the Project will be shared equally between Rosedale and Irvine, and that Irvine will use water held in that "account" for "M&I uses." (DEIR, p. ES-7.)

Sales and transfers of local water supplies, in particular Kern River water supplies, out of the County are directly contrary to the policies and interests of the City, and are highly damaging to the local water supply, groundwater basin and environment. The City has a long standing policy, most recently confirmed in 2001, that Kern River water shall not be utilized outside the boundaries of the San Joaquin Valley portion of Kern County.

The City is concerned that the out-of-county water transfers proposed through the Project could cause substantial harm to the local environment, the local groundwater basin, the City's water resources and supplies, the Kern River, and the water resources of the entire southern San Joaquin Valley. The City therefore reserves the right to challenge the Project to prevent harm to the City and local water supplies.

BAK-6

Rosedale, moreover, holds no Kern River water rights, but only receives Kern River water from the City pursuant to a water supply agreement. Rosedale is bound, through that agreement, to only use Kern River water acquired from the City within its boundaries. The City reserves the right to challenge and prevent any effort by Rosedale to violate the place of use restriction in that agreement, through the Project or otherwise.

BAK-7

The City understands that Rosedale has already provided Irvine with a mechanism to transfer local water supplies out of the area, to Southern California urban areas, through its partnerships with Irvine in the "Strand Ranch Integrated Banking Project" and the "Stockdale Integrated Banking Project." Those harmful actions, and any prior transfer of local water supplies out of the region by Irvine, do not excuse or diminish the potential adverse impacts arising from the present Project. The Project would significantly expand Irvine's ability to transfer local water supplies out of the region. The current Project, moreover, expressly acknowledges that it will involve the transfer of valuable and important local Kern River water supplies to Southern California urban interests.

BAK-8

Rosedale claims: "The proposed project has received a conditional award of funding through the California Water Commission's Water Storage Investment Program (WSIP). The WSIP is funded by the Proposition 1 Water Quality, Supply and Infrastructure Act of 2014. The purpose of the WSIP is to fund water storage projects that provide public benefits, improve operation of the State water system, and provide a net improvement in ecosystem and water quality conditions." (DEIR, p. 2-3.)

The Project does not appear to comply with or satisfy any of those requirements. The Project instead, by transferring local water supplies to Southern California, does not provide any "public benefit" to Kern County, and adversely impacts instead of improves the local ecosystem, and water quality conditions.

BAK-9

B. Consistency and Compliance with SGMA

The City is additionally concerned that the Project will violate the Sustainable Groundwater Management Act ("SGMA") by contributing to and exacerbating overdraft

BAK-10

conditions in the Kern Subbasin, and by contributing to adverse groundwater conditions, including through lowered groundwater levels, loss of local water supplies and increased, unsustainable groundwater pumping. BAK-10

The DEIR fails to consider any of those impacts, and instead simply assumes, and argues, without any supporting data, that the Project will "help support" groundwater sustainability efforts. The DEIR, states, for example: "There is approximately 1.7 million acre-feet (AF) of storage within the aquifer underlying the Rosedale service area. The purpose of the proposed project is to augment the recharge, storage, and extraction capabilities of existing programs and provide the project participants greater operational flexibility. By storing additional surface water underground in Kern County, the proposed project would benefit groundwater levels in the Kern County Sub-basin and help support groundwater sustainability efforts required by the Sustainable Groundwater Management Act (SGMA)." (DEIR, p. 2-4.) BAK-11

The DEIR later concludes: "The additional water stored in Kern County as a result of the proposed project would benefit water levels in the Kern County Sub-basin and help support groundwater sustainability." (DEIR, p. 2-16.) That statement is misleading, as it does not take into account pumping and extraction of water in connection with the Project. The DEIR fails to consider or account for the fact that water used in the Project or lost to the Project would have to be replaced, most likely through increased pumping from the overdrafted groundwater basin. The statement also does not disclose that the Project would not create new water supplies, or result in an increase in water in the basin. The statement also does not identify or account for the critically overdrafted condition of the basin, the coordinated Groundwater Sustainability Plan ("GSP") for the entire basin, lost recharge from the transfer of water supplies out of the area, or localized impacts on water levels from extractions in connection with the Project. BAK-12

Transfers of local water supplies out of the basin would, most importantly, directly violate and contradict the goals, policies and requirements of SGMA, and the principles, goals and objectives of various GSPs submitted for the basin. The DEIR fails to sufficiently or properly explain how the Project relates to, supports and impacts SGMA requirements, the GSP recently submitted to the State of California by Rosedale, and the goal's, programs and obligations set forth in Rosedale's GSP. The DEIR does not consider the impact and effect of the Project, including the proposed potential transfer of Kern River water out of the County, on the goals, projects and requirements set forth in the GSPs for the entire basin, including the "master" GSP for the Kern Groundwater Authority Groundwater Sustainability Agency ("GSA") and the GSP for the Kern River GSA. BAK-13

The DEIR also fails to explain that the Kern Groundwater Authority only covers and has jurisdiction over part of the Kern Subbasin, and its GSP is only a component of a larger GSP through coordination with other GSAs in the basin, including the Kern River GSA, which has jurisdiction over a substantial portion of the Kern River surface water supplies in the region. The DEIR does not even mention the Kern River GSA or the Kern River GSA's GSP, and the DEIR BAK-14

accordingly fails to discuss or consider how the Project impacts or is consistent with the coordinated GSP for the entire basin. BAK-14

C. Water Supplies for the Project

The DEIR fails to identify, explain and analyze in sufficient or required detail the specific sources of water that will be utilized in the Project, and the impacts associated with the use of those water supplies. At several places in the DEIR, the Authority indicates that the Project will utilize State Water Project (SWP) water, including Article 21 water; Central Valley Project (CVP) water, including Section 215 water; "Kern River water available to the Authority through agreement(s) with existing right holders;" and "Water from other sources when available." (DEIR, p. 2-1.)

Such general references to potential water sources in the DEIR, without further detail or explanation, is not sufficient and does not comply with CEQA requirements. The DEIR fails to identify the current uses of the water supplies that will be used in the Project, and fails to review and analyze the impacts arising from the shift of those water supplies to the Project. The DEIR must also identify and discuss any uncertainties associated with the proposed use of specific water supplies and sources, as well as legal, regulatory and practical limitations on the use of the water supplies identified and discussed in the EIR. (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 431; See also *California Oak Foundation v. City of Santa Clarita* (2005) 133 Cal.App.4th 1219, in which the court rejected an EIR because the water supply analysis relied, without adequate consideration of the uncertainties of SWP supplies, on the party's purchase of 41,000 acre-feet of SWP water.) BAK-15

With regard to Kern River water, the DEIR fails to identify and review the agreements, judgments, orders, policies and practices which govern and control the diversion and use of water from the Kern River. The DEIR fails to identify water rights holders on the Kern River, the extent of their rights, and the specific water rights and supplies that the Authority will utilize in the Project. The DEIR fails to identify the extent, source and nature of the Kern River water which may be used in the Project. Without that critical information, the DEIR cannot properly review the impacts of the Project on the Kern River, other local waters supplies, and entities, such as Bakersfield, that hold Kern River water rights or which use and rely on Kern River water supplies. BAK-16

The Authority claims that the Project would use, among other water supplies, "surplus" Kern River water supplies. The DEIR states: "Kern River surface water that may be available for the proposed project could occur when this water (1) is offered to all takers willing to sign a "Notice/Order"; or (2) is offered to the Kern River/California Aqueduct Intertie for disposal; or (3) is expected to flood farm acreage; or (4) is expected to be delivered into the Kern River Flood Channel for disposal out-of-county." (DEIR, p. 2-9.) BAK-17

The DEIR fails to disclose that the State Water Resources Control Board ("SWRCB") has determined, through WR Order 2010-10, that the Kern River is no longer fully appropriated. The SWRCB determined in that order that the water supplies described above, and at page 2-9 of the DEIR, including "water offered to Kern River/California Aqueduct," is unappropriated water. Rosedale has filed an application to appropriate some or all of those water supplies, yet Rosedale inexplicably fails to mention that fact in its DEIR. The DEIR also fails to identify or discuss other competing applications to appropriate those same water supplies, or the current uses of such unappropriated water supplies. The DEIR also fails to discuss, identify and compare the alternate uses of those water supplies proposed by the other parties that have submitted applications to appropriate. BAK-17

Rosedale also fails to disclose in the DEIR that it has filed an application with the SWRCB to appropriate certain Kern River water supplies, including "surplus" unappropriated Kern River supplies. The DEIR fails to identify, discuss and review the impacts arising from the use of those Kern River water supplies in the Project, including secondary and associated impacts involving the transfer of those Kern River water supplies to Rosedale. The DEIR also should have but fails to identify, consider and review the competing applications to appropriate Kern River water in connection with the discussion of alternatives, and cumulative impacts, associated with the Project. BAK-18

D. Impacts on Bakersfield

The boundaries of Rosedale overlap with the boundaries of the City. Rosedale and the City spread and extract water from a shared groundwater basin. Rosedale, and the Project site, are located adjacent to the City's primary recharge facility, the 2800 Acre Recharge Facility ("2800 Acres"), and the Kern River, the City's primary water source. The City banks and extracts water for municipal and domestic water service in close proximity to Rosedale. The City directly and indirectly provides water for individuals living within the overlapping City and Rosedale boundaries, and the City's Kern River water supply indirectly benefits landowners within the remaining portion of Rosedale. The City also supplies all or almost all of the Kern River water supplies utilized by Rosedale through a 1961 agreement, as amended in 1976.

The Project would therefore necessarily have significant impacts on the City, as well as Kern River water supplies, including banked and stored Kern River water, utilized by the City. The Project will also likely impact the City's ability to store and extract banked Kern River water supplies for municipal and domestic uses. The Project will also likely affect flows of Kern River, and the environment in and around the Kern River within the City. BAK-19

Despite these significant impacts, the DEIR fails to mention, consider or account for the impacts of the Project on the City, the residents of the City, the City's water supply, and the environment in and around the City, including, most importantly, in and around the Kern River channel. That omission highlights the Authority's violation of BAK-20

DEIR, and the lack of any complete, proper or accurate assessment of actual Project impacts on the local environment. BAK-20

The City's water supply and ability to provide drinking water to almost 400,000 residents are currently threatened and jeopardized by the ongoing drought conditions, rapid and increasing depletion of groundwater supplies by local agricultural districts, and increasing regional demands on local water supplies. The implementation of a large groundwater recharge and extraction project by Rosedale, in conjunction with a large Southern California urban water supplier, and the proposed transfer of Kern River water supplies to Southern California, will likely exacerbate the current adverse water conditions faced by the City, to the detriment of the City and its residents. BAK-21

An EIR must consider all impacts of a project on the environment, even if the impacts would be felt by another agency. (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713.) The DEIR's failure to thoroughly and properly assess the impact of the Project on the City, the City's water supply, and the City's use of water supplies constitutes a clear and obvious violation of CEQA. BAK-22

2. ADDITIONAL COMMENTS TO THE DEIR

In addition to the City's concerns with the validity and viability of the Project, it is also apparent that the Authority has not complied with the requirements of CEQA, and applicable provisions of California law, in the DEIR.

The fundamental purpose of an EIR is "to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment." (Public Resources Code § 21061.) Full and candid disclosure, and an honest assessment of the environmental consequences of governmental action, is the foundation of the CEQA process. The foremost principle under CEQA is that the Legislature intended the act "to be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 259.) BAK-23

EIRs should be organized and written in a manner that will make them "meaningful and useful to decision-makers and to the public." (Public Resources Code §21003(b).) Applying this statutory policy, the CEQA Guidelines require that EIRs be written in plain language. (14 Cal Code Regs §15140.) An EIR must be prepared with a sufficient degree of analysis to provide decision-makers with the information needed to make an intelligent decision concerning a project's environmental consequences. (14 Cal. Code Regs. § 15151.) An EIR must contain facts and analysis, not just an agency's bare conclusions or opinions. (*Citizens of Goleta Valley v Board of Supervisors* (1990) 52 Cal.3d 553, 568.)

In sharp contrast to the underlying purpose and principles of CEQA, the Authority has attempted, through the DEIR, to obscure and hide the details of the Project, to avoid addressing

the actual goals and purpose of the Project, and to avoid or minimize any real analysis of the Project's impact on the environment. It seems apparent that the Authority is proposing to undertake a project that could have a significant impact on the Kern River, the environment and natural resources of Kern County and the southern San Joaquin Valley, through the transfer of substantial local water supplies and resources to Southern California. The Authority is essentially attempting to undertake this significant water transfer in secret, and to change the use of significant quantities of local water supplies in an area that has recently experienced significant water shortages, without any meaningful public review or participation. BAK-23

The DEIR ignores or obscures the fact that the Project will have a significant negative impact on surface water supplies, the critically overdrafted local groundwater basin, the City and other entities that currently use the water subject to use in the Project, and the local environment, including, in particular, the environmentally sensitive Kern River corridor and riparian habitat. BAK-24

The DEIR also fails to consider secondary impacts associated with the change in use of Kern River water supplies, including impacts associated with increased pumping, environmental damage and replacement water supplies, in the areas and districts that formerly utilized the water proposed for use in the Project. BAK-25

The DEIR also fails to properly consider reasonable, feasible alternatives for the Project, including the "no project" alternative, fails to properly or sufficiently review cumulative impacts arising from the Project, and fails to provide any meaningful discussion or analysis of mitigation measures and known "areas of controversy." BAK-26

The DEIR therefore fails to serve as an informational document, or as a document which accurately and completely assesses the impacts of the Project on the environment. The DEIR instead appears intended to act primarily as an advocacy document to support and advocate for Rosedale's transfer of water supplies out of the area. The DEIR violates the principle that "[a]n EIR is not a document of advocacy but of information." (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 738.) BAK-27

A. Project Description

The DEIR fails to provide necessary and important details regarding the Project, the sources of water for the Project, or the intended and expected use of water produced by the Project.

The DEIR describes the Project as follows: BAK-28

"Rosedale-Rio Bravo Water Storage District (Rosedale) and Irvine Ranch Water District (IRWD) have formed the Groundwater Banking Joint Powers Authority (Authority) for the purpose of developing, constructing and operating the Kern Fan Groundwater Storage Project (proposed project) in western Kern County (see Figure 1-1). The proposed project would involve the construction and operation of water conveyance, recharge and recovery facilities. The proposed recharge and recovery facilities would be constructed in

two phases on approximately 1,300 acres of agricultural or vacant land within or near the Rosedale service area. The proposed project would also involve the acquisition of easements for construction, operation and maintenance of proposed Kern Fan Conveyance Facilities that would deliver water to and from the California Aqueduct and other facilities operated in Rosedale's Conjunctive Use Program. Implementation of the proposed facilities would allow Rosedale and IRWD to more effectively manage sources of water supply by using available underground storage in the local San Joaquin Valley Groundwater Basin." (DEIR, p. 1-1.)

The DEIR further states: "The proposed project would recharge, store, recover and deliver: State Water Project (SWP) water, including Article 21 water; Central Valley Project (CVP) water, including Section 215 water; Kern River water available to the Authority through agreement(s) with existing right holders; and Water from other sources when available." (DEIR, p. 2-1.)

The DEIR also states: "Other water supplies also may be secured and acquired by the Authority, Rosedale or IRWD from various sources that may include federal, State, and local supplies through transfers, balanced and unbalanced water exchange agreements, water purchases or temporary transfers, or other available means. Sources may also include supplies from the Kern River water depending on annual hydrologic availability, water rights and regulatory considerations described below." (DEIR, p. 2-7.)

The DEIR does not provide further details or information regarding the potential sources of water for the Project. Throughout the DEIR, Rosedale only provides a very general description of the sources of water for the Project. The DEIR does not identify the specific water supplies proposed for use in the Project, the sources of the water, or the water rights and nature of the water rights associated with the supplies that will be used in the Project. The DEIR fails to identify the current uses of the water supplies proposed for use in the Project.

BAK-28

The DEIR also fails to provide any information on the Kern River water supplies that will be used in the Project, or the nature, extent of the Kern River supplies proposed for use in the Project. The DEIR in general fails to identify and discuss Kern River water rights, current right holders, current and competing uses of Kern River water proposed for use in the Project, and related information. The DEIR fails to provide necessary information with regard to the operation and management of the Kern River, and the prior rights and agreements that govern and regulate the Kern River. The DEIR fails to identify the parties that are currently using Kern River water supplies proposed for use in the Project, and fails to discuss or disclose the sources of water that would replace or substitute for the supplies that will be used in the Project.

BAK-29

The project description focuses more on the physical components of the Project, and construction of those physical components, instead of focusing on water supplies for the Project, the use of water in connection with the Project, or impacts associated with and arising out of the acquisition, use and transfer of water for and from the Project.

BAK-30

The DEIR states, for example: "The proposed project would consist of construction of up to 1,300 acres of recharge basin facilities and up to 12 recovery wells on the Kern Fan Project Properties. The Kern Fan Conveyance Facilities would consist of canals and/or pipelines, pump stations and a new turnout at the California Aqueduct to convey water between the project facilities and the California Aqueduct. Subject to agreements between Rosedale and IRWD, the project facilities may be integrated with the other facilities operated in Rosedale's Conjunctive Use Program." (DEIR, p. 2-6.)

The DEIR further only provides a very general, vague description of the acquisition, use and transfer of water related to the Project, the sources of water for the Project, or the intended destination and uses of water produced by the Project. The DEIR states, for example: "Water stored by the proposed project would be recovered when needed to provide ecosystem and water supply benefits. The proposed project would be operated such that surplus surface water from the SWP, CVP, Kern River, and other available water sources would be recharged and stored for subsequent recovery." (DEIR, p. 2-6.) The DEIR, however, fails to explain how, where and to what extent water produced by the Project "would provide ecosystem and water supply benefits." BAK-31

The DEIR also fails to sufficiently explain how, when and to what extent "surplus surface water from the SWP, CVP, Kern River, and other available water sources" would be available for use in the Project, or would be used in the Project. The DEIR fails to explain how and why such supplies and sources of water produce surplus water would be available in general, and how in particular the supplies would be available for use in the Project.

The DEIR instead states: "Kern River water also is available during wet years when the U.S. Army Corps of Engineers (USACE) mandates release of water from Isabella Reservoir for flood control purposes. The Kern River Watermaster records the amount of water released daily from the Isabella Reservoir into the Kern River. During periods of mandatory release, releases from the Isabella Reservoir may be available for recharge and storage in the proposed project." (DEIR, p. 2-9.) BAK-32

The DEIR further states: "Kern River surface water that may be available for the proposed project could occur when this water (1) is offered to all takers willing to sign a "Notice/Order"; or (2) is offered to the Kern River/California Aqueduct Intertie for disposal; or (3) is expected to flood farm acreage; or (4) is expected to be delivered into the Kern River Flood Channel for disposal out-of-county. Kern River surface water would be conveyed to the proposed project through the CVC, Pioneer Canal or the Goose Lake Channel, or any other facility available to Rosedale, subject to any necessary approvals or agreements." (DEIR, p. 2-9.)

The failure to provide information regarding Rosedale's water rights, other Kern River water rights and supplies, and the use of water from the Kern River, is contrary to the intent and requirements of CEQA. The California Supreme Court has recognized that "the future water sources for a large land use project and the impacts of exploiting those sources are not the type of BAK-33

information that can be deferred for future analysis." (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 431.) In *Vineyard*, the court explained that "future water supplies" identified and analyzed in an EIR "must bear a likelihood of actually proving available; speculative sources and unrealistic allocations ("paper water") are insufficient bases for decisionmaking under CEQA." (*Id.,* at 432.) The court further explained that an EIR for a land use project "must address the impacts of likely future water sources, and the EIR's discussion must include a reasoned analysis of the circumstances affecting the likelihood of the water's availability." (*Id.*, citing *California Oak Foundation v. City of Santa Clarita* (2005) 133 Cal.App.4th 1219, 1244.) BAK-33

Courts have previously invalidated EIRs that did not contain sufficient information and details about water supplies proposed for use in a project, and which did not adequately discuss uncertainties associated with water supplies. (*See e.g. Planning & Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892, 908, fn. 5, noting that State Water Project entitlements represent nothing more than "hopes, expectations, water futures or, as the parties refer to them, 'paper water'"; *Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (2003) 106 Cal.App.4th 715, 722, holding that an EIR's water supply discussion was inadequate because of its assumption that 100 percent of a party's SWP entitlement would be available; *California Oak Foundation, supra,* 133 Cal.App.4th at 1238–1239, 1244, in which the court rejected an EIR for an industrial park because the water supply analysis relied, without adequate consideration of the uncertainties of SWP supplies, on the party's purchase of 41,000 af in imported SWP water supplies.) BAK-34

An EIR also cannot rely on information that is not either included or described and referenced in the document. (*Vineyard Area Citizens for Responsible Growth, Inc., supra*, 40 Cal.4th at 442.) An EIR should not be written in a way that forces readers "to sift through obscure minutiae or appendices" to find important components of the analysis. (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 659.) BAK-35

The brief, general and vague description of the water supplies to be used in the Project violates requirements for the description of water supplies in an EIR. Pursuant to *Vineyard* and related cases, the DEIR does not provide necessary and required details regarding the water supply for the Project. The Authority cannot avoid providing details regarding future water supplies and sources even if there is some uncertainty regarding the future availability of the potential water sources. Pursuant to the holding in *Vineyard*, and related, cases, the DEIR must have included "a reasoned analysis of the circumstances affecting the likelihood of the water's availability," and "possible replacement sources or alternatives to use of the anticipated water, and of the environmental consequences of those contingencies." (*Vineyard*, 40 Cal.4th at 432.) BAK-36

The DEIR in particular does not provide the public, and decision-makers, sufficient information to determine (1) the pros and cons of supplying the amounts of water needed for the Project from various sources, (2) long term water demands, and potential supplies, (3) the

likelihood that the identified water sources will actually be available, and (4) possible replacement or alternative sources if the identified water sources are not available. BAK-36

Similarly, in *San Joaquin Raptor/Wildlife Rescue Center*, the court found that an EIR for a large residential development project was inadequate because it did not disclose the specific location and extent of a riparian habitat adjacent to the project site, inadequately investigated the possibility of wetlands on the site, understated the significance of the project's location adjacent to the San Joaquin River, and failed to discuss a nearby wildlife preserve. (27 Cal.App.4th at 729.) The court found that because the description was deficient, consequently the impact analysis and mitigation findings were legally inadequate. (*Id.*) BAK-37

In *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 864, 881, the court held that a water agency violated CEQA by certifying an EIR which did not properly analyze the environmental impacts of a project increasing the agency's withdrawal of water from the Russian River. The agency abused its discretion by, among other things, failing to discuss a separate federal proceeding which would have reduced the flow of water in the Russian River, and hence affected the supply of water for the project. (*Id*., at 881.) BAK-38

In *California Oak Foundation*, 133 Cal.App.4th at 1226, the court held that although an EIR for a development project acknowledged that water entitlements could fluctuate from year-to-year, it did not present a reasoned analysis or discussion of the issue and thus did not comply with CEQA. Although the EIR acknowledged that water supply "could potentially be limited" by ongoing legal challenges, without a detailed discussion of the nature of the challenges, "it is impossible to know the contours of the potential limitation on the water supplies." (*Id*., at 1239.) BAK-39

Similarly, without relevant or accurate information regarding the status and extent of Kern River water rights, it is not possible to determine how the Project will impact the existing Kern River water rights, or water right holders. It is also impossible to determine from the DEIR how the Project will actually impact Kern River water supplies and other local water supplies. The DEIR is therefore woefully incomplete and deficient, and fails to comply with basic CEQA requirements. BAK-40

The DEIR also states that the Project would have the capacity to recharge and store upwards of 100,000 acre-feet per year. The DEIR states that these water supplies would be used by Rosedale and Irvine for "agriculture and M&I uses, improving water supply reliability during droughts and emergencies." (DEIR, p. 2-6.) The DEIR fails provide any specific details beyond those very vague and general descriptions regarding the intended use of water produced by the Project by Rosedale and Irvine. This is particularly troubling and deficient because the DEIR provides no specific information regarding Irvine's proposed use of water supplies, including local Kern River supplies, to satisfy M&I uses within Irvine's Orange County service area. BAK-41

The DEIR fails to include other necessary and significant details regarding the Project. The DEIR states, for example: "The proposed project includes a new turnout, additional canals BAK-42

and/or pipelines, and pump stations (collectively the "Kern Fan Conveyance Facilities") to convey water to and from the California Aqueduct and proposed recharge and recovery facilities. The exact locations of the new conveyance facilities have not yet been determined but would have up to 500 cfs of conveyance capacity." (DEIR, p. 2-12.) It is not possible, however, to determine Project impacts without the actual location of the new conveyance facilities. BAK-42

The DEIR also fails to disclose how much water could be recharged in connection with the Project each month, or year, or the rate of recharge. (See DEIR p. 2-16.) The DEIR, at page 2-17, fails to disclose expected rate of recovery, or quantities expected to be recovered each month, or year, in general, and in particular types of water years. BAK-43

The DEIR also states: "In addition to direct recovery through extraction, Rosedale could recover the banked water by way of exchange." (DEIR, p. 2-17.) The DEIR, however, fails to identify potential exchange partners, or details of any potential exchanges. Again, the omission of those necessary details and information fails to satisfy basic CEQA requirements, and makes it impossible to properly and accurately consider Project impacts. BAK-44

The DEIR also states: "It is expected that banked supplies would be recovered for IRWD when needed to return water to its program partners and during times when IRWD's imported and/or local supplies are interrupted or curtailed. IRWD's participation in the proposed project recognizes IRWD's need, in the event of a water shortage, for additional storage and recovery capacity to provide for improved reliability and redundancy in its supplies." (DEIR, p. 2-17.) The DEIR fails to provide any other details or information regarding the extraction and use of water from the Project by Irvine. The DEIR does not identify the quantities of water that would be recovered by Irvine, the rate of extraction, the environmental conditions for extraction of water, and other necessary and critical details regarding extraction of Project water. BAK-45

Rosedale's failure to provide a complete, clear project description constitutes a clear and obvious violation of CEQA. An accurate, finite project description "is indispensable to an informative, legally adequate EIR." (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192.) Without an accurate description on which to base the EIR's analysis, CEQA's objective of furthering public disclosure and informed environmental decision making are stymied. "An accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed project." (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 730.) BAK-46

An EIR's project description must provide "enough information to ascertain the project's environmentally significant effects, assess ways of mitigating them, and consider project alternatives." (*Sierra Club v. City of Orange* (2008) 163 Cal.App.4th 523.) California courts have frequently stated that "only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal … and weigh other alternatives in the balance" and that "[a]n accurate, stable and finite project description is

the sine qua non of an informative and legally sufficient EIR." (*County of Inyo, supra*, 71 Cal.App.3d at 192-193; *Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818, 830.)

If a project description is incomplete or inadequate, the environmental analysis will necessarily be incomplete and inadequate. (*Laurel Heights Improvement Association v. Regents of University of California* (1988) 47 Cal.3d 376, 399-400; *San Joaquin Raptor/Wildlife Rescue Center, supra*, 27 Cal.App.4th at 729.) In *County of Amador v. El Dorado County* (1999) 76 Cal.App.4th 931, for example, the court found that an EIR for a water supply project was deficient for not providing information on historic water release schedules from storage lakes, so that parties could determine if the project would alter the historic "baseline" pattern of water releases. An accurate and complete description of a project is required under CEQA to allow for "an intelligent evaluation of the potential environmental effects of a proposed activity." (*McQueen v. Board of Directors* (1988) 202 Cal.App.3d 1136, 1143, in which the court stated that the term "project" under CEQA "is given a broad interpretation in order to maximize protection of the environment.")

BAK-46

An EIR that omits integral components of the project is deficient since it prevents a disclosure and review of the actual impacts of a project. (*Cadiz Land Co. v. Rail Cycle, L.P.* (2000) 83 Cal.App.4th 74, finding an EIR failed to provide a sufficient description of the environmental setting of a project because it failed to "discuss the volume of water contained in an aquifer or the size of the aquifer," as knowledge of the volume of groundwater that might be affected by the project is "crucial" to determining whether and when the project might deplete groundwater resources; *Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d. 818, 829, finding a project description for a sand and gravel mine inadequate under CEQA for omitting mention and discussion of water pipelines that would serve the project.)

As a result of the Authority's failure to describe necessary elements of the Project, the DEIR does not and cannot review significant and inevitable Project impacts. Failure to include such important Project details and information in the DEIR also could constitute and lead to improper "piecemealing" of environmental review, in violation of CEQA.

The entire project being proposed for approval must be described in the EIR. A complete project description is necessary to ensure that all of the project's environmental impacts are considered. (*City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438, 1450.) In *County of Inyo*, for example, the court found that an EIR improperly fails to described or analyze groundwater exports because the EIR improperly sought to characterize expanding groundwater exports as a separate, ongoing project. (71 Cal.App.3d at 193.)

BAK-47

A lead agency may not split a single large project into small pieces so as to avoid environmental review of the entire project. (*Orinda Association v. Board of Supervisors* (1986) 182 Cal.App.3d 1145, 1171.) Instead, an EIR must examine all components necessary to a

project, including those that will have to be approved by another agency. (*Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428.) BAK-47

B. The DEIR Fails to Properly Describe the Project Area or "Baseline" Conditions in the Project Area

The DEIR also fails to comply with CEQA in its description of "baseline" conditions in the Project area, and in areas impacted by the Project. The DEIR fails to set forth a clear or comprehensive description of baseline conditions surrounding the Kern River, the diversion and use of water from the River, the local groundwater basin, or irrigation and agricultural operations within Rosedale, or within the service areas of the City and other Kern River interests that will be impacted by the Project. BAK-48

An EIR must describe existing environmental conditions in the vicinity of the proposed project, which is referred to as the "environmental setting" for the project. (14 Cal Code Regs §15125.) The description of existing environmental conditions ordinarily serves as the "baseline" for measuring the changes to the environment that will result from the project and for determining whether those environmental effects are significant. (14 Cal Code Regs §§15125, 15126.2(a).) As the California Supreme Court has noted, to provide the impact assessment that is a fundamental purpose of an EIR, the EIR "must delineate environmental conditions prevailing absent the project, defining a 'baseline' against which predicted effects can be described and quantified." (*Neighbors for Smart Rail v Exposition Metro Line Constr. Auth*. (2013) 57 Cal.4th 439, 447.) BAK-49

Establishment of the baseline is critical to a meaningful assessment of the environmental impacts of a project, because the significance of environmental impacts cannot be determined without setting the baseline. (*Save Our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App.4th 99, 119.) The description should place special emphasis on environmental resources that are rare or unique to the region and that would be affected by the project. (14 Cal. Code Regs. § 15125(c); *San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal.App.4th at 722.)

The DEIR fails to meet these standards. The DEIR either fails to provide any information on baseline conditions in the Project area, or only provides a brief, general and incomplete description of baseline conditions. The DEIR does not set forth a clear or comprehensive description of baseline conditions within Rosedale and Irvine, or surrounding the Kern River, the diversion and use of water from the River, or the local groundwater basin. The DEIR fails to describe current groundwater conditions, flow conditions in the Kern River, the environment in and around the river, and the timing and frequency of diversions from the River. Absent such information, the DEIR cannot possibly, properly or completely assess the impact of the Project on the Kern Rover and the environment in and around the River. BAK-50

The DEIR's failure to identify current baseline conditions in and around the Kern River, within Rosedale and Irvine, and in areas that will be impacted by the Project, is a fatal flaw to the DEIR. It is inconceivable that the EIR for such a significant water supply project, which calls for and contemplates the change in use of significant quantities of Kern River water, would fail to identify current baseline conditions for the Kern River. Absent that information, the DEIR cannot possibly properly consider the impacts of the Project on the local environment, and the local water supply. BAK-50

C. The DEIR Fails to Properly or Sufficiently Describe Project Impacts

As a direct and obvious result of the DEIR's incomplete Project description, missing data and information, and limited and restricted description of baseline conditions, the review and discussion of Project impacts in the DEIR is incomplete, deficient and not in compliance with CEQA requirements. BAK-51

An EIR must describe and analyze the significant environmental effects of a project, and discuss ways of mitigating or avoiding those effects. (14 Cal. Code Regs. § 15362.) Among other things, an EIR must identify direct, indirect and long-term environmental effects, and cumulative impacts. (14 Cal. Code Regs. §§ 15126.2(a), 15130.) An EIR must provide public agencies, and the public in general, with detailed information about the effects a proposed project is likely to have on the environment. (Pub. Res. Code §§ 21060.5, 21061; *Environmental Planning and Information Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 354.) BAK-52

An EIR must be prepared with a sufficient degree of analysis to provide decision-makers with the information needed to make an intelligent judgment concerning a project's environmental impacts. (14 Cal. Code Regs. §15151; *Napa Citizens for Honest Government. v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 356.) An EIR should, when looked at as a whole, provide a reasonable, good faith disclosure and analysis of the project's environmental impacts. (*Laurel Heights Improvement Assn.*, 47 Cal.3d at 392.)

In contravention of this authority, the Authority has not made a good faith effort at full disclosure and discussion of the impacts of the Project. Instead, the Authority has apparently attempted to obscure and hide the details of various elements and components of the Project, so as to avoid or minimize the discussion and disclosure of various impacts from the Project.

The entire DEIR is fundamentally flawed because it fails to discuss, recognize or account for the fact that the Project will necessarily result in a decrease in water supplies for the City, and other entities that use and rely on Kern River surface supplies, and banked Kern River supplies. Consequently the DEIR fails to properly assess or review Project impacts, including impacts on local water supplies, fails to inform the public of the impacts resulting from the Project, and fails as a CEQA document. BAK-53

The DEIR consequently fails to review and analyze the impact of the uses of the potential water sources on the environment, other water users, and local water supplies. The DEIR fails to

even come close to satisfying CEQA requirements concerning the identification and discussion of the impacts of a large water supply and storage project, as articulated in *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, *supra*, and related cases. BAK-53

The DEIR is also deficient because, to the extent it does attempt to review the impacts of the Project on the environment, it dismisses or minimizes a number of potential impacts to the environment without explanation and based on unsupported or unexplained conclusions. That is not appropriate, as a bare conclusion without an explanation of the factual and legal basis is not a sufficient analysis of an environmental impact. (*Laurel Heights Improvement Assn.*, 47 Cal.3d at 404.) The discussion of environmental impacts must instead contain an explanation of the reasoning supporting the EIR's impact findings, and the supporting evidence. (*Association of Irritated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383.)

California courts have frequently invalidated environmental review documents for failing to adequately review the impact of a project on a local water supply or source. (*See Napa Citizens for Honest Government, supra*, 91 Cal.App.4th at 386, rejecting an EIR for failing to provide sufficient information on the effect a project would have on a region's water supply and the need for treatment of wastewater; *County of Amador, supra*, 76 Cal.App.4th at 948, setting aside an EIR for a new water diversion for failing to "adequately assess the project's impacts on fishery resources and lake levels;" *Friends of the Santa Clara River v. Castaic Lake Water Agency* (2002) 95 Cal.App.4th 1373, finding an EIR for the acquisition of supplemental state water pursuant to the Monterey Agreement deficient for failing to completely assess the impacts of the water transfer.) BAK-54

In *Citizens to Preserve the Ojai v. City of Ventura* (1985) 176 Cal.App.3d 421, 432, the court concluded that if a precise technical analysis of environmental impacts is not practical, the lead agency must still make a reasonable effort to pursue a less detailed analysis. When it is difficult to forecast future actions, an EIR must still base its analysis on reasonable assumptions. (*State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 674, 797.) When uncertain future events could lead to a range of possible outcomes, an EIR should base its analysis on a reasonable "worst-case" scenario. (*Planning and Conservation League v. Castaic Lake Water Agency* (2009) 180 Cal.App.4th 210, 244.)

In addition to the above described CEQA violations in connection with the DEIR, and the Project, the DEIR also fails to properly or sufficiently analyze the impacts of the Project in the following respects.

(i) Impact of the Project on the groundwater basin

The DEIR does attempt to review and discuss the impact of the Project on the local groundwater basin, and groundwater supplies, but the review is incomplete, misleading, and not in compliance with CEQA. In particular, the DEIR does not sufficiently identify and discuss in any detail the impact of the Project on other banking projects and programs in the area, BAK-55

groundwater levels in the vicinity of the Project, and related impacts on the basin and local water supplies as a result of the extraction of water in connection with the Project, and the transfer of water from the Project out of the region. BAK-55

The DEIR claims that the Project "would result in measurable increases in groundwater elevations and therefore a groundwater level benefit." (DEIR, p. 2-16.) The DEIR, however, fails to provide data and information to support that conclusion. The discussion of the recovery of Project water is devoid of any meaningful details. (DEIR, p. 2-18.) The DEIR provides no information on the potential rate of extraction, timing of extraction, conditions for extraction, or location of extraction facilities. At page 2-19, in a section discussing energy requirements for the Project, the DEIR refers to "recovery of approximately 50,000 AFY" of water. The DEIR, however, provides no further discussion regarding that rate of extraction, and fails to consider impacts resulting from that rate of extraction. The DEIR therefore fails to provide information that would be necessary to properly review and assess impacts from the recovery of Project water. BAK-56

The DEIR only reviews very localized impacts on groundwater resources, within Rosedale and the Project area, and in wells immediately adjacent to the Project site. The DEIR does not review longer term impacts of the Project on the groundwater basin, or review the impact of the Project on groundwater levels and quantities farther removed from the Project site. BAK-57

The DEIR, for example, states: "Recovery would be limited to the amount previously recharged less losses, up to 50,000 AFY." (DEIR, p. 3.10-38.) That is an incomplete and misleading statement. The statement does not take into account migration of water away from Project site and pumping of banked and stored water by neighboring water districts and water banks. To properly assess Project impacts, the DEIR should have considered pumping by other entities in and around the Project site, including at the same time as the Authority. The DEIR should have also considered overall basin additions and withdrawals, not just in an isolated part of the basin utilized by the Project. The basin is considered critically overdrafted by DWR, and it is misleading to ignore that fact and fail to consider the impact of extractions on the already limited and oversubscribed groundwater supplies in the basin. BAK-58

The DEIR further states:

"The Long Term Operations Plan considers that project-related decreases in groundwater levels that are 30 feet or greater relative to baseline conditions are considered negative project impacts that trigger mitigation if neighboring wells experience mechanical failure or other operational problems due to declining water levels. Given historical fluctuations in groundwater levels in the area when other nearby groundwater banking projects are recovering, it is expected that additional declines attributable to the proposed project beyond historic low groundwater levels could result in operational problems at some existing wells. However, the proposed project would not be anticipated to result in declines of groundwater levels greater than 20 feet at neighboring existing wells. BAK-59

Therefore, no mitigation would be required and, impacts relative to recovery operations would be less than significant." (DEIR, p. 3.10-40.)

That statement is arbitrary and not supported by actual data. The DEIR simply concludes without any evidence that water levels will not decrease 30 feet or greater merely because that is considered a negative project impact, not based on any actual data or study. That statement also fails to account for critically dry years, when water levels throughout the basin can and have fallen substantially. The DEIR also does not consider increased pumping by other water banks in the area, or increased impacts on local pumping and water supplies as a result of global warming conditions.

The DEIR's conclusion that the Project, and the extraction of up to 50,000 acre-feet of water per year for transfer out of the region, will have a "Less than Significant Impact" (p. 3.10-41) on the environment is therefore not supported by any data, and also appears contrary to common sense and logic.

BAK-59

The DEIR's review of Project impacts on groundwater is also flawed and incomplete because the DEIR does not sufficiently describe the local groundwater basin or consider other uses of and burdens on the basin. The DEIR, for example, does not identify or discuss the entities, besides Rosedale, that pump water from the basin, describe the quantities and timing of groundwater extractions from the basin, or discuss the impacts of the pumping of other parties on the basin in connection with the Project.

BAK-60

The DEIR also does not assess the actual impact of increased groundwater banking and pumping in the area by other entities. The DEIR only provides very general, vague statements and information about the groundwater basin, other spreading projects, and the extraction of water from the basin. The DEIR's reliance on historical groundwater and pumping data additionally is not reasonable in the present situation. In light of the recent, long-term drought, rapidly increasing pumping, and the proliferation of new banking projects and facilities, reliance on past, historical data is not helpful and does not accurately assess or disclose the impacts of the Project.

BAK-61

The DEIR further states: "The proposed project would be operated subject to Rosedale's Operations Plans, as described previously. The Operations Plans designate specific measures to be employed to "prevent, eliminate or mitigate significant adverse impacts" resulting from project operations, including effects to neighboring wells. The Operations Plans includes monitoring of groundwater conditions and the use of Rosedale's groundwater model to predict the contribution of the various banking projects to groundwater increases or declines in the area. Consequently, the proposed project would be operated in such a way as to prevent cumulative impacts with neighboring water banking operations. Implementation of the Operations Plans would ensure that local groundwater users and neighboring well owners/operators to the proposed recharge and recovery facilities would not be adversely affected during operation of the proposed recovery wells." (DEIR, p. 3.10-46.)

BAK-62

Those unsupported conclusions and assumptions do not satisfy CEQA requirements. It is not proper for the DEIR to simply assume that any adverse impacts will be mitigated. The DEIR instead needs to identify and discuss other similar groundwater banking projects, and identify the scope of operation and extent of recharge and recovery efforts at other nearby facilities, in order to properly, completely and sufficiently review and consider Project impacts, including cumulative impacts. BAK-62

The DEIR also states: "Therefore, the proposed project would not have adverse localized effects to groundwater supplies and would support sustainable groundwater management of the basin." (DEIR, p. 3.10-46.) The DEIR, however, provides no support or evidence for that bare conclusion. Again, without actual identification and consideration of other projects in the vicinity of the Project, the statement, and conclusion, is unconvincing and inadequate. BAK-63

(ii) Impacts on the Kern River

Although the DEIR provides very little detail or meaningful information about the Project, and the components of the Project, the DEIR still reveals that the Project will utilize substantial quantities of Kern River water. The DEIR, however, fails to properly identify or discuss the Kern River supplies that will be utilized in the Project. BAK-64

To assess the impacts of a proposed project on the environment, an EIR must examine the changes to the existing environmental conditions that would occur if the project is implemented. (14 Cal. Code Regs. § 15126.2(a); *San Joaquin Raptor Rescue Center*, 149 Cal.App.4th at 676.) The DEIR inexplicably fails to provide any analysis, explanation or discussion of the impacts of the Project on the Kern River, including impacts on flows of water in the Kern River, the environment in and around the Kern River, the aquifer underlying the Kern River, and the patterns of diversion and use of water from the River. The section of the DEIR that reviews impacts on water resources (Chapter 3.10) focuses only on impacts on groundwater conditions and supplies within Rosedale. The DEIR does not even acknowledge that the Kern River will be impacted by the Project, let alone review and determine the significance of the Project's impact on the Kern River. BAK-65

The DEIR therefore does not discuss or analyze the impact of the Project on the quantity and timing of flows in the Kern River. The DEIR does not review Project impacts on the Kern River environment, including plant and animal life in and around the River. The DEIR further does not describe the impacts of the Project on recharge from operation of the river and groundwater supplies in and around the river channel. BAK-66

Rosedale does not hold any appropriative Kern River rights (nor does Irvine). Rosedale's plan to utilize substantial quantities of Kern River water for a new water banking project will necessarily result in changes, and impacts, in the diversion and use of water from the Kern River. Even if Rosedale is only proposing to use Kern River water purchased from the City, the Project would still likely result in changes in the timing, place of use, manner of use, and extent of use of BAK-67

such water. Those changes will necessarily have an impact on the Kern River and the Kern River corridor. BAK-67

California courts have frequently rejected or invalidated environmental review documents for failing to properly and adequately review the impact of a project on a local water supply or source. (*See Napa Citizens for Honest Government*, 91 Cal.App.4th at 386, rejecting an EIR for failing to provide sufficient information on the effect a project would have on a region's water supply and the need for treatment of wastewater; *County of Amador*, 76 Cal.App.4th at 948, setting aside an EIR for a new water diversion for failing to "adequately assess the project's impacts on fishery resources and lake levels;" *Friends of the Santa Clara River v. Castaic Lake Water Agency* (2002) 95 Cal.App.4th 1373, finding an EIR for the acquisition of supplemental state water pursuant to the Monterey Agreement deficient for failing to completely assess the impacts of the water transfer.)

In *Santiago County Water District*, the court similarly concluded that an EIR did not adequately assess the environmental impact of the delivery of water to a proposed sand and gravel operation. (118 Cal.App.3d at 831.) The court noted that "even if the Water District does have the ability to meet the requirements of the project, the EIR is silent about the effect of that delivery on water service elsewhere in the Water District's jurisdiction." (*Id.*) The court further stated "the conclusion that one of the unavoidable adverse impacts of the project will be the 'increased demand upon water availability from the Santiago County Water District' is only stating the obvious. What is needed is some information about how adverse the adverse impact will be." (*Id.*) BAK-68

In *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, the court similarly found that an EIR was defective because it did not discuss in sufficient detail the environmental impacts of a pipeline project on the reduction of surface flow in local streams. For the same reasons, the DEIR's failure to discuss the impact of the Project on the Kern River is clearly incomplete and inadequate.

The DEIR indicates that the parties may need project approval for "Appropriative Water Rights Holders: Use or transfer of pre-1914 or post-1914 appropriative water rights," and "State Water Resources Control Board: Transfer of post-1914 appropriative water rights." (DEIR, p. 2-20.) The DEIR, however, provides no information about which water rights may be subject to those approvals, which parties would transfer those rights to Rosedale, or present use of those water supplies. The failure to include that information renders the DEIR inadequate, and also makes it impossible to consider the impacts of Rosedale's use of such water supplies in the Project. BAK-69

It was additionally important and necessary for the DEIR to review Project impacts on the entities that have submitted competing applications to appropriate Kern River water, including Bakersfield. In fact, Rosedale's application seeks to obtain right to the same "flood water" loosely defined and identified in other competing applications to appropriate. It was BAK-70

therefore particularly important that the DEIR consider Project impacts on the other entities that seek to obtain rights to the same water supplies the Authority proposes to use in the Project. BAK-70

The DEIR also fails to identify or review secondary impacts on entities that are currently using Kern River water that would be used in the Project. Presumably those entities will have to obtain replacement water supplies, which could produce further impacts, such as increased groundwater pumping and use in the impacted districts. BAK-71

An EIR's analysis of significant environmental impacts must identify and describe the significant direct environmental impacts that will result from the project in both the short term and the long term. (14 Cal. Code Regs. §15126.2(a).) The emphasis of the discussion of significant effects should be in proportion to their severity and probability of occurrence. (14 Cal. Code Regs. § 15143.) Given the importance and significance of groundwater supplies in the region, the DEIR should have gone out of its way to provide accurate, complete information regarding groundwater conditions in Rosedale and the region, and accurately and properly considered Project impacts on such groundwater resources. BAK-72

(iii) Transfers of water to Orange County

The DEIR is also fatally flawed and defective because it fails to assess or discuss the impacts of transfers of water, including valuable, necessary high quality Kern River surface water, out of Rosedale, and out of Kern County, to Irvine.

The impacts of such out of basin transfers of valuable and important local water supplies will necessarily have significant impacts on the local environment, including on the Kern River, other local supplies, including groundwater supplies, and other water users. Transfers of Kern River water outside the County would deprive the region of a limited, high quality source of drinking and irrigation water, and negatively impact flows of water in the Kern River, and the environment in and around the River. Transfers of Kern River water out of the County would also deprive the groundwater basin of necessary recharge, which would negatively impact groundwater levels, the quality of water in the basin, and the supply of water available for consumptive use in the County. BAK-73

Despite such significant impacts, the DEIR is completely devoid of any discussion of the impacts of out of area transfers of Kern River water, or other local water supplies. Again, the section of the DEIR that reviews impacts on water resources, Chapter 3.10, almost exclusively focuses on localized impacts on groundwater resources in the Project area.

The DEIR's failure to disclose and discuss such impacts is particularly glaring and problematic in light of current drought conditions, the depleted water supplies in the region, and the overdrafted local groundwater basin. There is also no review or discussion of replacement water supplies that might be utilized to replace or make up for water lost to Southern California, and no discussion of the impacts associated with the use of such alternate water sources. BAK-74

The DEIR, as indicated, fails to provide necessary details and information regarding the transfers of local water supplies out of the area, to Irvine. Absent such information, there is no way that the DEIR could have provided a complete or meaningful discussion of the impacts of such out of area transfers, even if the Authority had intended to explore, rather than obscure, such impacts.

In any case, the lack of any discussion of impacts from out of area water transfers, by itself, establishes that the DEIR is invalid and not in compliance with CEQA requirements.

BAK-75

(iv) Impact of the Project on the City

The DEIR does not provide any meaningful, accurate or comprehensive discussion of the impacts of the Project on the City. The DEIR similarly provides almost no information about "baseline" conditions within the City, as well as the City's baseline water rights.

The City will apparently provide one of the primary water sources to the Project through its transfer of Kern River water to Rosedale pursuant to a 1961 agreement. The boundaries of the City overlap the boundaries of Rosedale, and the Project would be located immediately adjacent to the City. The operation of the Project, including the transfer of City supplies for use in the Project, and the apparent significant anticipated pumping and extraction of groundwater as a result of the Project, would necessarily impact the City's water supply, and the City's operation of the nearby 2800 Acre recharge and water banking facility.

The failure to review the impacts of the Project on the City is in direction violation of CEQA requirements. An EIR must consider all impacts of a project on the environment, even if the impacts would be felt by another agency. (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713.)

BAK-76

The DEIR was also required to review the impacts of the Project on the City because the City will provide water to Rosedale for the Project. California courts have rejected or invalidated environmental review documents for failing to properly and adequately review the impact of a water transfer on a local water supply or source. (*See Friends of the Santa Clara River v. Castaic Lake Water Agency*, *supra*, finding an EIR for the acquisition of supplemental state water pursuant to the Monterey Agreement deficient for failing to completely assess the impacts of the water transfer.)

The complete failure to review the impacts of the Project on the City renders the entire DEIR void and invalid.

BAK-77

(v) Impacts on Hydrology and Water Quality

In addition to the above concerns, the DEIR fails to properly identify and consider Project impacts on water resources, and water quality, in Section 3.10 of the DEIR. The DEIR,

BAK-78

for example, improperly assumes, and concludes, without supporting data that the Project will have a positive impact on water quality.

The DEIR states: "The water quality of the surface water sources for groundwater banking is in general lower in constituent concentrations than that of the local groundwater. The introduction of surface water into the shallow zone would improve groundwater quality, as it has been shown to occur for the neighboring Strand Ranch project (THC 2015). In addition, as the water placed in the recharge basins infiltrates through the soil column down to the aquifer, the water quality would be anticipated to further improve because the soil would filter out some of the chemical constituents. Consequently, the recharge of surface water would improve the groundwater quality, resulting in a beneficial impact." (DEIR p. 3.10-36): BAK-78

The DEIR further only discusses impacts on water quality from recharge and banking of surface water supplies through the Project. The DEIR fails to consider or review impacts on water quality associated with and arising from extraction of water from Project. That is a significant omission because extraction of water, with associated lowering of groundwater levels and migration of water through the aquifer as a result of the pumping, could have a significant adverse impact on water quality in the region. The City has observed significant negative impacts on water quality in the region from extraction of substantial amounts of water from groundwater banks, particularly during dry years. For example, the City has observed increased concentrations of arsenic and TCP in certain City water supply wells as a result of pumping by groundwater banks in the vicinity of the City's municipal wells as pumping has drawn down water levels and increased the concentration of harmful constituents in the diminishing groundwater supplies. BAK-79

(vi) Other Impacts

Population and Housing. The DEIR states, at p. 3-4: "The proposed project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). Implementation of the proposed project would not have a direct growth inducement effect, as it does not propose development of new housing that would attract additional population to the area. Further, implementation of the proposed project would not result in substantial permanent employment that could indirectly induce population growth. Although construction activities would create some short-term construction employment opportunities over the duration of construction, the amount of opportunities created would not require persons outside of the Kern County workforce." BAK-80

That statement is misleading and inaccurate. The DEIR earlier discloses that water supplies produced by the Project will be used to meet Irvine's municipal and domestic water demands. (DEIR, p. ES-7.) Water produced by the Project will therefore necessarily have an impact on housing and population growth in Irvine's service area.

The statement is also misleading because it does not account for the loss of water supplies, including Kern River water supplies, that would be transferred out of the area to Irvine. Such supplies would no longer be available for use by the City and other entities to satisfy local population and housing needs and demands. The loss of valuable local water supplies could therefore have a significant impact on population and housing in the region. BAK-81

The DEIR also does not account for the drinking water needs of individual residents within Rosedale's service area, and the impact of the Project on that population.

Agricultural Impacts. The DEIR should have considered the impact of the Project on agriculture in Kern County based on a transfer of local water supplies to Orange County. The DEIR is deficient for not identifying and reviewing potential adverse impacts associated with the loss of local water supplies used for agricultural production, and, in particular, the transfer of local agricultural water supplies to Orange County for municipal uses. Without that analysis, the conclusion that the Project will not have an adverse impact on agricultural operations in Kern County is misleading and deficient. BAK-82

Air Quality Impacts. The DEIR should have but fails to identify and consider any air quality impacts associated with extraction of water from the Project. BAK-83

Biological Resources. The DEIR fails to consider or account for Project impacts on biological resources in and around the Kern River, including impacts associated with the transfer of Kern River water out of region. The DEIR also fails to account for and discuss potential impacts on the Buena Vista Lake Shrew and the City's Habitat Management Plan for the shrew in the City's 2800 Acre recharge facility. In particular, the Project could reduce quantities of Kern River water, including high flow Kern River water supplies, used by the City in the 2800 Acres to benefit the Buena Vista Lake Shrew and to ensure the operation and implementation of City's Habitat Management Plan. BAK-84

Subsidence. The discussion of subsidence in the Geology and Soils section of the DEIR is incomplete and deficient. The DEIR states: "The proposed project would provide additional recharge capacity in excess of recovery and as such would not cause subsidence relative to existing conditions. Impacts would be less than significant, and no mitigation is required." (DEIR, p. 3.7-23.)

The DEIR fails to provide any facts or data to support that conclusion. The DEIR fails to consider the actual operation of the Project, including extraction of significant water supplies during dry year conditions, on subsidence. The DEIR fails to consider or even identify baseline conditions in the area, the rate of extraction for the Project, or other pumping in the vicinity of the Project. The bare, unsupported conclusion regarding subsidence in the DEIR is not in compliance with CEQA requirements. BAK-85

Greenhouse Gas Emissions. The DEIR should have, but fails to, identify and consider any greenhouse gas impacts associated with extraction of water from the Project. BAK-86

Land Use and Planning. This entire section is inadequate and incomplete for not considering land use and planning impacts within the boundaries of Irvine. The transfer of substantial local water supplies to Irvine would certainly have an impact on land use and development within Irvine. The DEIR also fails to consider impacts on land use and planning in Bakersfield and Rosedale based on the loss of local water supplies necessary to serve municipal needs. BAK-87

Utilities and Service Systems. The DEIR states that the Project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. (DEIR, p. 3.16-7.) The DEIR also states: "The unregulated water captured under the project for recharge would consist of water that would otherwise have left Kern County or created flooding conditions. Therefore, relative to baseline conditions, the use of unregulated water for recharge would not result in significant impacts to other legal users of water. No impacts to water rights holders, other water suppliers, or other public utilities would occur from the purchase, exchange, or transfer of water from the sources identified above." (DEIR, p. 3.16-7.)

Earlier in the DEIR, however, the Authority states that "Kern River water available to the Authority through agreement(s) with existing right holders;" and not just "high flow" supplies, will be used in the Project. (DEIR, p. 2-1.) Rosedale also receives Kern River water from the City pursuant to a 1961 agreement, and it appears that those Kern River supplies will also be available for use in the Project. The DEIR at the very least is contradictory and unclear with regard to Kern River supplies utilized in the Project. BAK-88

The reference to the use of Kern River water that would otherwise have left the area or is "flood water" is misleading. The SWRCB has declared those water supplies to be unappropriated water, and Rosedale cannot utilize those supplies or could not access those supplies absent an application to appropriate. Rosedale has submitted an application to the SWRCB to obtain rights to those supplies, but unless the SWRCB grants and approves Rosedale's application, those supplies will not be available for use in the Project.

Growth Inducement. This section of the DEIR should have but fails to consider impacts on growth within Kern County and Bakersfield as a result of a loss of valuable local water supplies to Southern California. BAK-89

D. The DEIR Fails to Properly Consider Reasonable Project Alternatives

The consideration and discussion of alternatives to the Project in Chapter 6 of the DEIR is incomplete, deficient and not in compliance with CEQA. One of an EIR's major functions "is to ensure that all reasonable alternatives to proposed projects are thoroughly assessed by the responsible official." (*Wildlife Alive v. Chickering* (1976) 18 Cal.3d 190, 197.) An EIR must therefore "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid BAK-90

or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." (14 Cal. Code Regs. § 15126.6(a).) An EIR must contain "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project." (14 Cal. Code Regs. § 15126.6(d).)

The DEIR does not satisfy those requirements. The only alternatives considered in the DEIR are the "no project" alternative, and the construction and the use of a different water banking project, in a different location.

BAK-90

There is no indication in the DEIR that the Authority considered actual, practical or meaningful alternatives to the Project, including alternate sources of supply, such as State Water Project water, reclaimed waste water, or water purchased from the City. The DEIR also fails to indicate that the Authority has properly or sufficiently considered alternatives, such as conservation, designed to reduce its water demands and to achieve the objectives of the Project. Similarly, there is no indication that the Authority actually or properly considered the "no project" alternative, as required by CEQA.

BAK-91

The DEIR is deficient, and flawed, for not considering other viable, practical alternatives available to the Authority. The DEIR fails to consider other alternatives which could achieve "flexibility," including use of other existing banking facilities, such as the Pioneer Project or Kern Water Bank, expansion of existing Rosedale banking projects, changes in the management and operation of its existing banking projects, water transfers and exchanges with local water districts and purveyors, restrictions on groundwater pumping within Rosedale, and fallowing of fields.

BAK-92

The alternatives analysis is also deficient because the Authority fails to consider any alternative to out-of-County sales of local water to Irvine. Rosedale should have at least considered alternatives to the Project involving local districts, instead of an Orange County urban water district. Irvine should have also considered sources of supply other than local water supplies.

BAK-93

Thedescription and review of the no project alternative is inaccurate and incomplete. The DEIR states; "Without the proposed project, Rosedale and IRWD would continue to capture, recharge, and store water from the SWP, CVP, and other available water supplies for later use through existing projects and facilities within Rosedale's Conjunctive Use Program. Under the No Project Alternative, greater operating flexibility would not be provided for existing and future conjunctive use programs. In addition, under the No Project Alternative, the benefits of the proposed project, which includes ecosystem public benefits, emergency water supply public benefits during extended droughts or a Delta levee failure, and water supply reliability benefits to agricultural and M&I users would not occur. Additionally, under the No Project Alternative, the benefit of the proposed project to provide operational flexibility to the CVP and Incremental Level 4 supplies to federal wildlife refuges would not occur. Finally, under the No Project

BAK-94

Alternative, the benefit to groundwater sustainability in the Kern County Sub-basin would not occur." (DEIR, pp. 6-11 - 6-12.)

The discussion of the no project alternative is flawed and deficient. The DEIR improperly focuses on the purported benefits of the Project without actually considering impacts and benefits associated with the "no project" alternative. A proper, credible review of the "no project" alternative would have considered and compared status quo conditions with the actual impacts associated with the Project, instead of only focusing on the purported benefits of the Project. BAK-94

In addition, the only alternative proposed and discussed in the DEIR, other than the no project alternative, is not a valid, credible or actual alternative to the Project. The purported alternative is not really a true alternative to the Project, but merely the same project in a different location. The DEIR once again is not just deficient in its analysis, but is misleading and deceptive for ignoring the actual alternatives to the Project, and for presenting a false and misleading characterization of alternatives to the public. BAK-95

The DEIR also fails to provide a valid explanation for the rejection of the alternatives involving conservation and recycled water. The discussion of these alternatives fails to explain how much water these alternatives could produce. This discussion also reveals and highlights one of the major flaws in the DEIR, as the DEIR does not explain how much of a supplemental water supply Irvine needs. Since Irvine has not identified an amount of water it needs, it is of course very easy for Irvine to reject alternate options and supplies. BAK-96

Recharge in the Kern River channel is also not considered as an alternative. Increased stream flows and recharge in the Kern River would provide numerous benefits to Rosedale and would achieve some of the goals of the Project, again with a reduction in adverse impacts on the environment and other water users. BAK-97

An alternative that would substantially reduce the project's significant environmental impacts should not be excluded from the analysis simply because it would not fully achieve the project's objectives. (*Habitat & Watershed Caretakers v City of Santa Cruz*, 213 Cal.App.4th at 1304.) The CEQA Guidelines assume that the alternatives described in an EIR will not necessarily attain all of the project's objectives. (*Watsonville Pilots Ass'n v City of Watsonville* (2010) 183 Cal.App.4th 1059, 1087.) There is no requirement that the alternatives included in an EIR satisfy every basic objective of the project. (*California Native Plant Society v City of Santa Cruz* (2009) 177 Cal.App.4th 957, 991; *see also County of Inyo v City of Los Angeles*, 71 Cal.App.3d at 203, EIR for expansion of groundwater extraction program failed to consider water conservation as alternative to increased groundwater extraction.) BAK-98

The DEIR should have considered alternatives that involved changes in operations and policies within Irvine and Rosedale, including alternatives involving conservation, in lieu recharge, more efficient irrigation methods, pumping moratoriums, changes in location of

groundwater pumping, and other operational changes. In fact, it is very likely that Rosedale will be required to implement some or all of those actions, and significantly change its groundwater banking and extraction practices, in connection with the eventual implementation of SGMA in the basin. BAK-98

The DEIR also does not properly consider the use of other, existing banking projects in Kern County as an alternative to the Project. It is not clear why the existing banking projects could not meet most, if not all, of the objectives of the Project, with decreased adverse impacts. BAK-99

The DEIR's failure sufficiently consider and discuss valid, viable alternatives constitutes a direct and clear violation of CEQA. (*See e.g. Laurel Heights Improvement Assn.,* 47 Cal.3d at 403, in which the court stated that an EIR was inadequate because the consideration of alternatives was "cursory at best.") In *Vineyard Area Citizens for Responsible Growth*, the court stated that when "it is impossible to confidently determine that anticipated future water sources will be available, CEQA requires some discussion of possible replacement sources or alternatives to use of the anticipated water, and of the environmental consequences of those contingencies." (40 Cal.4th at 432; *see also* N*apa Citizens for Honest Government*, 91 Cal.App.4th 342, holding that an EIR's discussion of possible alternative water sources did not comply with CEQA requirements because the EIR cannot simply label the possibility that other water sources will not materialize as "speculative" and decline to address such water sources.) BAK-100

E. Cumulative Impacts

The discussion of cumulative impacts throughout the DEIR is deficient and incomplete. In addition to identifying other local water banking projects (see DEIR, p. 3.9) and related cumulative impacts, the DEIR should have considered cumulative impacts from groundwater extractions and use in general, and not just in connection with a water banking project. The extensive use of local banked water supplies, particularly in dry years, would have a considerable cumulative impact, when combined with the Project, on local water supplies. BAK-101

The DEIR should have also included and addressed cumulative impacts associated with the projects proposed by other applicants for unappropriated water which Rosedale seeks for the Project. For example, the Kern Water Bank has issued an EIR for a project that would utilize the same high flow water that Rosedale seeks through its application for this Project. The DEIR should have considered impacts from the implementation of those projects in conjunction with its proposed use of the unappropriated high flow water supplies. BAK-102

The DEIR should have also considered the cumulative impact of other water transfers and water conveyance projects in Kern County, and in particular to other Southern California interests. BAK-103

An EIR must discuss a cumulative impact if the project's incremental effect combined with the effects of other projects is "cumulatively considerable." (14 Cal Code Regs §15130(a).) This determination is based on an assessment of the project's incremental effects "viewed in BAK-104

connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (14 Cal. Code Regs. §15065(a)(3); *Banning Ranch Conservancy v City of Newport Beach* (2012) 211 Cal.App.4th at 1228; *see also* 14 Cal. Code Regs. §15355(b).)

The purpose of the cumulative impacts analysis is to avoid considering projects in a vacuum, because failure to consider cumulative harm may risk environmental disaster. (*Whitman v Board of Supervisors,* 88 Cal.App.3d at 408.) Without this analysis, piecemeal approval of several projects with related impacts could lead to severe environmental harm. (*San Joaquin Raptor/Wildlife Rescue Ctr. v County of Stanislaus*, 27 Cal.App.4th at 720; *Las Virgenes Homeowners Fed'n v County of Los Angeles* (1986) 177 Cal.App.3d 300, 306.) An adequate analysis of cumulative impacts is particularly important when another related project might significantly worsen the project's adverse environmental impacts. (*Friends of the Eel River v Sonoma County Water Agency, supra*.) BAK-104

The DEIR does not comply with the requirements for the review of the Project's cumulative impacts on the environment. Among other problems, the cumulative impact discussion fails to properly identify the Project's impacts, adverse or otherwise, fails to provide sufficient details regarding other projects, and potential projects, in the region, and fails to properly identify and discuss the cumulative impacts of the Project in connection with other projects. The same errors and omissions in the "impact" section of the DEIR are carried over and compounded in the cumulative impact section of the DEIR. BAK-105

The DEIR also fails to provide any meaningful discussion or analysis of the cumulative impact of the Project on the Kern River, and other local water supplies and sources. Once again, the Authority cannot provide a proper or sufficient analysis of the cumulative impacts of the Project on the Kern River, and other local water supplies, because the DEIR fails to provide basic, essential information on baseline conditions in the Kern River, and the impacts of the Project on the Kern River. BAK-106

The cumulative impact discussion is also flawed and not in compliance with CEQA requirements because the DEIR fails to provide relevant, accurate or helpful information with regard to the other projects in the region which would cause or contribute to cumulative impacts. The DEIR fails to provide data, information or details with regard to the water banking projects identified in the DEIR, including conditions or activities which would contribute to or cause cumulative impacts. The DEIR instead consistently summarily dismisses a number of potential cumulative impacts without providing or referring to any supporting facts or data, and without providing any accurate or reasonable explanation of the impacts. The analysis of cumulative impacts is therefore prejudicially and unreasonably understated, and is based primarily on speculation and wishful thinking. BAK-107

In *Citizens to Preserve the Ojai v. County of Ventura,* 176 Cal.App.3d at 431, the court stated that "it is vitally important that an EIR avoid minimizing the cumulative impacts. Rather, BAK-108

it must reflect a conscientious effort to provide public agencies and the general public with adequate and relevant detailed information about them." The court therein further stated: "A cumulative impact analysis which understates information concerning the severity and significance of cumulative impacts impedes meaningful public discussion and skews the decisionmaker's perspective concerning the environmental consequences of the project, the necessity for mitigation measures, and the appropriateness of project approval." (*Id*.)

BAK-108

To comply with CEQA, the Authority should have listed and considered the cumulative impacts of the Project on all other entities in the region that divert and use Kern River water, including the City, as well as all other "projects" proposed or undertaken by those entities that involve the diversion and use of Kern River water.

The cumulative impact section of the DEIR also fails to consider cumulative impacts arising out of secondary impacts triggered by the Project. As indicated previously, implementation of the Project would necessarily increase pumping in other parts of Kern County by entities that previously used some of the water proposed for use in the Project. The City, for example, historically has used some of that water for either direct delivery to water treatment plans, or for recharge and banking in its 2800 Acre Recharge Facility. The transfer of water to Irvine would likely increase pumping, and the volume of pumping, by the City to replace those water supplies.

BAK-109

F. Potential Areas of Controversy

The DEIR must also identify and discuss "areas of controversy" known to the parties. (14 Cal. Code Regs. §15123.) At page ES-10, the DEIR briefly and generally describes "areas of controversy" which were identified in comments made during the 30-day public review period in response to information published in the NOP.

BAK-110

Despite that claim, the DEIR fails to identify significant "areas of controversy and issues of concern" with regard to the Project, including the City's opposition to transfers of Kern River water supplies out of the region, to Southern California. The City, in fact, raised a number of concerns with the Project in its comments to the NOP. The DEIR, however, fails to acknowledge, review or analyze that opposition, and that area of controversy.

The DEIR also fails to acknowledge prior disputes among the Kern River interests and other local water districts, including Rosedale, which could impact the Authority's ability to implement the Project or to transport water developed through the Project. Rosedale, for example, has been involved in litigation with its neighboring water districts with regard to Rosedale's groundwater pumping and use. The DEIR should have identified and discussed those disputes, and considered the impact of the Project on such disputes, and the issues arising from such disputes.

BAK-111

Even if the Authority disagrees with various objections to and complaints about the Project, the environmental documentation must still summarize the main points of disagreement

BAK-112

regarding controversies and issues of concern. (14 Cal. Code Regs. § 15151; *Browning-Ferris Indus. v. City Council* (1986) 181 Cal.App.3d 852.) An agency may choose among differing opinions or conclusions as long as the EIR identifies the competing arguments correctly and in a responsive manner. (*Browning-Ferris Indus.*, *supra*, 181 Cal.App.3d at 863.)

BAK-112

3. CONCLUSION

The statements and comments in this letter constitute only the City's comments to the DEIR. The City reserves the right to comment on and raise appropriate objections and challenges to the Project, the Final EIR for the Project, and any other efforts or approvals related to the Project.

BAK-113

We thank you for consideration of these comments. Please let us know if you have any questions with regard to these comments.

Sincerely,

Colin L. Pearce

CLP:bah
Attachment

cc: Virginia Gennaro, City Attorney, City of Bakersfield
Art Chianello, Water Resources Manager, City of Bakersfield

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May 8, 2020

VIA EMAIL eaverett@rrbwsd.com

Eric Averett
General Manager
Rosedale-Rio Bravo Water Storage District
P.O. Box 20820
Bakersfield, CA 93390-0820

Re: City of Bakersfield's Comments to Notice of Preparation of an Environmental Impact Report for Kern Fan Groundwater Storage Project.

Dear Mr. Averett:

On behalf of the City of Bakersfield ("City" or "Bakersfield"), we submit the following comments to the Notice of Preparation ("NOP") of an Environmental Impact Report ("EIR") for the Kern Fan Groundwater Storage Project ("Project") issued by the Rosedale-Rio Bravo Water Storage District ("Rosedale") on April 8, 2020.

1. Potential Transfer of Local Water Supplies Out of Area

The City is concerned that the Project will involve the transfer or sale of local water supplies, including the waters of the Kern River, out of Kern County to the Irvine Ranch Water District ("Irvine").

BAK
A-1

Irvine is a California Water District that provides water "to approximately 422,000 residents encompassing 181 square miles in central Orange County." (NOP, p. A-2.) The NOP indicates that one of the primary purposes and goals of the Project is to increase Irvine's water supply. Specifically, one of the "Project Objectives" is to provide Irvine's "customers and partners with increased water supply reliability during periods when other supply sources may be reduced or interrupted." (NOP, p. A-3.) The NOP further indicates that up to 37,500 acre-feet of "storage capacity" in the Project will be allocated to Irvine, and that Irvine will use water held in that "account" for "M&I uses." (NOP, p. A-4.)

The NOP also indicates that although the Project will primarily involve the recharge and recovery of State Water Project ("SWP") water supplies, the Project will also utilize other water supplies "from various sources, that may include federal, state, and local supplies." (NOP, p. A-5.) Those sources "may also include supplies from the CVP, and high-flow Kern River water depending on annual hydrologic availability, water rights and regulatory considerations." (Id.)

The City reminds Rosedale that sales and transfers of local water supplies out of the County are directly contrary to the policies and interests of the City. The City has a long standing policy that Kern River water shall not be utilized outside the boundaries of the San Joaquin Valley Portion of Kern County.

The Project would appear to violate the City's policy against transfers of local water supplies out of the County. Development of a water supply for Irvine within Kern County would seem to necessarily and logically involve the transfer of local water supplies out of the County to Orange County. The NOP, moreover, confirms that the Project could involve the storage and eventual transfer of Kern River water out of the County to Irvine.

BAK A-1

The City is concerned that the out-of-county water transfers proposed through the Project could cause substantial harm to the local environment, the local groundwater basin, the City's water resources and supplies, the Kern River, and the water resources of the entire southern San Joaquin Valley. The City therefore reserves the right to challenge the Project to prevent harm to the City and local water supplies. The City also urges Rosedale to accurately, honestly and completely review the wide ranging potential impacts of the proposed transfer of local water supplies, including Kern River water, out of the area, to Southern California.

Rosedale, moreover, holds no Kern River water rights, but only receives Kern River water from the City pursuant to a water supply agreement. Rosedale is bound, through that agreement, to only use Kern River water acquired from the City within its boundaries. The City reserves the right to challenge and prevent any effort by Rosedale to violate the place of use restriction in that agreement, through the Project or otherwise.

2. Consistency and Compliance with SGMA

The NOP states "By storing additional surface water underground in Kern County, the proposed Project would benefit groundwater levels in the Kern County Sub-basin and help support groundwater sustainability efforts required by the Sustainable Groundwater Management Act." (NOP, p. A-4.) In the very next sentence, however, Rosedale states that the Project "would enhance water supply reliability for IRWD and its partners by augmenting supplies for periods when other sources may be limited or unavailable." (Id.) That statement indicates that through the Project local groundwater supplies will be transferred out of the basin to Southern California.

BAK A-2

Those statements therefore appear contradictory, as transfers of groundwater out of the basin would appear to directly violate and contradict the goals, policies and requirements of the

Sustainable Groundwater Management Act ("SGMA"). The EIR should address and explain that apparent conflict. BAK A-2

The EIR should additionally explore and explain how the Project relates to, supports and impacts SGMA requirements, the Groundwater Sustainability Plan ("GSP") recently submitted to the State of California by Rosedale, and the goal's, programs and obligations set forth in Rosedale's GSP. The EIR should also consider the impact and effect of the Project, including the proposed potential transfer of Kern River water out of the County, on the goals, projects and requirements set forth in the GSPs for the entire basin, including the "master" GSP for the Kern Groundwater Authority GSA and the GSP for the Kern River GSA. BAK A-3

3. Water Supplies for Project

As indicated, the NOP states that the Project will primarily use SWP water supplies, but will also utilize other water supplies "from various sources, that may include federal, state, and local supplies," including Kern River water supplies. (NOP, p. A-5.)

To comply with CEQA, the EIR must identify, explain and analyze in detail the specific sources of water that will be utilized in the Project, and the impacts associated with the use of those water supplies. The EIR must identify the current uses of the water supplies that will be used in the Project, and must review and analyze the impacts arising from the shift of those water supplies to the Project. The EIR must also identify and discuss any uncertainties associated with the proposed use of specific water supplies and sources, as well as legal, regulatory and practical limitations on the use of the water supplies identified and discussed in the EIR. (*Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 431; See also *California Oak Foundation v. City of Santa Clarita* (2005) 133 Cal.App.4th 1219 (in which the court rejected an EIR because the water supply analysis relied, without adequate consideration of the uncertainties of SWP supplies, on the party's purchase of 41,000 acre-feet of SWP water).) BAK A-4

With regard to Kern River water, the EIR should identify and review the agreements, judgments, orders, policies and practices which govern and control the conveyance of water through the Kern River channel, and the diversion and use of water from the Kern River. Without that critical information, the EIR cannot properly review the impacts of the Project on the Kern River, other local waters supplies, and entities, such as Bakersfield, that hold Kern River water rights or which use and rely on Kern River water supplies. BAK A-5

The EIR must also identify the extent, source and nature of the Kern River water which may be used in the Project. Rosedale, for example, has filed an application with the State Water Resources Control Board ("SWRCB") to appropriate certain Kern River water supplies. If Rosedale proposes to use water acquired through that application in the Project, the EIR should identify, discuss and review the impacts arising from the use of those Kern River water supplies in the Project, including secondary and associated impacts involving the transfer of those Kern BAK A-6

River water supplies to Rosedale. The EIR should also identify, consider and review the competing applications to appropriate Kern River water in connection with the discussion of alternatives, and cumulative impacts, associated with the Project. BAK A-6

4. Impacts on Bakersfield

The City maintains water banking and spreading facilities in very close proximity to the Project. The City also recharges water in the Kern River channel, and thereafter extracts significant quantities of water through groundwater pumping. The Project would appear to have significant impacts on these activities and operations.

An EIR must consider all impacts of a project on the environment, even if the impacts would be felt by another agency. (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713.) The EIR must therefore thoroughly and properly assess the impact of the Project on the City, the City's water supply, and the City's use of water supplies. The EIR should also review and assess the impacts of the Project on the Kern River in general, and the environment in and around the Kern River. BAK A-7

5. Additional Issues and Questions

The City has the following additional comments, questions, and concerns regarding the NOP and the Project. These comments do not constitute or represent all of the City's concerns with the Project, or to the adequacy of Rosedale's, or Irvine's, compliance with CEQA.

- We understand that Rosedale did not prepare an Initial Study Environmental Checklist for the Project, presumably because it already recognizes that it is necessary to prepare an EIR for the Project. We also recognize that the NOP lists and discusses, at least briefly, all of the Environmental Factors included within an Initial Study Environmental Checklist. The EIR should still provide a detailed discussion and evaluation of all of those Environmental Factors, in at least the detail required in Initial Study Environmental Checklist. BAK A-8

- The EIR must consider reasonable alternatives that would satisfy the purpose and goals of the Project, including the objectives and goals of the Project, including conservation, additional sources of water, alternate storage locations, or other alternatives to the Project. It is particularly imperative that Rosedale, and Irvine, identify and consider alternatives that do not involve the transfer of local water supplies out of the Kern Subbasin. BAK A-9

- The EIR should identify and analyze the cumulative impacts of the Project on other banking and spreading projects in the vicinity of the Project, including banking and recharge projects operated by the City, such as the Kern River channel and the 2800 Acre recharge facility. The EIR should also identify and BAK A-10

discuss the cumulative impacts of the planned extraction of groundwater in connection with other groundwater pumping in the vicinity of the Project. BAK A-10

- The NOP indicates that the EIR for the Project will "evaluate the potential for the proposed Project to affect biological resources." (NOP, p. A-7.) The NOP further states that the EIR will review "how proposed Project operations could provide benefits to threatened and endangered fish species in the Delta, as well as benefits to wetland habitat and wildlife in the Kern Fan area." (Id.) The EIR, of course, must review **all** impacts associated with and resulting from the Project, including impacts on biological resources, and not just purported beneficial impacts. The transfer of Kern River water to Southern California, for example, as called for by the Project, could have significant adverse impacts on local biological resources. BAK A-11

- The NOP states that the EIR "will include a program-level analysis of the effects associated with operation of the proposed recovery facilities." (NOP, p. A-8.) The NOP further refers to later additional "site-specific analysis" and review of "project-level impacts associated with the recovery operations," but it is not clear if the EIR will include or incorporate a proper and complete "project level' review of the Project, including "recovery operations." The City maintains that Rosedale cannot approve the Project until and unless it has completely, properly and sufficiently reviewed all impacts arising from the Project, including "project level impacts" associated with the Project, including the "recovery operations" involved with and contemplated by the Project. BAK A-12

- The NOP states that because the Project "does not include the construction of new housing," the Project "would not directly induce population growth." (NOP, p. A-9.) The NOP states that the EIR will still "analyze the Project's potential to induce indirect population growth due to the recharge, storage and extraction of surface water stored underground." (Id.) The City points out that the Project would appear to **directly** induce population growth, and construction of new housing, because the Project will provide a supplemental water source for the "approximately 422,000 residents" within the boundaries of Irvine "in central Orange County." (NOP, p. A-2.) The EIR should therefore completely, properly and sufficiently review the impacts of the Project on population and housing growth, including within Orange County. BAK A-13

- The NOP very generally describes conveyance facilities that will be constructed or utilized in connection with the Project, including "a new turnout, additional canals and pipelines, and pump stations," and "proposed recharge and recovery facilities." (NOP, p. A-5.) The EIR must review and analyze all impacts associated with and resulting from the construction and operation of these conveyance facilities. BAK A-14

- The EIR should identify and discuss "areas of controversy," including any potential opposition to the Project from neighboring water districts, and residents and landowners in the region. (14 Cal. Code Regs. §15123.) That analysis is necessary and relevant, in part, because Rosedale is currently involved in litigation with the City with regard to Kern River water supplies, and Rosedale recently was involved in litigation with neighboring water districts and water banks, including the Kern Water Bank.

BAK A-15

- On February 22, 2018, Rosedale issued an NOP for the "Onyx Ranch South Fork Valley Water Project." Bakersfield thereafter submitted detailed comments to the NOP, which comments identified a number of concerns with and objections to that project. The EIR for the present Project should explain the relationship, if any, between the two projects. In particular, the EIR should identify whether any water that would be produced by the Onyx Ranch project would be used in connection with the Project.

BAK A-16

The statements and comments in this letter constitute only the City's comments to the NOP. The City reserves the right to comment on and raise appropriate objections and challenges to the Project, the EIR which will be prepared in connection with the Project, and any other efforts or approvals related to the Project.

BAK A-17

We thank you for consideration of these comments. Please let us know if you have any questions with regard to these comments.

Sincerely,

Colin L. Pearce

CLP:bah

cc: Virginia Gennaro, City Attorney, City of Bakersfield
Art Chianello, Water Resources Manager, City of Bakersfield

DM2\12614768.1

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December 2, 2020

Eric Averett
Groundwater Banking Joint Powers Authority
Post Office Box 20820
Bakersfield, California 93390-0820
eaverett@rrbwsd.com

Subject: Kern Fan Groundwater Storage Project (Project)
Draft Environmental Impact Report (DEIR)
State Clearinghouse No.: 2020049019

Dear Mr. Averett:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a DEIR from Groundwater Banking Joint Powers Authority (Authority) for the Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW-1

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW-2

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent that implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

CDFW has jurisdiction over fully protected species of birds, mammals, amphibians and reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species is prohibited and CDFW cannot authorize their incidental take.

CDFW-2

The use of unallocated stream flows are subject to appropriation and approval by the State Water Resources Control Board (SWRCB) pursuant to Water Code section 1225. CDFW, as Trustee Agency, is consulted by the SWRCB during the water rights process to provide terms and conditions designed to protect fish and wildlife prior to appropriation of the State's water resources. Certain fish and wildlife are reliant upon aquatic ecosystems, which in turn are reliant upon adequate flows of water. CDFW therefore has a material interest in assuring that adequate water flows within streams for the protection, maintenance, and proper stewardship of those resources. CDFW provides, as available, biological expertise to review and comment on environmental documents and impacts arising from project activities.

CDFW-3

PROJECT DESCRIPTION SUMMARY

Proponent: Rosedale Rio-Bravo Water Storage District (Rosedale) and Irvine Ranch Water District (IRWD) are jointly carrying out the Project through the Groundwater Banking Joint Powers Authority (Authority). Pursuant to CEQA Guidelines section 15051(d), until the Authority was formed, Rosedale served as the Lead Agency under CEQA for the preparation of the Notice of Preparation. Rosedale and IRWD agreed that Rosedale would perform the lead agency role until the Authority was formed, and the Authority will assume the role thereafter.

Objective: The objectives of the Project are (1) Capture, recharge, and store water from the State Water Project (SWP), Central Valley Project, and other available water supplies for later use; (2) Provide ecosystem public benefits, emergency water supply public benefits during extended droughts or a Delta levee failure, and water supply benefits for agricultural, municipal and industrial, and federal wildlife refuge uses; (3) Provide operating flexibility for Rosedale's existing and future conjunctive use programs; (4) Assist in achieving groundwater sustainability within the Kern County Sub-basin of

CDFW-4

the San Joaquin Valley Groundwater Basin through implementation of projects consistent with California Executive Order N-10-19 directing state agencies to develop a "water resilience portfolio;" and (5) Provide Rosedale and IRWD customers and partners with increased water supply reliability during periods when other supply sources may be reduced or interrupted.

CDFW-4

Project Description: The Project would consist of construction of up to 1,300 acres of recharge basin facilities and approximately 12 recovery wells. The Kern Fan Conveyance Facilities would consist of canals and/or pipelines, pump stations, and a new turnout at the California Aqueduct to convey water between the Project facilities and the California Aqueduct. Subject to agreements between Rosedale and IRWD, the Project facilities may be integrated with other facilities operated in Rosedale's Conjunctive Use Program. Water stored by the Project would be recovered when needed to provide ecosystem and water supply benefits.

The Project would be operated such that surplus surface water from the SWP, Central Valley Project, Kern River, and other available water sources would be recharged and stored for subsequent recovery. It is estimated that the Project would be able to recharge and store approximately 100,000 acre-feet per year (AFY). Project capacities are to be allocated as follows:

CDFW-5

Pursuant to the award of funds under the California Water Commission's Water Storage Investment Program (WSIP), up to 25 percent, or up to 25,000 acre-feet (AF), of the "unallocated" SWP Article 21 water would be stored for the California Department of Water Resources (DWR) in an "Ecosystem Account." Through the implementation of 1-for-1 exchanges, the water stored in the Ecosystem Account would be used by the State of California to alleviate stress on endangered and threatened species in the Sacramento-San Joaquin River Delta during critically dry years.

The remaining 75,000 AF of storage capacity would be divided equally, with 37,500 AF of storage capacity allocated to Rosedale and 37,500 AF of storage capacity allocated to IRWD. Rosedale and IRWD would use the water recharged in their respective accounts for agriculture, municipal, and industrial uses, improving water supply reliability during droughts and emergencies.

The Project would be implemented in two phases, and each phase would construct up to approximately 640 acres of recharge and recovery facilities within the Project area. Water could be conveyed to and from Phase 1 and 2 properties through existing facilities and a new turnout and conveyance system (Kern Fan Conveyance Facilities) connecting to the California Aqueduct. Project operations would be coordinated with Rosedale's Conjunctive Use Program.

Recharge Facilities. The Project would include the construction of recharge basins of varying shape, size, and depth within approximately 1,300 acres. Basins would be formed by excavating and contouring existing soils to form earthen berms. Typical basin berms would be approximately three to six feet above ground. Dirt roads approximately 14 to 20 feet wide would run along the perimeter of and in between all basins to provide access to facilities during operation and maintenance activities. Surface water would be delivered to the basins for recharge through the new Kern Fan Conveyance Facilities, and the basins would be connected by check structures to allow recharge water to flow by gravity among basins. The basins would be managed to allow agricultural land uses (e.g., annual farming or grazing) to continue when the basins are empty.

Intermittent Wetlands. The recharge basin design, subject to grant funding requirements, would be intended to create intermittent wetland habitat through intermittent recharge events. During the years that the Project takes and recharges water into storage, the basins would be inundated with water and provide intermittent wetland habitat to support waterfowl, shorebirds, raptors, and other migratory birds. The wetlands to be established by the Project would be considered intermittent because the water supply delivered for recharge may not be available for recharge year-round or during periods of drought.

CDFW-5

Recharge Water Supplies. The Project would receive, recharge, and store SWP Article 21 water, which is a surplus supply managed by DWR. Other water supplies also may be secured and acquired by Rosedale and IRWD from various sources, and may include federal, state, and local supplies through transfers, balanced and unbalanced water exchange agreements, water purchases or temporary transfers, or other available means. Sources may also include supplies from the Central Valley Project, and high-flow Kern River water depending on annual hydrologic availability, water rights, and regulatory considerations.

Recovery Facilities. The Project would construct up to 12 extraction wells, with an anticipated annual recovery capacity of up to 50,000 AF. Each well would be designed to pump groundwater at a recovery rate of approximately five to six cubic feet per second (cfs). Actual recovery rates for each well may be slightly more or less based on aquifer conditions at each well site. If higher production is achieved for the first few wells installed, fewer wells may be needed. Additionally, if any agricultural wells exist on the recharge basin sites, these could potentially be used as production wells or monitoring wells. The recovery facilities would be designed and located to minimize potential effects on wells pumping on adjacent properties.

Conveyance Facilities. The Kern Fan Conveyance Facilities will convey water to and from the California Aqueduct and recharge and recovery facilities. The exact locations of the new conveyance facilities have not yet been determined but they would have up

to 500 cfs of conveyance capacity. Water would be conveyed to and from a new turnout at the California Aqueduct and a new conveyance system approximately 10 miles long that may include an open canal, closed conduit, or some combination. In addition to new conveyance, existing facilities within Rosedale's Conjunctive use Program may be used to move water to/from the Project, subject to approvals, such as through Friant-Kern Canal or the Kern River by exchange through the Goose Lake Channel or from the Cross Valley Canal through the Rosedale Intake Canal.

Groundwater recovered from the Project extraction wells would be conveyed through new pipelines that would be below ground, running along the dirt roads between the recharge basins, or buried in the basin bottoms, with exact locations subject to final well placement. The recovery pipelines would connect to the new Kern Fan Conveyance Facilities or could connect to the Cross Valley Canal via existing conveyance facilities. CDFW-5

Location: The Project boundary would be located within the Rosedale district boundary in western Kern County, west of the City of Bakersfield. The recharge and recovery facilities would be constructed in two phases on approximately 1,300 acres of agricultural or vacant land within or near the Rosedale service area.

Timeframe: Unspecified

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the Authority in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the CEQA document.

Based on a review of the Project description and a review of California Natural Diversity Database (CNDDB) records and the surrounding habitat, several special-status species could potentially be impacted by Project activities. Please note that the CNDDB is populated by and records voluntary submissions of species detections. As a result, species may be present in locations not depicted in the CNDDB but where there is suitable habitat and features capable of supporting species. Therefore, a lack of an occurrence record in the CNDDB is not tantamount to a negative species finding. CDFW-6

Project-related activities within the Project boundary including but not limited to construction and operation of additional water banking facilities and introduction of surface water flows for storage could impact the following special-status plant and wildlife species and habitats known to occur in the area: the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*); the State and federally endangered Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*); the State CDFW-7

and federally endangered and State fully protected blunt-nosed leopard lizard (*Gambelia sila*); the State threatened Swainson's hawk (*Buteo swainsoni*), Nelson's antelope squirrel (*Ammospermophilus nelsoni*), and tricolored blackbird (*Agelaius tricolor*); the federally endangered and California rare plant rank (CRPR) 1B.2 San Joaquin woollythreads (*Monolopia congdonii*); the federally endangered and CRPR1B.2 Kern mallow (*Eremalche parryi* ssp*. kernensis*), the CRPR 4.2 Hoover's eriastrum (*Eriastrum hooveri*); the CRPR 1B.2 recurved larkspur (*Delphinium recurvatum*) and Munz's tidy-tips (*Layia munzii*); the CRPR 1B.1 Mason's neststraw (*Stylocline masonii*); and the State species of special concern American badger (*Taxidea taxus*), Tulare grasshopper mouse (*Onychomys torridus tularensis*), burrowing owl (*Athene cunicularia*), San Joaquin coachwhip (*Masticophis flagellum ruddocki*), California glossy snake (*Arizona elegans occidentalis*), western spadefoot (*Spea hammondi*), and coast horned lizard (*Phrynosoma blainvillii*). Aerial imagery of the Project boundary and its surroundings within the Rosedale District boundary show the Goose Lake and Kern River riparian corridors, riparian-lined canal corridors, large trees, Great Valley cottonwood riparian forest, Great Valley mesquite scrub, Valley salt bush scrub, upland grassland, and agricultural habitats. CDFW-7

CDFW recommends that the following modifications and/or edits be incorporated into the DEIR.

I. Mitigation Measure or Alternative and Related Impact Shortcoming

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or the United States Fish and Wildlife Service (USFWS)?

COMMENT 1: San Joaquin Kit Fox (SJKF)

DEIR Mitigation Measure (MM) Bio-5

Issues: SJKF occurrences have been documented within the Project boundary and surrounding area (CDFW 2020a). The Project has the potential to temporarily disturb and permanently alter suitable habitat for SJKF and directly impact individuals if present during construction, recharge, and other activities. CDFW-8

SJKF den in a variety of areas such as right-of-ways, agricultural and fallow/ruderal habitat, dry stream channels, and canal levees, and populations can fluctuate over time. SJKF are also capable of occupying urban environments (Cypher and Frost 1999). SJKF may be attracted to Project areas due to the type and level of ground-disturbing activities and the loose, friable soils resulting from intensive ground disturbance. SJKF will forage in fallow and agricultural fields and utilize

streams and canals as dispersal corridors. As a result, there is potential for SJKF to occupy all suitable habitat within the Project boundary and surrounding area. CDFW-8

DEIR MM BIO-5 states that a qualified biologist shall conduct a USFWS-approved early evaluation of the project area to determine if the Project sites represent SJKF habitat. If the evaluation shows that the SJKF does not utilize the Project site, and the Project will not result in take, then no further mitigation shall be required of the SJKF. If the "early evaluation" finds presence of SJKF, a SJKF survey shall be conducted by a qualified biologist in accordance with current USFWS SJKF Survey Protocol. If it is determined that SJKF utilize the property, then the Authority shall determine appropriate Project modifications to protect SJKF, including avoidance, minimization, restoration, preservation, or compensation. If evidence of active or potentially active SJKF dens is found within the area to be impacted by the Project, appropriate compensation for the habitat loss shall be determined and provided.

The DEIR does not specify the protocol to be used for early evaluation of SJKF. The USFWS Survey Protocol for Northern SJKF Populations (USFWS 1999) recommends conducting early evaluation for SJKF, and information obtained from the early evaluation requirements is used by the USFWS to evaluate whether suitable SJKF habitat is present. The DEIR has already determined that suitable SJKF habitat occurs within the Project area and confirmed numerous known occurrences for SJKF within the Project and surrounding area using the CNDDB (CDFW 2020). The DEIR acknowledges the potential to temporarily disturb and permanently alter suitable habitat for special status species including SJKF, and to directly impact individuals if present during construction activities. CDFW-9

The DEIR MM BIO-5 defers identifying mitigation for impacts to SJKF until after Project implementation, and does not specify consultation with CDFW for activities that may impact SJKF. Given the size and scope of the Project and the prevalence of SJKF adjacent to and within the Project area, CDFW has concluded it is likely that impacts to SJKF, including take, may occur during all phases of the Project.

Specific impact: Without appropriate avoidance and minimization measures for SJKF, potential significant impacts associated with construction include habitat loss, den collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals. CDFW-10

Evidence impact is potentially significant: Habitat loss resulting from land conversion to agricultural, urban, and industrial development is the primary threat to SJKF (Cypher et al. 2013). Western Kern County supports relatively large areas of high suitability habitat and one of the largest remaining populations of SJKF (Cypher et al. 2013). The Project area is within this remaining highly suitable habitat, which is otherwise intensively managed for agriculture. Therefore, subsequent CDFW-11

ground-disturbing activities have the potential to significantly impact local SJKF populations. CDFW-11

Recommended Mitigation Measure 1: SJKF Habitat Assessment

For all Project-specific components including construction and land conversion, CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project area or its immediate vicinity contains suitable habitat for SJKF.

Recommended Mitigation Measure 2: SJKF Surveys

CDFW recommends assessing presence/absence of SJKF for all Project phases and components by having qualified biologists conducting transect surveys of Project areas and a 500-foot buffer of Project areas to detect SJKF and their sign. Specifically, CDFW advises conducting these surveys in all areas of potentially suitable habitat no less than 14 days and no more than 30 days prior to beginning of ground disturbing activities. CDFW also recommends following the USFWS (2011) "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance". CDFW-12

Recommended Mitigation Measure 3: SJKF Take Authorization

SJKF detection warrants consultation with CDFW to discuss how to avoid take, or if avoidance is not feasible, to acquire an Incidental Take Permit (ITP) prior to ground-disturbing activities, pursuant to Fish and Game Code section 2081 subdivision (b).

COMMENT 2: Blunt-nosed Leopard Lizard (BNLL)

DEIR MM BIO-1

Issues: BNLL have been documented in suitable habitat within and adjacent to the Project boundary (CDFW 2020a). Suitable BNLL habitat includes areas of grassland and upland scrub that contain requisite habitat elements such as small mammal burrows. BNLL also use open space patches between suitable habitats, including disturbed sites, unpaved access roadways, and canals. DEIR MM BIO-1 states that prior to commencement of project ground disturbing construction, a qualified biologist shall survey for blunt-nosed leopard lizard, in accordance with the most recent CDFW *Approved Survey Methodology for the Blunt-Nosed Leopard Lizard*. If it is determined that blunt-nosed leopard lizard is present within the project areas, the Authority shall initiate the appropriate Project modifications to protect blunt-nosed leopard lizard, including avoidance, minimization, restoration, CDFW-13

preservation, or compensation. The DEIR does not specify the parameters of those modifications or measures or note whether consultation with CDFW would occur for activities that may impact BNLL. CDFW-13

Specific impact: Without appropriate avoidance and minimization measures for BNLL, potentially significant impacts associated with ground-disturbing activities include habitat loss, burrow collapse, reduced reproductive success, reduced health and vigor of eggs and/or young, and direct mortality. CDFW-14

Evidence impact is potentially significant: Habitat loss resulting from agricultural, urban, and industrial development is the primary threat to BNLL (ESRP 2020a). The range for BNLL now consists of scattered parcels of undeveloped land within the valley floor and the foothills of the Coast Range (USFWS 1998). Some undeveloped areas with suitable BNLL habitat occur within the Project and surrounding area; therefore, ground disturbance and conversion of suitable habitat has the potential to significantly impact local BNLL populations. CDFW-15

Recommended Mitigation Measure 4: BNLL Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of project implementation, to determine if the Project area or its immediate vicinity contains suitable habitat for BNLL.

Recommended Mitigation Measure 5: BNLL Surveys

If suitable habitat is present, prior to initiating any vegetation- or ground-disturbing activities, CDFW recommends conducting surveys in accordance with the "Approved Survey Methodology for the Blunt-nosed Leopard Lizard" (CDFW 2019). This survey protocol, designed to optimize BNLL detectability, reasonably assures CDFW that ground disturbance will not result in take of this fully protected species. CDFW-16

CDFW advises that BNLL surveys be completed no more than one year prior to initiation of ground disturbance. Please note that protocol-level surveys must be conducted on multiple dates during late spring, summer, and fall of the same calendar year, and that within these time periods, there are specific protocol-level date, temperature, and time parameters that must be adhered to. As a result, protocol-level surveys for BNLL are not synonymous with 30-day "preconstruction surveys" often recommended for other wildlife species. In addition, the BNLL protocol specifies different survey effort requirements based on whether the disturbance results from maintenance activities or if the disturbance results in habitat removal (CDFW 2019).

Recommended Mitigation Measure 6: BNLL Take Avoidance

BNLL is a State fully protected species pursuant to Fish and Game Code Section 5050 and CDFW is unable to authorize take of this species for any reason. Therefore, BNLL detection during protocol-level surveys warrant advance consultation with CDFW to discuss whether take of BNLL can be avoided during ground-disturbing Project activities and during operations and maintenance of Project facilities. In addition, CDFW recommends that the EIR be revised to provide information on specific avoidance measure for this species during construction, operations, and maintenance throughout the life of the Project..

CDFW-16

COMMENT 3: San Joaquin Antelope Squirrel (SJAS)

Issue: SJAS have been documented to occur within areas of suitable habitat within the Project vicinity (CDFW 2020a). Suitable SJAS habitat includes areas of grassland, upland scrub, and alkali sink habitats that contain requisite habitat elements, such as small mammal burrows.

CDFW-17

DEIR MM BIO-7 states that prior to commencement of Project activities, a qualified biologist will survey for SJAS. If SJAS is detected, then to avoid potential adverse effects to this species the Authority shall determine appropriate project modifications to protect SJAS, including avoidance, minimization, restoration, preservation, or compensation. The DEIR does not specify the parameters of those modifications or measures or note whether consultation with CDFW would occur for activities that may impact SJAS.

Specific impact: Without appropriate avoidance and minimization measures for SJAS, potential significant impacts include loss of habitat, burrow collapse, inadvertent entrapment of individuals, reduced reproductive success such as reduced health or vigor of young, and direct mortality of individuals.

CDFW-18

Evidence impact is potentially significant: Habitat loss resulting from agricultural, urban, and industrial development is the primary threat to SJAS. Very little suitable habitat for this species remains along the western floor of the San Joaquin Valley (ESRP 2020b). Areas of suitable habitat within the Project Area vicinity represent some of the only remaining undeveloped land in the vicinity, which is otherwise intensively managed for agriculture, and ground-disturbing activities are anticipated during Project implementation.

CDFW-19

Recommended Mitigation Measure 7: SJAS Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of project implementation, to determine if the Project area or its immediate vicinity contains suitable habitat for SJAS.

Recommended Mitigation Measure 8: SJAS Surveys

In areas of suitable habitat, CDFW recommends that a qualified biologist conduct focused daytime visual surveys for SJAS using line transects with 10- to 30-meter spacing within Project areas and a 50-foot buffer around those areas. CDFW further advises that these surveys be conducted between April 1 and September 20, during daytime temperatures between 68° and 86° F (CDFG 1990), to maximize detectability.

Recommended Mitigation Measure 9: SJAS Avoidance

If suitable habitat is present and surveys are not feasible, CDFW advises maintenance of a 50-foot minimum no-disturbance buffer around all small mammal burrow entrances until the completion of Project activities.

Recommended Mitigation Measure 10: SJAS Take Authorization

SJAS detection warrants consultation with CDFW to discuss how to avoid take, or if avoidance is not feasible, to acquire a State ITP prior to ground-disturbing activities, pursuant to Fish and Game Code Section 2081 subdivision (b).

CDFW-20

COMMENT 4: Tipton Kangaroo Rat (TKR)

Issue: TKR have been documented to occur within areas of suitable habitat within and adjacent to the Project (CDFW 2020a). Suitable TKR habitat includes areas of grassland, upland scrub, and alkali sink habitats that contain requisite habitat elements, such as small mammal burrows.

DEIR MM BIO-6 states that prior to commencement of project activities, a qualified biologist shall survey for TKR in accordance with the USFWS (2013) “Survey Protocol for Determining Presence of San Joaquin Kangaroo Rats”. If it is determined that TKR utilize the Project area, the Authority will determine appropriate project modifications to protect TKR, including avoidance, minimization, restoration, preservation, or compensation. The DEIR does not specify the parameters of those modifications or measures or note whether consultation with CDFW would occur for activities that may impact TKR.

CDFW-21

Specific impact: Without appropriate avoidance and minimization measures for TKR, potential significant impacts include loss of habitat, burrow collapse, inadvertent entrapment of individuals, reduced reproductive success such as reduced health or vigor of young, and direct mortality of individuals. CDFW-22

Evidence impact is potentially significant: Habitat loss resulting from agricultural, urban, and industrial development is the primary threat to TKR. Little suitable habitat for this species remains along the western floor of the San Joaquin Valley (ESRP 2020c). Areas of suitable habitat where ground disturbing activities will occur within the Project represent some of the only remaining undeveloped land in the vicinity, which is otherwise intensively managed for agriculture. CDFW-23

Recommended Mitigation Measure 11: TKR Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project area or its immediate vicinity contains suitable habitat for TKR.

Recommended Mitigation Measure 12: TKR Avoidance

If suitable habitat is present, CDFW advises implementation and maintenance of a 50-foot minimum no-disturbance buffer around all small mammal burrow entrances of suitable size for TKR use, during all Project activity. CDFW-24

Recommended Mitigation Measure 13: TKR Surveys

If burrow avoidance is not feasible, CDFW recommends that focused protocol-level trapping surveys according to the USFWS (2013) protocol be conducted by a qualified wildlife biologist that is permitted to do so by both CDFW and USFWS, to determine if TKR occurs in the Project area, well in advance of ground-disturbing activities in order to determine whether impacts to TKR could occur.

Recommended Mitigation Measure 14: TKR Take Authorization

TKR detection warrants consultation with CDFW to discuss how to avoid take, or if avoidance is not feasible, to acquire an ITP prior to ground-disturbing activities, pursuant to Fish and Game Code Section 2081 subdivision (b).

COMMENT 5: Swainson's Hawk (SWHA)

Issue: SWHA are known the Project area; two SWHA were documented during reconnaissance biological surveys utilizing the Project area in July 2020, indicating that the site may be used by foraging and/or nesting SWHA annually. Review of CDFW-25

recent aerial imagery indicates that trees capable of supporting nesting SWHA occur along the Kern River, and within the Project and overall Rosedale boundary. Landscape trees may also provide suitable nesting habitat. In addition, grassland and agricultural land in the surrounding area provide suitable foraging habitat for SWHA, increasing the likelihood of SWHA occurrence within the vicinity.

DEIR MM BIO-3 states that if construction activities are initiated within the nesting season of March 1 to September 15, preconstruction nesting surveys will be conducted by a qualified biologist prior to ground disturbance, in accordance with the guidance provided in the "Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley" (Swainson's Hawk Technical Advisory Committee (SWHA TAC), 2000), including a ½-mile radius around the Project sites. If a nest site is found, the qualified biologist will determine the appropriate buffer zone around the nest within which Project-related construction activities would be avoided. The DEIR does not specify the parameters for determining appropriate nest avoidance for SWHA or whether consultation with CDFW would occur. CDFW-25

Specific impact: Without appropriate avoidance and minimization measures for SWHA, potential significant impacts associated with Project activities include loss of forging and/or nesting habitat, nest abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young. CDFW-26

Evidence impact would be significant: Lack of suitable nesting habitat in the San Joaquin Valley limits the local distribution and abundance of SWHA (CDFW 2016). The trees within the Project represent some of the only remaining suitable nesting habitat in the local vicinity. Depending on the timing of construction, activities including noise, vibration, and movement of workers or equipment could affect nests and have the potential to result in nest abandonment, significantly impacting local nesting SWHA. In addition, agricultural cropping patterns can directly influence distribution and abundance of SWHA. SWHA can forage in grasslands, pasture, hay crops, and low growing irrigated crops; however, other agricultural crops such as orchards and vineyards are incompatible with SWHA foraging (Estep 2009, Swolgaard et al. 2008). CDFW-27

Recommended Mitigation Measure 15: Focused SWHA Surveys

To evaluate potential Project-related impacts, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting SWHA following the SWHA TAC (2000) survey methodology prior to Project initiation. CDFW-28

Recommended Mitigation Measure 16: SWHA Avoidance

CDFW recommends that if Project-specific activities will take place during the SWHA nesting season and active SWHA nests are present, a minimum ½-mile no-disturbance buffer be maintained around each nest, regardless of when it was detected, until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival, to prevent nest abandonment, other forms of take, and other potentially significant impacts to SWHA as a result of Project activities.

Recommended Mitigation Measure 17: Tree Removal

CDFW recommends that the removal of known SWHA nest trees, even outside of the nesting season, be replaced with an appropriate native tree species planting at a ratio of 3:1 at or near the Project area or in another area that will be protected in perpetuity. This mitigation would offset the local and temporal impacts of SWHA nesting habitat loss.

Recommended Mitigation Measure 18: SWHA Take Authorization

If SWHA are detected and a ½-mile no-disturbance nest buffer is not feasible, consultation with CDFW is warranted to determine if the Project can avoid take. If SWHA take cannot be avoided, issuance of an ITP prior to Project activities is warranted to comply with CESA.

CDFW-29

COMMENT 6: Tricolored Blackbird (TRBL)

Issues: TRBL are known to occur in the Project vicinity (CDFW 2020a, UC Davis 2020). Review of aerial imagery indicates that the Project boundary includes flood-irrigated agricultural land, which is an increasingly important nesting habitat type for TRBL, particularly in the San Joaquin Valley (Meese et al. 2017).

DEIR MM BIO-2 states if construction or vegetation removal occurs between the nesting bird season of March 1 to September 15, a qualified biologist will conduct a preconstruction nesting survey that covers all reasonably potential nesting locations on and within 300 feet of the Project site, within 1 day prior to work. If an active nest is confirmed, no construction activities will occur within 250 feet of the nest or less, as determined by a qualified biologist. DEIR MM BIO-2 does not identify TRLB as threatened under CESA and does not specify how the recommended buffer was deemed to be adequate to avoid or minimize potentially significant impacts to TRBL.

CDFW-30

Specific impact: Without appropriate avoidance and minimization measures for TRBL, potential significant impacts associated subsequent development include

CDFW-31

nesting habitat loss, nest and/or colony abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young. CDFW-31

Evidence impact would be significant: As mentioned above, flood-irrigated agricultural land is an increasingly important nesting habitat type for TRBL, particularly in the San Joaquin Valley (Meese et al. 2014). This nesting substrate is present within the Project vicinity. TRBL aggregate and nest colonially, forming colonies of up to 100,000 nests (Meese et al. 2014). Approximately 86% of the global population is found in the San Joaquin Valley (Kelsey 2008, Weintraub et al. 2016). In addition, TRBL have been forming larger colonies that contain progressively larger proportions of the species' total population (Kelsey 2008). In 2008, for example, 55% of the species' global population nested in only two colonies, which were located in silage fields (Kelsey 2008). Nesting can occur synchronously, with all eggs laid within one week (Orians 1961). For these reasons, depending on timing, disturbance to nesting colonies can cause nest entire colony site abandonment and loss of all unfledged nests, significantly impacting TRBL populations (Meese et al. 2014). CDFW-32

Recommended Mitigation Measure 19: TRBL Surveys

CDFW recommends that construction be timed to avoid the typical bird-breeding season of February 1 through September 15. If Project activity that could disrupt nesting must take place during that time, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting TRBL no more than 10 days prior to the start of implementation to evaluate presence/absence of TRBL nesting colonies in proximity to Project activities and to evaluate potential Project-related impacts. CDFW-33

Recommended Mitigation Measure 20: TRBL Colony Avoidance

If an active TRBL nesting colony is found during preconstruction surveys, CDFW recommends implementation of a minimum 300-foot no-disturbance buffer, in accordance with the CDFW (2015) "Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015", until the breeding season has ended or until a qualified biologist has determined that nesting has ceased and the young have fledged and are no longer reliant upon the colony or parental care for survival. TRBL colonies can expand over time and for this reason, CDFW recommends that an active colony be reassessed to determine its extent within 10 days prior to Project initiation.

Recommended Mitigation Measure 21: TRBL Take Authorization

If TRBL take avoidance at a nesting colony is not feasible, acquisition of an ITP pursuant to Fish and Game Code Section 2081(b), prior to any Project activities, would be warranted to comply with CESA. CDFW-33

COMMENT 7: Special-status Plants MM BIO-9

Issue: Special-status plant species meeting the definition of rare or endangered under CEQA section 15380 are known to occur within the Project and surrounding area. San Joaquin woollythreads, Kern mallow, Hoover's eriastrum, Masons neststraw, recurved larkspur, and Munz's tidy-tips have been documented within the Project area and Rosedale boundary.

DEIR MM BIO-9 states that prior to the start of construction activities that could affect special-status plant species, a qualified botanist will conduct a focused survey within the Project area for California jewelflower, Hoover's eriastrum, Kern mallow, recurved larkspur, San Joaquin woollythreads, slough thistle, and subtle orache, during the typical blooming periods of special-status plants with the potential to occur. If a special-status plant species is found to be present, and avoidance of the species and/or habitat is not feasible, the Authority will prepare and implement a Revegetation/Restoration Mitigation Plan to avoid and minimize impacts to special-status plant species during construction and operations and maintenance. DEIR MM BIO-9 defers addressing specific mitigation for impacts to special-status plant species by allowing development of Revegetation/Restoration Mitigation Plan after Project implementation. CDFW-34

Specific impact: Without appropriate avoidance and minimization measures for special-status plants, potential significant impacts associated with subsequent construction include loss of habitat, loss or reduction of productivity, and direct mortality. CDFW-35

Evidence impact would be significant: San Joaquin woollythreads, Kern mallow, Hoover's eriastrum, Mason's neststraw, recurved larkspur, Munz's tidy-tips, and many other special-status plant species are threatened by grazing and agricultural, urban, and energy development. Many historical occurrences of these species are presumed extirpated (CNPS 2019). Though new populations have recently been discovered, impacts to existing populations have the potential to significantly impact populations of these plant species. CDFW-36

Recommended Mitigation Measure 22: Special-Status Plant Surveys

CDFW recommends that individual Project sites be surveyed for special-status plants by a qualified botanist following the "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities" (CDFW 2018b). This protocol, which is intended to maximize detectability, includes the identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period.

Recommended Mitigation Measure 23: Special-Status Plant Avoidance

CDFW recommends that special-status plant species be avoided whenever possible by delineating and observing a no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special-status plant species. If buffers cannot be maintained, then consultation with CDFW may be warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species.

CDFW-37

Recommended Mitigation Measure 24: Listed Plant Species Take Authorization

If take of a State-listed plant species cannot be avoided, take authorization is warranted through acquisition of an ITP, pursuant to Fish and Game Code Section 2081 subdivision (b) and acquisition of a Permit for rare plants pursuant to procedures set forth in the California Code of Regulations, title 14, section 783 et seq. (Cal. Code Regs., tit. 14, section 786.9).

COMMENT 8: Burrowing Owl (BUOW) – MM BIO-4

Issue: BUOW occur within and in the vicinity of the Project (CDFW 2020a). BUOW inhabit open grassland containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. Habitat both within and surrounding the Project supports grassland habitat, and there is potential for BUOW to occupy or colonize the area.

CDFW-38

DEIR MM BIO-4 defers addressing specific mitigation for impacts to BUOW until after Project implementation. BIO-4 proposes the development of a Burrowing Owl Management Plan by a qualified biologist if BUOW are identified as present and occupied burrows cannot be avoided. The DEIR does not specify how detection of BUOW would occur or what actions or parameters would be included in a Burrowing Owl Management Plan.

Specific impact: Potentially significant direct impacts associated with subsequent activities and land conversion include habitat loss, burrow collapse, inadvertent entrapment, nest abandonment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals. CDFW-39

Evidence impact is potentially significant: BUOW rely on burrow habitat year-round for their survival and reproduction. Habitat loss and degradation are considered the greatest threats to BUOW in California's Central Valley (Gervais et al. 2008). The Project and surrounding area contain remnant undeveloped land but is otherwise intensively managed for agriculture; therefore, subsequent ground-disturbing activities have the potential to significantly impact local BUOW populations. In addition, and as described in CDFW's (CDFG 2012) "Staff Report on Burrowing Owl Mitigation", excluding and/or evicting BUOW from their burrows is considered a potentially significant impact under CEQA. CDFW-40

Recommended Mitigation Measure 25: BUOW Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine if the Project area or its vicinity contains suitable habitat for BUOW.

Recommended Mitigation Measure 26: BUOW Surveys

If suitable habitat is present on or in the vicinity of the Project area, CDFW recommends assessing presence/absence of BUOW by having a qualified biologist conduct surveys according to California Burrowing Owl Consortium's "Burrowing Owl Survey Protocol and Mitigation Guidelines" (CBOC 1993) and CDFG (2012). Specifically, these documents suggest three or more surveillance surveys conducted during daylight with each visit occurring at least three weeks apart during the peak breeding season (i.e., April 15 to July 15) when BUOW are most detectable. In addition, CDFW advises that surveys include a minimum 500-foot survey radius in addition to the Project area. CDFW-41

Recommended Mitigation Measure 27: BUOW Avoidance

CDFW recommends that no-disturbance buffers be implemented prior to and during any ground-disturbing activities, and that impacts to occupied burrows be avoided in accordance with the following table unless a qualified biologist approved by CDFW verifies through non-invasive methods that either: 1) the birds have not begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival (CDFG 2012).

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting sites	April 1-Aug 15	200 m*	500 m	500 m
Nesting sites	Aug 16-Oct 15	200 m	200 m	500 m
Nesting sites	Oct 16-Mar 31	50 m	100 m	500 m

* meters (m)

Recommended Mitigation Measure 28: BUOW Passive Relocation and Mitigation

If BUOW are found within these recommended buffers and avoidance is not possible, it is important to note that excluding birds from burrows is not considered a take avoidance, minimization, or mitigation method and is instead considered a potentially significant impact under CEQA (CDFG 2012). If it is necessary for Project implementation, CDFW recommends that burrow exclusion be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirmed empty through non-invasive methods, such as surveillance. CDFW recommends replacement of occupied burrows with artificial burrows at a ratio of one burrow collapsed to one artificial burrow constructed (1:1) to mitigate for evicting BUOW and the loss of burrows. BUOW may attempt to colonize or re-colonize an area that will be impacted; thus, CDFW recommends ongoing surveillance at a rate that is sufficient to detect BUOW if they return.

CDFW-41

COMMENT 9: Other State Species of Special Concern

Issue: Tulare grasshopper mouse, San Joaquin coachwhip, western spadefoot, coast horned lizard, California glossy snake, and American badger can inhabit grassland and upland scrub habitats (Shuford and Gardali 2008, Thomson et al. 2016). All the species mentioned above have been documented to occur in the vicinity of the Project, which supports requisite habitat elements for these species (CDFW 2018).

CDFW-42

DEIR MM BIO-8 only addresses impact to American badger. The DEIR does not address other special-status wildlife species known to occur within the Project boundary and surrounding area. The DEIR also states that the Authority will determine appropriate Project modifications, including avoidance, minimization, restoration, preservation, or compensation, without describing modifications or providing the parameters of measures.

Specific impact: Without appropriate avoidance and minimization measures for these species, potentially significant impacts associated with ground disturbance

CDFW-43

include habitat loss, nest/den/burrow abandonment, which may result in reduced health or vigor of eggs and/or young, and direct mortality. CDFW-43

Evidence impact is potentially significant: Habitat loss threatens all of the species mentioned above (Shuford and Gardali 2008, Thomson et al. 2016). Habitat within and adjacent to the Project ground-and vegetation-disturbing activities associated with development of the Project will occur represents some of the only remaining undeveloped land in the vicinity, which is otherwise intensively managed for agriculture. CDFW-44

Recommended Mitigation Measure 29: Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of project implementation, to determine if project areas or their immediate vicinity contain suitable habitat for the species mentioned above.

Recommended Mitigation Measure 30: Surveys

If suitable habitat is present, CDFW recommends that a qualified biologist conduct focused surveys for applicable species and their requisite habitat features to evaluate potential impacts resulting from ground and vegetation disturbance. CDFW-45

Recommended Mitigation Measure 31: Avoidance

Avoidance whenever possible is encouraged via delineation and observance a 50-foot no-disturbance buffer around dens of mammals like the American badger as well as the entrances of burrows that can provide refuge for small mammals, reptiles, and amphibians.

Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS?

COMMENT 10: Wetland and Riparian Habitats

Issue: The Project area contains numerous waterways, riparian and wetland areas, and development has the potential to impact these features. Impacts 3.4-2 and 3.4-3 of the DEIR (p. ES-19) state that the Project could have a substantial adverse effect on any riparian habitat, wetland habitat, or other sensitive natural communities identified in local or regional plans, policies, regulations or by CDFW or USFWS. CDFW-46

The DEIR MM BIO-12 states if sensitive natural communities will be impacted from construction activities, a focused survey by a qualified botanist shall be conducted to

assess and delineate the potential impacts. If evidence of impacts to these sensitive natural communities are observed or anticipated, compensation for the habitat loss will be provided. The DEIR MM BIO-13 states that prior to any disturbance of potential jurisdictional resources within the Project area, a jurisdictional delineation of water courses will be conducted to identify features or habitats that would be impacted by Project activities, and a jurisdictional delineation report will be prepared for submittal to regulatory agencies for obtaining a Section 404 Clean Water Act permit and/or CDFW Lake or Streambed Alteration Agreement. BIO-12 and BIO-13 propose to identify these resources and develop avoidance, minimization, and compensation after Project approval. CDFW-46

Specific impact: Project activities have the potential to result in the loss of riparian and wetland vegetation, in addition to the degradation of wetland and riparian areas through grading, fill, and related development. CDFW-47

Evidence impact is potentially significant: The Project area includes stream and wetland features within an agricultural landscape that also maintains undeveloped habitats. Riparian and associated floodplain and wetland areas are valuable for their ecosystem processes such as protecting water quality by filtering pollutants and transforming nutrients; stabilizing stream banks to prevent erosion and sedimentation/siltation; and dissipating flow energy during flood conditions, thereby spreading the volume of surface water, reducing peak flows downstream, and increasing the duration of low flows by slowly releasing stored water into the channel through subsurface flow. Within the San Joaquin Valley, modifications of streams to accommodate human uses has resulted in damming, canalizing, and channelizing of many streams, though some natural stream channels and small wetland or wetted areas remain (Edminster 2002). The Fish and Game Commission policy regarding wetland resources discourages development or conversion of wetlands that results in any net loss of wetland acreage or habitat value. Construction activities within these features also has the potential to impact downstream waters as a result of Project site impacts leading to erosion, scour, and changes in stream morphology. CDFW-48

Recommended Mitigation Measure 32: Stream and Wetland Mapping

CDFW recommends that formal stream mapping and wetland delineation be conducted by a qualified biologist or hydrologist, as warranted, to determine the baseline location, extent, and condition of streams (including any floodplain) and wetlands within and adjacent to the Project area, for inclusion in the DEIR. Please note that while there is overlap, State and Federal definitions of wetlands differ, and complete stream mapping commonly differs from delineations used by the United States (U.S.) Army Corps of Engineers specifically to identify the extent of Waters of the U.S. It is advised that the wetland delineation identify both State and Federal wetlands in the Project area as well as the extent of all streams including floodplains, CDFW-49

if present, within the Project area. CDFW advises that site map(s) depicting the extent of any activities that may affect wetlands, lakes, or streams be included with any Project site evaluations, to clearly identify areas where stream/riparian and wetland habitats could be impacted from Project activities.

Recommended Mitigation Measure 33: Stream and Wetland Habitat Mitigation

CDFW recommends that the potential direct and indirect impacts to stream/riparian and wetland habitat be analyzed according to each Project activity. Based on those potential impacts, CDFW recommends that the DEIR include measures to avoid, minimize, and/or mitigate those impacts. CDFW recommends that impacts to riparian habitat (i.e., biotic and abiotic features) take into account the effects to stream function and hydrology from riparian habitat loss or damage, as well as potential effects from the loss of riparian habitat to special-status species identified herein. CDFW recommends that losses to stream and wetland habitats be offset with corresponding riparian and wetland habitat restoration incorporating native vegetation to replace the value to fish and wildlife provided by the habitats lost from Project implementation. If on-site restoration to replace habitats is not feasible, CDFW recommends offsite mitigation by restoring or enhancing in-kind riparian or wetland habitat and providing for the long-term management and protection of the mitigation area, to ensure its persistence. CDFW-49

Editorial Comments and/or Suggestions

Fishery Ecosystem and Special-Status Fish:
Pages 3.4-37 and 3.4-38 state that the benefits for Chinook salmon (*Oncorhynchus tshawytscha*) would occur in years when the Project allows for a Feather River flow pulse. On average, Project flow pulses were estimated to improve survival relative to the base flow condition by approximately 4.6%. For spring-run Chinook salmon, years with flow pulses would produce 121 to 354 additional adult Chinook salmon from each of the seven Project flow pulses occurring in the 2030 estimated condition, and 168 to 375 additional adults for each of the five flow pulses occurring in the 2070 estimated condition. For winter-run Chinook salmon, benefits would range from 26 to 57 additional adult Chinook winter run occurring with the seven pulses for the 2030 condition, and with the five pulses for the 2070 estimated condition. CDFW-50

For green sturgeon (*Acipenser medirostris*), April pulse flows would be expected to enhance upstream passage for spawning adults by approximately 13 and 10 adult additional spawners accessing the Feather River per year for the 2030 and 2070 future conditions, respectively. For steelhead (*Oncorhynchus mykiss irideus*), an additional 63 to 127 adults would be benefited for the 2030 future condition and an additional 42 to 83 adults would be benefited for the 2070 future condition. CDFW recommends that the

DEIR detail how the models used to predict the benefits to fisheries are accurate enough to specify the precise number of fish that will benefit from the Project. CDFW-50

Operations and Maintenance Plan, Pesticide Use Plan: The DEIR Impacts 3.4-1 (p. ES-18 and p. 3.4-34) state that operations and maintenance (O&M) activities have the potential to significantly impact special-status plant and wildlife species including take of State-listed species. These activities may include, but are not limited to, activities such as the operation of recharge basins, pump and other facility maintenance, vehicle, and equipment operation. The DEIR defers analysis of impacts and the development of avoidance, minimization, and mitigation measures until after Project implementation. BIO-10 directs the Authority to develop an O&M Plan detailing how special-status plant and wildlife species, nesting birds, and sensitive natural communities will not be impacted by O&M activities. CDFW-51

The DEIR (p. 3.4-34) states that the need for rodenticide will be reduced by the installation of raptor boxes every 0.25 miles of berm with perching structures, for hawks and owls to offset harmful effects of burrowing rodents causing damage to earthen berms; however, the DEIR MM BIO-11 does not propose to reduce or substitute the use of pesticides or rodenticides with raptor boxes. Nesting raptors attracted to the Project site by the introduction of raptor boxes, as well as SJKF and other wildlife may be substantially impacted if they consume rodents exposed to rodenticides. Special-status small-mammals such as TKR, SJAS, Tulare grasshopper mouse, and other small mammals may also be potentially impacted rodenticides. BIO-11 defers the analysis of impacts and the development of avoidance, minimization, and mitigation measures, by requiring the Authority develop a Pesticide Use Plan in the future to detail how pesticides, rodenticides, and/or herbicides will be used and how application will not impact special-status plant and wildlife species, nesting birds, wetlands and jurisdictional features, and sensitive natural communities. CDFW-52

CDFW recommends that the DEIR include an O&M Plan and Pesticide Use Plan for review, or at a minimum that the DEIR identify the requirements and parameters for those documents, to avoid or minimize potential significant impacts. If take of State listed species cannot be avoided for O&M activities or the application and use of pesticides, herbicides, or rodenticides, take authorization through acquisition of an ITP, pursuant to Fish and Game Code Section 2081(b) would be warranted. CDFW-53

Kern Water Bank Habitat Conservation Plan and Natural Communities Conservation Plan (HCP/NCCP): The DEIR Impact 3.4-6 and MM BIO-14 state that the Project could conflict with the provisions of the Kern Water Bank HCP/NCCP, if facilities will be located on the Kern Water Bank. BIO-14 proposes that discussions be initiated to ensure that conveyance facilities located in the HCP/NCCP area avoid impacts to covered species area during construction, operations, and maintenance. CDFW-54

CDFW recommends that the DEIR thoroughly disclose which Project-related activities may occur on the Kern Water Bank, including any potential direct or indirect impacts to portions of the Kern Water Bank that are part of a mitigation bank encumbered with perpetual Conservation Easements held by the State of California. Please note that these Conservation Easements would likely preclude direct project related impacts on the parcels encumbered with Conservation Easements. In addition, CDFW recommends that the DEIR disclose the implications that these activities may have for the HCP/NCCP, as well as the need for any related major permit modifications. CDFW recommends that the DEIR include a complete description and location map for each of these activities. If any of these Project activities will conflict with the implementation of the HCP/NCCP, then consultation with CDFW by both the Authority and Kern Water Bank Authority is advised well in advance of Project approval or implementation to ensure compliance with CESA. CDFW-54

CDFW ITP No. 2081-2013-058-04 and the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP): The DEIR Cumulative Impact 3.4-7 discusses Project-related impacts related to construction of transportation projects and roadway O&M related that will be mitigated through implementation of the MBHCP (p 3.4-44). The DEIR describes the Project-related components that are subject to and located within the MBHCP boundary and the Metropolitan Bakersfield General Plan Area.

On August 24, 2014, CDFW issued ITP No. 2081-2013-058-04 to the City of Bakersfield and County of Kern authorizing take of Tipton kangaroo rat, San Joaquin kit fox, San Joaquin antelope squirrel, and Bakersfield cactus (*Opuntia basilaris* var. *treleasei)* associated with and incidental to Urban Development (as defined in the ITP) in the Metropolitan Bakersfield 2010 General Plan Area in Kern County, California. For the purpose of the ITP, Urban Development specifically ***does not*** include activities for water recharge and extraction facilities (not including wells developed in an urban setting) within lands owned by the California Department of Water Resources, Kern County Water Agency, Kern Water Bank Authority, or other water districts. CDFW-55

The Project applicant is the Authority, which is jointly composed of Rosedale and IRWD, and it is not clear how the Project-related transportation and roadway O&M components are activities covered under ITP No. 2081-2013-058-04. CDFW recommends that the DEIR disclose which Project-related activities meet the criteria for inclusion under the ITP and include a complete description and location map. If any of these Project activities do not meet the criteria for take coverage under ITP No. 2081-2013-058-04, then acquisition of separate State incidental take authorization pursuant to CESA would be necessary prior to any take of species listed pursuant to CESA. Consultation with CDFW to ensure compliance with CESA is advised well in advance of any Project approval or implementation.

Federally Listed Species: CDFW recommends consulting with USFWS regarding potential impacts to federally listed species including but not limited to SJKF, BNLL, and San Joaquin woollythreads. Take under the Federal Endangered Species Act (FESA) is more broadly defined than CESA; take under FESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with FESA is advised well in advance of any Project activities. CDFW-56

Lake and Streambed Alteration: Project activities have the potential to substantially change the bed, bank, and channel of lakes, streams, and associated wetlands onsite and/or substantially extract or divert the flow of any such feature that is subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation): (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent as well as those that are perennial. CDFW-57

CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement (LSAA); therefore, if the CEQA document approved for the Project does not adequately describe the Project and its impacts to lakes or streams, a subsequent CEQA analysis may be necessary for LSAA issuance. For information on notification requirements, please refer to CDFW's website (https://wildlife.ca.gov/Conservation/LSA) or contact CDFW staff in the Central Region Lake and Streambed Alteration Program at (559) 243-4593 or R4LSA@wildlife.ca.gov. CDFW-58

Cumulative Impact Analysis of Surface Water Diversions from outside the Project Boundary: Project-related diversions acquiring surface water from outside of the Project boundary, including the Sacramento-San Joaquin River Delta (Delta); and San Joaquin, Kings, and Kern River watersheds (including South Fork Kern River watershed) may impact additional riparian, wetland, fisheries, and terrestrial (i.e., upland) wildlife species and habitats. Special-status species and habitats located in watersheds outside of the Project area vary depending upon location. They may include, but are not limited to, the Federal threatened Central Valley distinct population segment steelhead (*Oncorhynchus mykiss*), the Federal and State threatened Central Valley spring-run evolutionary significant unit (ESU) Chinook salmon (*O. tshawytscha*), the Federal candidate and State species of special concern Central Valley fall-run and late fall-run ESU Chinook salmon (*O. tshawytscha*), the State species of special concern hardhead (*Mylopharodon conocephalus*), the State and Federal threatened giant garter snake (*Thamnophis gigas*), the State threatened Swainson's hawk and CDFW-59

tricolored blackbird, the species of special concern burrowing owl and western pond turtle, and numerous additional special-status species and habitats. CDFW-59

The South Fork Kern River Valley contains the largest contiguous cottonwood-willow riparian woodland in California. Rosedale owns and manages Onyx Ranch in the South Fork Kern River Valley. CDFW owns and manages the 7,200-acre Canebrake Ecological Reserve adjacent to Onyx Ranch. The National Audubon Society owns and manages the Audubon Kern River Preserve, a 3,275-acre preserve located on several parcels to the west of Onyx Ranch. Both properties are to be protected in perpetuity and portions of them were set aside as mitigation for other projects such as Lake Isabella construction. Project-related activities resulting in surface water diversion from the South Fork Kern River could significantly impact habitat on these properties and the following sensitive habitats and special-status plant and wildlife species located in the South Fork Valley: Great Valley Cottonwood Forest, Central Valley Drainage Hardhead /Squawfish Stream, the Federal threatened and State endangered yellow-billed cuckoo (*Coccyzus americanus occidentalis*), the Federal and State endangered southwestern willow flycatcher (*Empidonax trailii extimus*) and least Bell's vireo (*Vireo bellii pusillus*), tricolored blackbird, and numerous other special-status species. CDFW-60

CDFW provided a comment letter to Rosedale dated July 27, 2020 (enclosed), regarding the DEIR for the Onyx Ranch South Fork Valley Water Project (State Clearinghouse No. 2018021061). The Onyx Ranch South Fork Valley Water Project DEIR lists the Kern Fan Groundwater Storage Project as a potential recipient of surface water. To the extent that surface water exchanges from the WSIP are part of this Project, the DEIR must analyze impacts of this Project on those water source areas. CDFW recommends that the DEIR provide an analysis of the impacts of the acquisition of surface water from all watersheds and any potential direct, indirect, and cumulative biological impacts to fish and wildlife species and their habitats, as well as to properties permanently conserved to protect those resources.

Water Rights: The Project proponents will seek to acquire additional water supplies from various potential sources. CDFW recommends that the DEIR include a detailed description of the water rights and water entitlements for the points of diversion and places of use that pertain to the Project. CDFW recommends including information on the historic and current water rights and water use agreements/contracts including pre-1914 and appropriative rights, riparian rights, prescriptive rights, and adjudications. CDFW-61

CDFW recommends that the DEIR address whether Rosedale or IRWD will be filing a change petition or a new application for additional surface water. Given the potential for impacts to sensitive species and their habitats, it is advised that required consultation with CDFW occur well in advance of the SWRCB water right application process. CDFW-62

WSIP: The Project received a conditional award of funding through the California Water Commission's WSIP (Cal. Code Regs., tit. 23, § 6000 et seq.). The WSIP is funded by the Proposition 1 Water Quality, Supply, and Infrastructure Act of 2014. The purpose of the WSIP is to fund water storage projects that provide public benefits, improve operation of the state water system, and provide a net improvement in ecosystem and water quality conditions. "Net Improvement" means the gain or enhancement of a resource condition determined by comparing the with- and without-project future conditions less any negative outcomes of a proposed project, as defined in the WSIP regulations (Cal. Code Regs., tit.23, § 6001 (a)(50)). "Public benefit(s)" as defined in WSIP are those public benefits associated with water storage projects outlined in Water Code section 79753(a). Ecosystem improvements is a public benefit that includes changing the timing of water diversions, improvement in flow conditions, temperature, or other benefits that contribute to restoration of aquatic ecosystems and native fish and wildlife, including those ecosystems and fish and wildlife in the Delta (Water Code § 79753(a)(1)). Ecosystems include both aquatic and terrestrial habitats and natural communities. CDFW-63

Pursuant to the requirements of Water Code section 79755, any project funded under WSIP shall enter into a contract with CDFW, the SWRCB, and DWR (i.e., the administering agencies) to administer the public benefits of the project. CDFW is responsible for administering a contract with the Project for the implementation of ecosystem benefits that provide a net improvement.

Two ecosystem benefits proposed by the Project are pulse flow release from Oroville Reservoir and the provision of 1,280 acres of incidental wetland habitat in Kern County. CDFW will be coordinating with the Project to develop an ecosystem benefit contract and adaptive management plan for the Project. CDFW recommends that the DEIR provide an assessment of the Project, including delivery of the WSIP public benefits. CDFW also recommends the DEIR discuss CDFW permits or agreements that may potentially be required.

The Project Description on page ES-6 and page 2-6 state that, "…twenty-five percent, up to 25,000 AF, of unallocated Article 21 water would be stored for DWR in an 'Ecosystem Account.' Through the implementation of 1-for-1 exchanges, the Article 21 water stored in the Ecosystem Account would be used by the State of California to alleviate stress on endangered and threatened species in the Sacramento-San Joaquin River Delta. DWR, in consultation with the California Department of Fish and Wildlife would determine when water from the Ecosystem Account would be needed for such ecosystem benefits… DWR would release the SWP Project water from Lake Oroville at its discretion to provide ecosystem benefits." CDFW-64

Page ES-10 also states, regarding the Willow Springs Water Bank (WSWB), "If the Authority participates in the WSWB Conjunctive Use Project… DWR would forgo the

availability of 18,000 to 25,000 AF of pulse flows associated with the proposed project. If the Authority proceeds with the proposed project, then other entities would participate in the WSWB Conjunctive Use Project and together both groundwater banking projects would have the potential to provide DWR with up to 65,000 AF of water for pulse flows and benefits to fishery resources."

While it is accurate that the Project's water exchange will happen with DWR's Oroville Reservoir, CDFW recommends rephrasing the Ecosystem Account and pulse flow descriptions to reflect CDFW's role as the administering agency of the WSIP public ecosystem benefit. The pulse flows out of Oroville would be implemented at CDFW's discretion with coordination with DWR for SWP operations. CDFW-64

WSIP Benefit Description Consistency: The intermittent/incidental wetlands described in multiple sections of the DEIR (i.e., Sections 2.4, 3.4.3, and Appendix D) were conditionally accepted as a public ecosystem benefit under the WSIP. However, it is not clear in the descriptions that those provide a proposed WSIP public benefit. For clarity and consistency, CDFW recommends that the intermittent wetlands be described as a WSIP ecosystem public benefit, similar to how the Project's Ecosystem Account and Oroville pulse flow is described and presented in the DEIR. CDFW-65

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird). CDFW encourages Project implementation to occur during the bird non-nesting season; however, if Project activities must occur during the breeding season (i.e., February through mid-September), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above. CDFW-66

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified wildlife biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground disturbance to maximize the probability that nests that could potentially be impacted by the Project are detected. CDFW also recommends that surveys cover a sufficient area around the work site to identify nests and determine their status. A sufficient area means any area potentially affected by a project. In addition to direct impacts (i.e., nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends that a qualified biologist continuously monitor nests to detect behavioral

changes resulting from the project. If behavioral changes occur, CDFW recommends that the work causing that change cease and CDFW be consulted for additional avoidance and minimization measures. CDFW-66

If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. CDFW recommends that a qualified wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance. CDFW-67

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database, which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDB. The CNNDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp. CDFW-68

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089). CDFW-69

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist the Authority in identifying and mitigating Project impacts on biological resources. If you have questions regarding these comments, please contact Annette Tenneboe, Senior Environmental CDFW-70

Scientist (Specialist), at the address on this letterhead, by phone at (559) 243-4014 extension 231, or by email at Annette.Tenneboe@wildlife.ca.gov.

CDFW-70

Sincerely,

DocuSigned by:
Julie Vance
FA83F09FE08945A...

Julie A. Vance
Regional Manager
Attachment

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Attachment 1

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PROJECT: Kern Fan Groundwater Storage Project

RECOMMENDED MITIGATION MEASURES	STATUS/DATE/INITIALS
Before Disturbing Soil or Vegetation	
Recommended Mitigation Measure 1: SJKF Habitat Assessment	
Recommended Mitigation Measure 2: SJKF Surveys	
Recommended Mitigation Measure 3: SJKF Take Authorization	
Recommended Mitigation Measure 4: BNLL Habitat Assessment	
Recommended Mitigation Measure 5: BNLL Surveys	
Recommended Mitigation Measure 7: SJAS Habitat Assessment	
Recommended Mitigation Measure 8: SJAS Surveys	
Recommended Mitigation Measure 9: SJAS Avoidance	
Recommended Mitigation Measure 10: SJAS Take Authorization	
Recommended Mitigation Measure 11: TKR Habitat Assessment	
Recommended Mitigation Measure 13: TKR Surveys	
Recommended Mitigation Measure 14: TKR Take Authorization	
Recommended Mitigation Measure 15: Focused SWHA Surveys	
Recommended Mitigation Measure 17: Tree Removal	
Recommended Mitigation Measure 18: SWHA Take Authorization	
Recommended Mitigation Measure 19: TRBL Surveys	
Recommended Mitigation Measure 21: TRBL Take Authorization	
Recommended Mitigation Measure 22: Special-Status Plant Surveys	
Recommended Mitigation Measure 24: Listed Plant Species Take Authorization	
Recommended Mitigation Measure 25: BUOW Habitat Assessment	

RECOMMENDED MITIGATION MEASURES	STATUS/DATE/INITIALS
Recommended Mitigation Measure 26: BUOW Surveys	
Recommended Mitigation Measure 28: BUOW Passive Relocation and Mitigation	
Recommended Mitigation Measure 29: Habitat Assessment (Other Species of Special Concern)	
Recommended Mitigation Measure 30: Surveys (Other Species of Special Concern)	
Recommended Mitigation Measure 32: Stream and Wetland Mapping	
Recommended Mitigation Measure 33: Stream and Wetland Habitat Mitigation	
During Construction	
Recommended Mitigation Measure 6: BNLL Take Avoidance	
Recommended Mitigation Measure 12: TKR Avoidance	
Recommended Mitigation Measure 16: SWHA Avoidance	
Recommended Mitigation Measure 20: TRBL Colony Avoidance	
Recommended Mitigation Measure 23: Special-Status Plant Avoidance	
Recommended Mitigation Measure 27: BUOW Avoidance	
Recommended Mitigation Measure 31: Avoidance (Other Species of Special Concern)	

CHAPTER 10
Responses to Comments

This chapter contains the responses to the comment letters received during the public review period for the Draft EIR, which are listed in Table 9-1 in Chapter 9. The letters are included in Chapter 9 and have been bracketed and numbered. The responses to comments are provided below and are labeled to correspond to the comment letters and numbers that appear in the margins of the comment letters in Chapter 9.

Where the responses indicate additions or deletions to the text of the Draft EIR, additions are included as underlined text, deletions as ~~stricken text~~. The revisions do not substantially alter the conclusions in the Draft EIR.

The Authority has attempted to respond to all comments. However, it should be noted that some comments seek to raise issues which do not involve environmental impacts and are, therefore, beyond the scope and purpose of the Draft EIR. [*Mani Brothers Real Estate Group v. City of Los Angeles* (2007) 153 Cal.App.4th 1385, 1401: "The focus of CEQA, both procedurally and substantively, is 'solely ... the potential environmental impacts of a project"]. Such comments do not warrant or require a response. [*Browning-Ferris Industries v. City Council* (1986) 181 Cal.App.3d 852, 862: The EIR need not respond to each comment made during the review process, but it must specifically respond to the most significant environmental issues raised].

Letter 1: Dudley Ridge Water District (DRWD)

DRWD – 1

The Authority acknowledges DRWD's support of the proposed project. The comment is noted for the record.

DRWD – 2

The comment suggests that the connection between IRWD and DRWD is only discussed in Section ES.3 of the Draft EIR. The comment is correct in that the Executive Summary (Section ES.4, *Project Description)* of the Draft EIR briefly discusses the connection between IRWD and DRWD. This connection is also included in the Draft EIR on page 2-4 of Chapter 2, *Project Description*:

> IRWD is a landowner in the DRWD, which is also a SWP contractor. Through IRWD's land ownership in DRWD, IRWD is entitled to a portion of DRWD's Table A allocation.

In addition, the text of the Draft EIR has been revised on pages ES-6 to ES-7, and 2-6 as follows:

> ~~The 1-for-1 exchanges would result in the reclassification of Table A water being held in Lake Oroville for delivery to Rosedale or IRWD as SWP Project water, while the~~ Article 21 water stored in the proposed project's Ecosystem Account would be eligible for use for a pulse flow released pursuant to an agreement between DWR and CDFW to provide ecosystem benefits. The pulse flow released from Oroville Reservoir would be replenished by SWP operational 1 for 1 exchanges of~~reclassified as~~ Table A water from~~for use by~~ Rosedale as a member unit of the Kern County Water Agency and IRWD as a landowner in Dudley Ridge Water District. ~~After the 1-for-1 exchange is complete, DWR would release the SWP Project water from Lake Oroville at its discretion to provide ecosystem benefits.~~ The Table A water would be recovered from the proposed project facilities in Kern County and used by Rosedale, IRWD, and DRWD.

The comment also states that the need for IRWD to exchange Article 21 water for the DRWD's Table A water is a fundamental component of the Project. To clarify the need for this exchange, the text of the Draft EIR on page 2-6 has been revised as follows:

> The remaining storage capacity would be shared equally between Rosedale and IRWD. Project storage available to Rosedale and IRWD is estimated to be a minimum of 37,500 AF each. Rosedale and IRWD would use the water recharged in their respective storage accounts for agriculture and M&I uses, improving water supply reliability during droughts and emergencies. Article 21 stored in IRWD's storage account, made available to IRWD as a landowner in DRWD, would be made available for use in IRWD's service area through exchanges for Table A water as described in Section 2.6.2. Subject to agreements between Rosedale and IRWD, the operation of storage for the Authority members would be integrated with storage in Rosedale's Conjunctive Use Program and IRWD's Strand and Stockdale Integrated Banking Projects to store Article 21, Section 215, and other water supplies as well as for implementing exchange programs with SWP and CVP Contractors.

DRWD – 3

The comment states that Section 2.6 of the Draft EIR does not explain the exchange process with DRWD. The exchange process is discussed on the following pages in Chapter 2 of the Draft EIR: pages 2-6, 2-7, and 2-10 under Section 2.4, *Description of the Project*; and pages 2-17 and 2-18 under Section 2.6, *Project Operations*. In response to the comment, the text of the Draft EIR on page 2-17 of Section 2.6.2 have been revised to further describe the exchange process with DRWD:

> ## DRWD Exchange Process
>
> Under the proposed project, IRWD would receive Article 21 water as a land owner in DRWD, where 25 percent would be stored in the proposed project Ecosystem Account and the remaining water would be stored for IRWD and DRWD in IRWD's storage account. DRWD would facilitate the exchange of the Article 21 stored in IRWD's storage account for Table A; occurring either in-

ground or by surface deliveries. This Table A water would then be available for IRWD to recover for use in DRWD or for delivery through MWD to IRWD's service area as described in Section 2.6.4.

DRWD – 4

The comment states that Section 2.8 of the Draft EIR does not indicate what approvals would be required by DRWD, DWR and KCWA. Section 2.8 of the Draft EIR includes the need for an agreement with DWR to facilitate exchange of Article 21 water for Table A water involving water stored in the proposed project Ecosystem Account. In response to the comment, Section 2.8, *Project Approvals* of the Draft EIR has been expanded to include approvals required by DRWD and DWR, as follows:

Draft EIR, Page 2-20:

- Kern County Water Agency: Approval for construction and operation of a new turnout on the California Aqueduct
- Department of Water Resources:
  - Approval for use of the California Aqueduct to convey water;
  - Agreement authorizing the construction and operation of a new turnout on the California Aqueduct;
  - Operational Agreement facilitating the ~~1 for 1~~ exchanges necessary for the replenishment of pulse flows from Oroville Reservoir ~~of Table A water held in Lake Oroville as SWP Project Water for Article 21~~ from water held in the Kern Fan Groundwater Storage Project Ecosystem Account;
  - Agreement to coordinate the emergency response benefits associated with the WSIP funding
  - Agreement facilitating the exchange of DRWD Article 21 water stored in IRWD's storage account in the Kern Fan Groundwater Storage Project for DRWD Table A water.
- Dudley Ridge Water District:
  - Agreement facilitating the exchange of DRWD Article 21 water stored in IRWD's storage account in the Kern Fan Groundwater Storage Project for DRWD Table A water.

DRWD – 5

The Authority acknowledges receipt of the most recent IRWD presentation to DRWD. The comment is noted for the record.

Letter 2: Metropolitan Water District of Southern California (MET)

MET – 1

The comment confirms receipt of the Notice of Availability (NOA) of the Draft EIR and provides a brief project overview. The comment is noted for the record.

MET – 2

The comment recognizes that the proposed project would improve the management of surplus water supplies that otherwise would not be put to beneficial use. The comment requests that the proposed project be operated such that SWP contactors, including Metropolitan, are not negatively impacted. Please refer to Response to Comment MET-4, below.

MET –3

The comment states that Metropolitan's comments on the Draft EIR generally focus on ensuring the proposed project does not limit DWR's ability to operate the SWP or impair water quality. Please refer to Response to Comment MET-6 and MET-7, below.

MET – 4

The comment states that the project should not have negative impacts to the operation of the SWP and that the Draft EIR does not disclose operational analysis to support a finding of no impact. Last, the comment states that the project needs to ensure no harm to non-participating SWP contractors.

As quoted in the comment, the Draft EIR states on page 3.16-7 that "relative to baseline conditions, the use of unregulated water for recharge would not result in significant impacts to other legal users of water." As also stated on page 3.16-7, "source recharge waters for the proposed project would include SWP Article 21 water, which is a surplus supply managed by DWR." An explanation of SWP Article 21 water is included in the Draft EIR on page 2-4 and 2-5 as part of Chapter 2, *Project Description*, which also has been revised as follows:

> In addition to allocating Table A water, DWR periodically makes water supplies available under Article 21 of the SWP contracts. Article 21 states that DWR may offer to sell and deliver surplus SWP water when its available supplies exceed scheduled Table A delivery requests from the SWP contractors, the Sacramento-San Joaquin Delta is in an excess flow condition under applicable regulatory standards, and SWP facilities have available conveyance capacity. When "Article 21 water" becomes available, SWP contractors submit their delivery requests to DWR; when Article 21 supplies exceed SWP contractor demands, there is additional Article 21 supply that becomes available for allocation if there is additional demand and delivery capability. ~~unallocated."~~ The proposed project would increase the ability to capture, store and reregulate "unallocated" Article 21 water" for beneficial use by Authority members Rosedale and IRWD. The proposed project would increase the overall water within the SWP system, reduce the loss of water to the ocean, and provide ecosystem benefits in accordance with the proposed project's funding conditions.

As explained above, by definition, Article 21 water in excess of demand would be used as a source for recharge in the proposed recharge basins would be in excess of any Table A allocations for SWP contractors and thus would not harm non-participating SWP contractors.

MET – 5

The comment explains that it is unclear on how water exchanges will work to allow pulse flows from Oroville in the Draft EIR. Metropolitan understands that this process will be discussed in the future with DWR, however, should be described as an aspect of the project. The comment encourages the Authority to work with DWR and SWP contractors to ensure the project description is consistent with SWP contracts.

The Draft EIR explains the water exchanges to allow pulse flows from Oroville, which also has been revised, on page 2-6 as follows:

> Pursuant to the award of funds under the WSIP, twenty-five percent, up to 25,000 AF, of the ~~unallocated~~ Article 21 water in excess of demand would be stored for use for pulse flows ~~DWR~~ in an "Ecosystem Account." Through the implementation of 1-for-1 exchanges, the Article 21 water stored in the Ecosystem Account would be used by the State of California to alleviate stress on endangered and threatened species in the Sacramento-San Joaquin River Delta. DWR, in consultation with the California Department of Fish and Wildlife, would determine when water from the Ecosystem Account would be needed for such ecosystem benefits. ~~The 1-for-1 exchanges would result in the reclassification of Table A water being held in Lake Oroville for delivery to Rosedale or IRWD as SWP Project water, while the~~ Article 21 water stored in the proposed project's Ecosystem Account would be eligible for use for a pulse flow released pursuant to an agreement between DWR and CDFW to provide ecosystem benefits. The pulse flow released from Oroville Reservoir would be replenished by SWP operational 1 for 1 exchanges of ~~reclassified as~~ Table A water from ~~for use by~~ Rosedale as a member unit of the Kern County Water Agency and IRWD as a landowner in Dudley Ridge Water District. ~~After the 1-for-1 exchange is complete, DWR would release the SWP Project water from Lake Oroville at its discretion to provide ecosystem benefits.~~ The Table A water would be recovered from the proposed project facilities in Kern County and used by Rosedale, IRWD, and DRWD.

The Authority is committed to working with DWR and SWP contractors (e.g., MWD, Dudley Ridge Water District and Kern County Water Agency, etc.) to ensure that the proposed project is consistent with SWP contracts. The proposed project would be operated pursuant to the contractual rights and obligations of the parties involved. As mentioned in Response to Comment DWR-6 (see Letter 4 below), the Authority would operate the proposed project consistent with the understanding reached between DWR and the Authority in the *Principles for Turnout Construction Related Agreements Between the Kern County Water Agency, Groundwater Banking Authority and the California Department of Water Resources for the Kern Fan Groundwater Storage Project* (Principles for Turnout Construction) (May 12, 2020), which includes general terms for DWR to structure agreements to implement the proposed project, including the turnout, consistent with SWP operations and SWP water supply contracts.

Operational conditions upstream of the proposed project will be evaluated by DWR as part of a separate CEQA process for the pulse flows in the Delta.

MET – 6

The comment states that the project should not impair the water quality of the California Aqueduct and should follow DWR's Process.

An explanation of how the proposed project would ensure water quality introduced into the California Aqueduct would comply with DWR's water quality policy provisions for pumping groundwater into the Aqueduct is included in Section 3.10 of the Draft EIR on page 3.10-36 to 3.10-37. In response to the comment, a minor edit is made to the text of the Draft EIR as follows:

> Once recovered, the groundwater would be introduced into the new proposed conveyance facilities, California Aqueduct, Goose Lake Channel, or the CVC through the Rosedale West Intake Canal and would be subject to applicable pump-in water quality requirements. The Authority will enter into an agreement with DWR for a new turnout into the California Aqueduct ~~that will include water quality requirements for discharging non-SWP water into the California Aqueduct~~. Prior to pumping extracted groundwater into the CVC and California Aqueduct, it would be the Authority's responsibility to ensure that the water quality was sufficient to meet applicable water quality requirements of KCWA and DWR, and submit a Pump-In Proposal that identifies the water sources, planned operation, inflow water quality, and any anticipated impacts to water quality and/or operations. The operational agreement with DWR will specify that any introduction of water into the California Aqueduct must comply with DWR water quality requirements. Any water that did not meet water quality requirements or could not be blended to meet such requirements, as imposed by the conveyance facility operators, would not be conveyed within the canals.

MET – 7

The comment describes that arsenic concentrations could be as high as three times maximum containment levels in the project area and that 1,2,3-TCP has been detected in the overall project area. The comment states that the Draft EIR does not clearly identify mitigation strategies that will be followed to comply with DWR's Process.

Compliance with DWR's Process is a requirement of project operation; therefore, no specific mitigation measures are necessary. Please refer to Response to Comment MET-6.

MET – 8

The comment provides contact information at Metropolitan. The comment is noted for the record.

Letter 3: California Department of Water Resources, Division of Safety of Dams (DSOD)

DSOD – 1

The comment confirms receipt of the Draft EIR by the DSOD and includes project description text regarding "basin berms approximately 3 to 6 feet in height above the ground." The comment is noted for the record.

DSOD – 2

The comments states that insufficient information is provided in the project description to make an accurate DSOD jurisdictional determination, and it is unclear if project work would be subject to State jurisdiction for dam safety. The comment then states that the Authority needs to submit preliminary plans with cross-sections so that DSOD can make a jurisdictional determination.

The comment is noted for the record. In the event that the proposed recharge basins would include berms that exceed 6 feet in height with storage capacity of 50 acre-feet or more, as defined by Sections 6002 and 6003 of the California Water Code, the Authority would submit preliminary design plans to DSOD for a jurisdictional determination.

DSOD – 3

The comment states that dams higher than six feet with a storage capacity of 50 acre-feet or more are subject to State jurisdiction. Please refer to Response to Comment DSOD-2, above.

DSOD – 4

The comment explains that if dam(s) are subject to State jurisdiction, a construction application together with plans, specifications and filing fees must be filed with the DSOD for the project. The comment then provides the Authority with more information and a contact for the application process and questions.

The contact information provided is noted for the record. Please refer to Response to Comment DSOD-2 above. In the event that the proposed recharge basins would be subject to DSOD jurisdiction, the Authority would provide the appropriate documentation and application.

Letter 4: California Department of Water Resources (DWR)

DWR – 1

The comment confirms receipt and review of the Draft EIR by multiple DWR divisions and departments. The comment is noted for the record.

DWR – 2

The comment summarizes the project description. The comment is noted for the record.

DWR – 3

The comment explains that the DSOD is submitting a separate letter on the project and that all responses to that letter should be directed to DSOD specifically. The comment is noted for the record. Refer to responses to Comment Letter 3 from DSOD.

DWR – 4

The comment states that DWR's Sustainable Groundwater Management Office (SGMO) has regulatory authority for ensuring the local groundwater agencies comply with the sustainable Groundwater Management Act (SGMA). The letter informs the Authority that SGMO had no participation in the drafting of the comment letter nor was the SGMO solicited for advice or comment. The comment is noted for the record.

DWR – 5

The comment states that the project's proposed turn-out and turn-in to the Aqueduct would require several agreements to be executed with DWR; therefore, DWR should have been included as a Responsible Agency in the Draft EIR. The comment also explains what agreements would be required at a minimum.

The Draft EIR lists approvals and agreements required for the project on page 2-20 in Section 2.8, *Project Approvals*. The agreements with DWR listed in Comment DWR-5 are included in this list. To further respond to the comment, the text of the Draft EIR on page 2-20 has been revised to provide clarity that DWR is a Responsible Agency of the proposed project:

> Other approvals required, including those by Responsible and Trustee Agencies, may include the following:
>
> - Department of Water Resources: (as a Responsible Agency)
> – Approval for use of the California Aqueduct to convey water;
> – Agreement authorizing the construction and operation of a new turnout on the California Aqueduct;
> – Operational Agreement facilitating the ~~1 for 1~~ exchanges necessary for the replenishment of pulse flows from Oroville Reservoir ~~of Table A water held in Lake Oroville as SWP Project Water for Article 21~~ from water held in the Kern Fan Groundwater Storage Project Ecosystem Account;
> – Agreement to coordinate the emergency response benefits associated with the WSIP funding.

DWR – 6

The comment states that the Draft EIR's Project Description includes insufficient information on construction of the turnout at the California Aqueduct. The comment then states that the construction schedule does not consider potential impacts of ongoing or simultaneous construction activities in the vicinity involving the maintenance of the Aqueduct. The comment states that the Draft EIR does not provide a reasonably specific location of where the turnout would be placed, nor does the analysis of construction activities adequately address potential impacts to the Aqueduct and other SWP facilities.

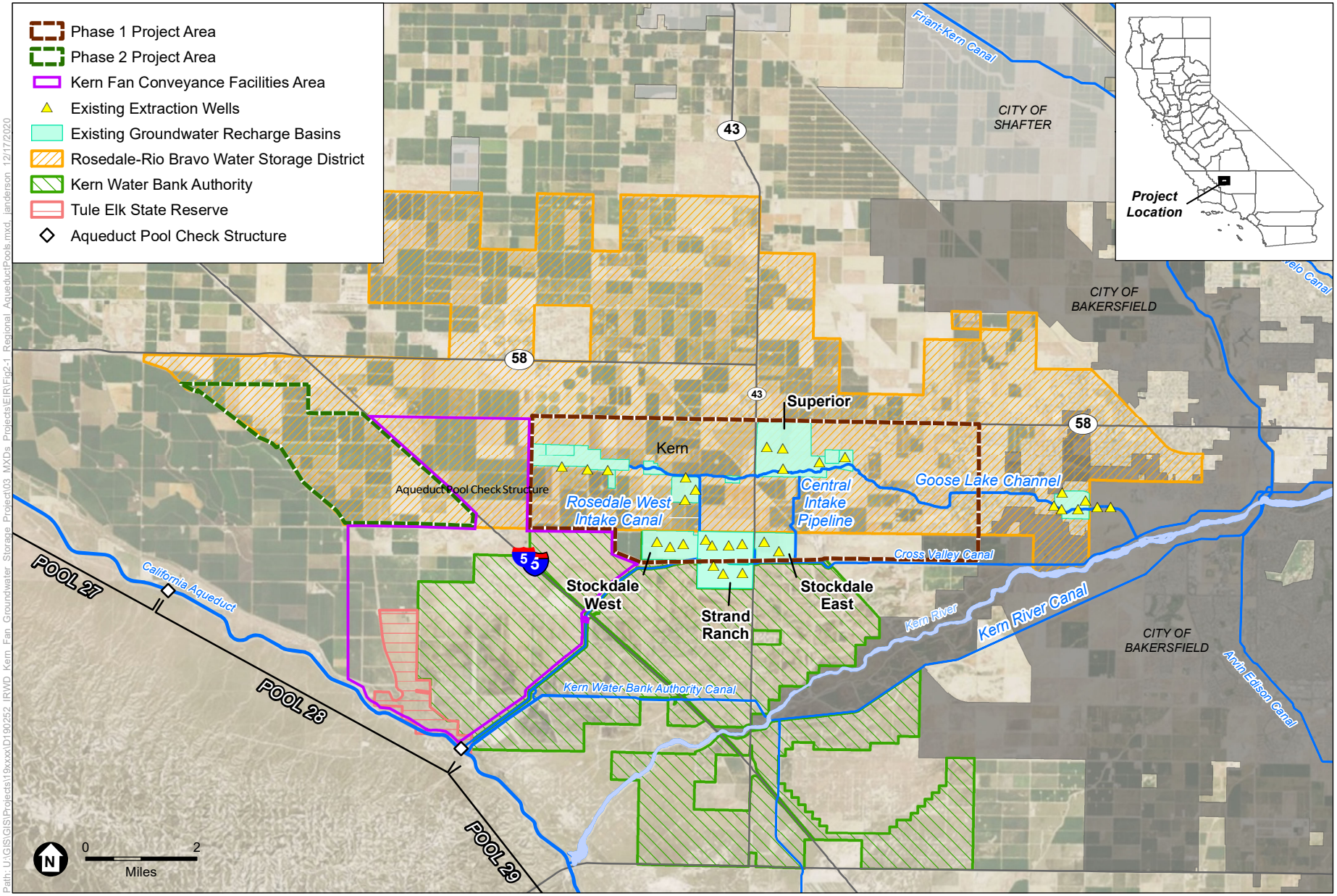
The analysis of potential environmental impacts in the Draft EIR are based on the location of the proposed turnout within Pool 28 of the California Aqueduct. In response to the comment, the text of the Draft EIR on page 2-6 is revised as follows:

> The proposed project would consist of construction of up to 1,300 acres of recharge basin facilities and up to 12 recovery wells on the Kern Fan Project Properties. The Kern Fan Conveyance Facilities would consist of canals and/or pipelines, pump stations and a new turnout at the California Aqueduct. The turnout is planned for Reach 12E upstream of Check 28, subject to DWR approval of final location, to convey water between the project facilities and the California Aqueduct (see Figure 2-1). Subject to agreements between Rosedale and IRWD, the project facilities may be integrated with the other facilities operated in Rosedale's Conjunctive Use Program. Water stored by the proposed project would be recovered when needed to provide ecosystem and water supply benefits.

In addition, in response to the comment, Figure 2-1 of the Draft EIR is revised to show the location of Pool 28 of the California Aqueduct, which is directly adjacent to the area identified for the Kern Fan Conveyance Facilities, of which the proposed turnout would be a component.

As part of the Kern Fan Conveyance Facilities, the construction activities associated with the proposed turnout are included in the Draft EIR on page 2-15, including the use of cofferdams, which allow a portion of the Aqueduct to be dewatered during construction of the turnout while allowing flows to continue to pass through the Aqueduct channel. The Draft EIR includes DWR's Liner Raise and Instrumentation Project as a cumulative project, as listed Table 3-2 on page 3-13. The Authority also is aware of DWR's California Aqueduct Subsidence Program (CASP); although as of the date of publication of the Draft EIR, there was no known specific locations for subsidence-related projects because the CASP is still in the planning stages. The *California Aqueduct Subsidence Study: Supplemental Report* (CASS) (DWR 2019) identifies subsidence bowls between Pool 13 and Pool 40 of the California Aqueduct; no subsidence bowls are identified for Pool 28, where the proposed turnout would be located (DWR 2019: Figure 1-1).

In the event that DWR implements simultaneous CASP projects or other Aqueduct maintenance projects in proximity to the proposed turnout, the Authority would coordinate construction with DWR, consistent with the understanding reached between DWR and the Authority in the *Principles for Turnout Construction Related Agreements Between the Kern County Water Agency, Groundwater Banking Authority and the California Department of Water Resources for the Kern Fan Groundwater Storage Project* (Principles for Turnout Construction) (May 12, 2020), as part of the mandatory approval and authorization process for a new SWP turnout facility. Pursuant to the Principles for Turnout Construction, the Authority would be required to submit to DWR the permitting documents, contract drawings and specifications, and construction schedule for approval, which would ensure consistency with DWR's ongoing Aqueduct maintenance projects and CASP, and avoid future effects of subsidence to the Aqueduct. Pursuant to the Principles for Turnout Construction, all construction within DWR right-of-way would be required to conform to DWR standards for protection of the California Aqueduct.



SOURCE: Mapbox; Kern County

Kern Fan Groundwater Storage Project

Figure 2-1 Revised

Regional Project Location

ESA

DWR – 7

The comment expresses concern that the Draft EIR lacks specific details of where the turnout location is proposed and without these specific details, the proposed project may conflict with active CASP projects by attempting to construct the proposed turnout in a location under rehabilitation by CASP.

Please see Response to Comment DWR-6.

DWR – 8

The comment states that the Impact 3.7-3 analysis in Section 3.7, *Geology and Soils* of the Draft EIR should include language that ensures the Authority would continue to monitor potential land subsidence caused by aquifer compaction or consolidations due to groundwater pumping or overdraft. In response to the comment, the following edits are made to page 3.7-22 of the Draft EIR:

> **Operation**
>
> Rosedale conducts subsidence monitoring in the project area (Rosedale 2019) and will continue subsidence monitoring in the future in accordance with requirements of the Kern Groundwater Authority GSP of which Rosedale is a member (see Chapter 2, Project Description, page 2-4; and Section 3.10 Hydrology and Water Quality, page 3.10-23 to 3.10-24). The Kern Groundwater Authority GSP includes requirements for subsidence monitoring for critical infrastructure, which includes the California Aqueduct. Subsidence has occurred historically north and south of Rosedale but not within its boundaries. Subsidence has been continuously monitored by DWR since June 1994 with an extensometer located about two miles south of the Phase 1 area within the Kern Water Bank Authority (see Figure 3.10-1 for district location and Figure 3.10-2 for extensometer location). The results of the monitoring indicate that both upward and downward changes of at most 0.1 foot per year have occurred within an overall upward trend of inflation. As of June 2018, the land surface was 0.27 feet higher than the land surface in June 1994. The data indicates subsidence has not resulted from KWB recovery operations during extended droughts. DWR has developed, as part of their SGMA technical assistance a statewide InSAR subsidence dataset. InSAR is a satellite-based remote sensing technique that measures vertical surface displacement changes at high degrees of measurement resolution and spatial detail. Subsidence for 2016 and 2017 in the Rosedale area was upward by about 0.01 foot per year. This increase denotes swelling rather than subsidence in the project area.
>
> The proposed project is a groundwater banking project that would require water to be recharged prior to extraction. Groundwater banking programs generally benefit water levels in the local aquifer because the amount of water available for recovery is less than the amount recharged; this difference can raise groundwater levels. The proposed project would serve to correct declining groundwater levels, one of the primary causes of compaction and subsidence, and therefore would serve to mitigate against additional subsidence to some degree. The proposed project would provide additional recharge capacity in excess of recovery and as

such would not cause subsidence relative to existing conditions. Impacts would be less than significant, and no mitigation is required.

DWR – 9

The comment states that the Impact 3.7-3 analysis in Section 3.7, *Geology and Soils* of the Draft EIR should also specifically discuss potential subsidence impacts the proposed project may have on SWP facilities or the California Aqueduct during construction and severe drought conditions.

As noted on page 3.7-22, construction activities associated with the proposed project would not include the extraction or recharge of water and therefore would not cause subsidence or collapse. In addition, as noted on page 3.7-23, during recent drought conditions that ended in 2016, subsidence in the Rosedale area was upward by about 0.01 foot per year, which denotes swelling rather than subsidence in the project area.

DWR – 10

The comment states that the Authority must ensure that Kern River water and "other available water" resources are of acceptable water quality, as set forth by the National Pollutant Discharge Elimination System Program (NPDES). The comment then states that the DWR water quality provisions should be included in Section 3,10, *Hydrology and Water Quality* within the State Regulatory Setting discussion of the Draft EIR.

An explanation of how the proposed project would ensure water quality introduced into the California Aqueduct would comply with DWR's water quality policy provisions for pumping groundwater into the Aqueduct is included in Section 3.10 of the Draft EIR on page 3.10-36 to 3.10-37. In response to the comment, a minor edit is made to the text of the Draft EIR as follows:

> Once recovered, the groundwater would be introduced into the new proposed conveyance facilities, California Aqueduct, Goose Lake Channel, or the CVC through the Rosedale West Intake Canal and would be subject to applicable pump-in water quality requirements. The Authority will enter into an agreement with DWR for a new turnout into the California Aqueduct ~~that will include water quality requirements for discharging non-SWP water into the California Aqueduct~~. Prior to pumping extracted groundwater into the CVC and California Aqueduct, it would be the Authority's responsibility to ensure that the water quality was sufficient to meet applicable water quality requirements of KCWA and DWR, and submit a Pump-In Proposal that identifies the water sources, planned operation, inflow water quality, and any anticipated impacts to water quality and/or operations. The operational agreement with DWR will specify that any introduction of water into the California Aqueduct must comply with DWR water quality requirements. Any water that did not meet water quality requirements or could not be blended to meet such requirements, as imposed by the conveyance facility operators, would not be conveyed within the canals.

DWR – 11

The comment requests that the Draft EIR list DWR as a Responsible Agency. Please refer to Response to Comment DWR-5, above.

DWR – 12

The comment requests that the Draft EIR include more accurate and descriptive construction information, including specific locations of potential turnouts and additional construction window and timeline details, if possible.

Please refer to Responses to Comments DWR-6 and DWR-7, above. In response to the comment about construction timeline details, the text of the Draft EIR on page 2-16 is modified as follows:

> Construction of the proposed facilities is anticipated to begin with Phase 1 in fall 2021, with the Phase 1 recharge facilities ready to receive water by 2022, subject to variation of the construction schedule. Construction of Phase 2 facilities is anticipated to begin in 2022. Construction of the Kern Fan Conveyance Facilities, including the proposed turnout, is anticipated to begin in fall 2023. Construction of the project will be in multiple sequential or concurrent segments, each ranging from approximately 3 months to 40 months. The project is anticipated to be completed by fall 2026, subject to variations in the construction schedule.

DWR – 13

The comment requests that the Draft EIR include additional language explaining that the Authority will have ongoing subsidence monitoring and develop a subsidence monitoring program, if necessary. Refer to Response to Comment DWR-8 regarding Rosedale's existing and ongoing subsidence monitoring program.

DWR – 14

The comment requests that the Draft EIR include analysis specific to accessing potential subsidence impacts to the Aqueduct and SWP facilities as a result of construct or operation of the project. Please refer to Response to Comment DWR-9, above.

DWR – 15

The comment requests that the Draft EIR include additional language in Section 3.10 explaining that the Authority will comply with DWR's water quality control provisions. Please refer to Response to Comment DWR-10, above.

DWR – 16

The comment requests the Authority include DWR within the review of construction documents and construction scheduling as soon as possible. The comment is noted for the record. The Authority would correspond with DWR as soon as construction details are finalized.

DWR – 17

The comment provides contact information for questions and future coordination with DWR. The comment is noted for the record. David Gordon with DWR will be added to the project's Distribution List.

Letter 5: Kern County Water Agency (KCWA)

KCWA – 1

The comment confirms receipt of the Draft EIR by KCWA and provides a brief overview of KCWA and role in the proposed project. The comment is noted for the record.

KCWA – 2

The comment states that KCWA is generally supportive of projects seeking to improve water supply and reliability; however, the proposed project has the potential to significantly impact other water users within Kern County.

Please refer to Responses to Comments KCWA-3 to KCWA-7 below.

KCWA – 3

The comment states that the Draft EIR incorrectly characterizes the Pioneer Project portion of the Project Recovery Operations Plan as long-term.

The Draft EIR explains the term of the Project Recovery Operations Plan (in which the Pioneer Project participates) in footnote #1 on page 1-11, as follows:

> The initial term of the Project Recovery Operations Plan term expired on January 31, 2019. The parties agreed to extend the term for an additional two years to January 31, 2021. The parties have initiated discussions regarding a further extension of the term. The proposed project will be subject to and consistent with the conditions of the Project Recovery Operations Plan during its effective term.

The "Long Term Operations Plan" referenced in the Draft EIR refers to the operations plan governing Rosedale's projects and which would govern operations of the proposed project. This Long Term Operations Plan is provided in Appendix B to the Draft EIR, as is a copy of the Project Recovery Operations Plan mentioned in the comment.

KCWA – 4

The comment states that the Draft EIR fails to identify and discuss potential implications of using SWP water for in-lieu recovery by exchange. The comment requests that the Draft EIR be amended to include a discussion and analysis of Rosedale's existing return obligations and how SWP water used for the proposed project's anticipated in-lieu recovery, including return of DWR "Ecosystem Account" water by exchange, would impact or be impacted by its existing program obligations.

The Draft EIR discusses the possibility of recovering banked water for the proposed project by employing an exchange in-lieu of recovery. The Draft EIR explains how an exchange in-lieu of recovery may be accomplished on page 2-16. The Draft EIR notes that any such exchange would be subject to the approval of those entities with authorities over the applicable supplies, including KCWA and DWR in certain instances. Rosedale's existing return obligations would neither impact nor be impacted by in-lieu recovery for the proposed project.

KCWA – 5

The comment states that the Draft EIR Project Approvals list is incomplete. In response to the comment, the text of the Draft EIR on page 2-20 is edited to include KCWA approvals as follows:

- Kern County Water Agency: Approval for construction and operation of a new turnout on the California Aqueduct; Approval to deliver, exchange, and convey water through the California Aqueduct

KCWA – 6

The comment states that the Draft EIR fails to analyze the potential impacts to the SWP, SWP allocations and SWP Contractors due to the pre-release of water from Lake Oroville for pulse flow.

The determination to release water from Lake Oroville would be at the discretion of DWR. For purposes of planning and the WSIP application, the Authority conducted a feasibility assessment to inform the potential beneficial impacts of the pulse flows associated with the proposed project. The results of the assessment and potential benefits to the fishery of the Sacramento-San Joaquin River Delta is summarized in the Draft EIR on pages 3.4-35 to 3.4-38. The assessment assumes that pulse flows would be released from Lake Oroville into the Feather River during dry or critically dry years, during the month of April when baseflow conditions are less than 3,000 cfs.

The proposed project would have no impact to the SWP allocations or SWP contractors. As explained in the Draft EIR on page 2-4 and 2-5, the Article 21 water in excess of demand that would be used as a source for recharge in the proposed recharge basins would be in excess of any Table A allocations for SWP contractors and thus would not harm non-participating SWP contractors.

The Draft EIR explains the water exchanges to allow pulse flows from Oroville on page 2-6. Revisions to this language have been addressed in Responses to Comment DRWD-2 (Letter 1) and MET-5 (Letter 2) as follows:

> Pursuant to the award of funds under the WSIP, twenty-five percent, up to 25,000 AF, of the ~~unallocated~~ Article 21 water in excess of demand would be stored for use for pulse flows ~~DWR~~ in an "Ecosystem Account." Through the implementation of 1-for-1 exchanges, the Article 21 water stored in the Ecosystem Account would be used by the State of California to alleviate stress on endangered and threatened species in the Sacramento-San Joaquin River Delta. DWR, in consultation with the California Department of Fish and Wildlife, would determine when water from the Ecosystem Account would be needed for such ecosystem benefits. ~~The 1-for-1 exchanges would result in the reclassification of Table A water being held in Lake Oroville for delivery to Rosedale or IRWD as SWP Project water, while the~~ Article 21 water stored in the proposed project's Ecosystem Account would be eligible for use for a pulse flow released pursuant to an agreement between DWR and CDFW to provide ecosystem benefits. The pulse flow released from Oroville Reservoir would be replenished by SWP operational 1 for 1 exchanges of~~reclassified as~~ Table A

> water fromfor use by Rosedale as a member unit of the Kern County Water Agency and IRWD as a landowner in Dudley Ridge Water District. After the 1-for-1 exchange is complete, DWR would release the SWP Project water from Lake Oroville at its discretion to provide ecosystem benefits. The Table A water would be recovered from the proposed project facilities in Kern County and used by Rosedale, IRWD, and DRWD.

The Authority is committed to working with DWR and SWP contractors (e.g., Dudley Ridge Water District and Kern County Water Agency) to ensure that the proposed project is consistent with existing SWP contracts. The proposed project would be operated pursuant to the contractual rights and obligations of the parties involved. As mentioned in Response to Comment DWR-6 (see Letter 4 above), the Authority would operate the proposed project consistent with the understanding reached between DWR and the Authority in the *Principles for Turnout Construction Related Agreements Between the Kern County Water Agency, Groundwater Banking Authority and the California Department of Water Resources for the Kern Fan Groundwater Storage Project* (Principles for Turnout Construction) (May 12, 2020), which includes general terms for DWR to structure agreements to implement the proposed project, including the turnout, consistent with SWP operations and SWP water supply contracts. Operational conditions upstream of the proposed project will be evaluated by DWR as part of a separate CEQA process for the pulse flows in the Delta.

KCWA – 7

The comment states that the Draft EIR fails to analyze hydraulic impacts to existing turnouts in the California Aqueduct.

As part of the approval process for the proposed turnout, DWR is conducting a hydraulic analysis in cooperation with Kern County Water Agency to ensure other operations are not adversely affected. The hydraulic analysis will determine the optimal location for the proposed turnout, which is planned for Reach 12E upstream of Check 28, subject to DWR approval of final location.

Letter 6: West Kern Water District (WKWD)

WKWD – 1

The comment states that West Kern Water District generally supports the proposed project and its long-term goals. The comment is noted for the record.

WKWD – 2 and WKWD – 3

The comment states that the cumulative analysis presented in the Draft EIR does not appear to explicitly consider the effects on neighboring wells if the Buena Vista Water Storage District's proposed Palms Project were to recover stored groundwater at the same time as the proposed Kern Fan Groundwater Storage Project and the existing Drought Relief Project and Stockdale Integrated Banking Project. The comment states that proposed cumulative impacts to WKWD North Wellfield wells would be greater than anticipated by the modeling.

The Draft EIR includes an analysis of project impacts to groundwater levels due to proposed recovery operations on pages 3.10-38 to 3.10-41, which are based on the groundwater modeling for the proposed project, the results of which are summarized on pages 3.10-27 to 3.10-35. The Draft EIR evaluates the potential impact of project recovery operations alone (see pages 3.10-39 to 3.10-40) and then together with the existing Drought Relief Project and Stockdale Integrated Banking Project (see pages 3.10-40), which are recently constructed groundwater recovery projects that are operated by Rosedale. This analysis conservatively evaluates the impacts of operating the proposed project simultaneously with other existing projects, and determines that maximum drawdown at the nearest banking project well would be approximately 19.9 feet (Draft EIR page 3.10-40). As shown in the Draft EIR on Figure 3.10-11, the greatest drawdown at WKWD NW-1 would be 16 feet in the deep aquifer. The Draft EIR concludes that a temporary drawdown of less than 20 feet at the closest neighboring wells would not be considered a significant impact, and no mitigation measures are required.

In addition to this analysis of direct and indirect project impacts to groundwater levels, the Draft EIR also evaluates cumulative impacts on pages 3.10-45 through 3.10-47. The list of cumulative projects that are considered in the analysis of cumulative impacts are provided in Table 3-2, which includes the Buena Vista Water Storage District's Palms Project (see Draft EIR page 3-13, Cumulative Project 12). The analysis of cumulative impacts explains that implementation of the Long Term Operations Plan and Project Recovery Operations Plan would ensure that the proposed project's impacts to groundwater levels would not be cumulatively considerable. The Draft EIR states on page 3.10-46 that "[i]mplementation of the Operations Plans would ensure that local groundwater users and neighboring well owners/operators to the proposed recharge and recovery facilities would not be adversely affected during operation of the proposed recovery wells."

WKWD – 4

The comment asks how Rosedale's Long Term Operations Plan would address potential cumulative impacts to WKWD wells, particularly since WKWD is not a signatory to the Plan.

Rosedale's Long Term Operations Plan is summarized in the Draft EIR on page 1-11 to 1-13 and is included within Appendix B. Rosedale's Long Term Operations Plan is a stand-alone plan that applies to Rosedale's projects and would apply to the proposed project. In addition, on page 3.10-40, the Draft EIR explains that the Long Term Operations Plan is designed to identify project-related decreases in groundwater levels, relative to baseline conditions, that are considered negative project impacts and trigger mitigation if neighboring wells experience mechanical failure or other operational problems due to declining water levels. The Long Term Operations Plan would be applicable to the proposed project, as well as the Drought Relief Project and Stockdale Project, which are also operated by Rosedale. See Responses to Comments WKWD-2 and WKWD-3 for a discussion of the groundwater modelling and the results of such modelling with respect to WKWD's wells, particularly WKWD NW-1.

WKWD – 5

The comment states that in the case of a cumulative impact on WKWD, the operators of the proposed project, Drought Relief Project, Stockdale Project, and Palms Project may not agree on the cause of the impact, and this may inhibit timely mitigation response.

Rosedale operates three of the four projects listed in the comment (i.e., the proposed project, Drought Relief Project and the Stockdale Project). Buena Vista Water Storage District is the operator of the Palms Project.

See Responses to Comments WKWD-2 and WKWD-3 for a discussion of the groundwater modelling and the results of such modelling with respect to WKWD's wells, particularly WKWD NW-1.

WKWD – 6

The comment asks if the Long Term Operations Plan includes mitigation measures with respect to changes in water quality that may result from operation of the project. The comment states that significant changes in water quality could impact the ability of WKWD to deliver water for potable use.

The Draft EIR includes an analysis of project-related impacts to groundwater quality on pages 3.10-35 to 3.10-38. The analysis concludes that operation of the proposed project would not have significant adverse impacts to groundwater quality. The Long Term Operations Plan does not include specific mitigation measures with respect to changes in water quality.

The proposed project would be operated pursuant to two Memoranda of Understanding (MOUs) with adjoining entities in the Kern Fan area (Draft EIR page 2-19), which includes WKWD. The MOUs are described in the Draft EIR on page 1-9 and 1-10 and included in Appendix B. The MOUs allow for the proposed project to achieve maximum water storage and withdrawal benefits, while also avoiding, eliminating, or mitigating adverse impacts to the groundwater basin, including water quality, and to the operation of other groundwater banking programs in the Kern Fan area.

Letter 7: Kern Water Bank Authority (KWBA)

KWBA – 1

The comment states that the Kern Water Bank Authority (KWBA) objects to the approval of the proposed project and requests that the Draft EIR be revised in accordance with the KWBA's comments and recirculated for additional public review and comment. The comment is noted for the record. Regarding recirculation of the Draft EIR, please refer to Response to Comment KWBA-89.

KWBA – 2

Please refer to Response to Comment KWBA-18.

KWBA – 3

Please refer to Response to Comment KWBA-19 and KWBA-20.

KWBA – 4

Please refer to Response to Comment KWBA-67 to KWBA-80.

KWBA – 5

Please refer to Response to Comment KWBA-25 to KWBA-29.

KWBA – 6

Please refer to Response to Comment KWBA-30 to KWBA-58.

KWBA – 7

Please refer to Response to Comment KWBA-17.

KWBA – 8

Please refer to Response to Comment KWBA-59.

KWBA – 9

Please refer to Response to Comment KWBA-81 to KWBA-83.

KWBA – 10

Please refer to Response to Comment KWBA-84 to KWBA-86.

KWBA – 11

Please refer to Response to Comment KWBA-61 to KWBA-66.

KWBA – 12

Please refer to Response to Comment KWBA-29 to KWBA-50.

KWBA – 13

Please refer to Response to Comment KWBA-84 to KWBA-86.

KWBA – 14

Please refer to Response to Comment KWBA-61, and KWBA-74 to KWBA-75.

KWBA – 15

Please refer to Response to Comment KWBA-30, KWBA-72, KWBA-84, KWBA-85, and KWBA-87.

KWBA – 16

Please refer to Response to Comment KWBA-66.

KWBA – 17

The comment correctly states that the purpose of the Draft EIR is to serve as an informational document for the public and decision makers, as cited in Public Resources Code Section 21061 and CEQA Guidelines Section 15003. However, CEQA does not require that an EIR include quantitative or qualitative analyses. The sections of the CEQA Guidelines cited in the comment (Section 15003 (b) through (e)) require that an EIR serve to demonstrate to the public that the environment is being protected; inform governmental agencies and public generally of environmental impacts; demonstrate that the lead agency has analyzed and considered the ecological implications of its action; and enable the public to determine the environmental and economic values of their elected and appointed officials. Thus, in accordance with CEQA, the Draft EIR for the proposed project meets the requirements to serve as an informational document.

The Draft EIR reflects a good faith effort to investigate and disclose environmental impacts of the project in full compliance with the requirements of CEQA. The Draft EIR presents background information about the proposed project and clearly presents an overview of the proposed project – the Kern Fan Groundwater Storage Project – in Chapter 1 and Chapter 2, including the project's purpose and objectives on pages 2-3 to 2-5. The environmental impacts of the project, as well as mitigation measures where necessary, are documented in Chapters 3 through 6, along with accompanying appendices. The Draft EIR includes an Alternatives Analysis in Chapter 6, including the No Project Alternative on pages 6-11 to 6-17. As documented in the Draft EIR, the proposed project would have no significant, unavoidable, or irreversible environmental impacts.

CEQA does not require technical perfection in an EIR, but rather adequacy, completeness, and a good-faith effort at full disclosure. [CEQA Guidelines Section 15003(i)]. A court does not pass upon the correctness of an EIR's environmental conclusions, but only determines if the EIR is sufficient as an informational document. [Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692, 711]. The Authority has complied with CEQA by providing an adequate, complete, and good-faith effort at full disclosure in the Draft EIR and supporting technical documents. [CEQA Guidelines Section 15003(i), 15151; Browning-Ferris Industries v. City Council (1986) 181 Cal.App.3d 852, 862: "where a general comment is made, a general response is sufficient"; see also, Eureka Citizens for Responsible Government v. City of Eureka (2007) 147 Cal.App.4th 357, 378: "Responses to comments need not be exhaustive; they need only demonstrate a 'good faith, reasoned analysis.' (Citations)"].

KWBA – 18

The comment states the Draft EIR fails to provide a legally-sufficient project description that complies with CEQA. The suggestion that the project description is not sufficient is not supported by substantial evidence. The Draft EIR includes an Introduction and a clear, accurate Project Description (Chapters 1 and 2) that include all the information required by CEQA to comprise an adequate description of the project without supplying extensive detail beyond that needed for evaluation and review of the environmental impacts (CEQA Guidelines Section 15124). According to the CEQA Guidelines, an EIR should include (1) a detailed map of the location and boundaries of the proposed project as well as a regional map; (2) a statement of the objectives of the proposed project; (3) a general description of the project′s characteristics; and (4) a brief

statement describing the intended uses of the EIR (CEQA Guidelines Section 15124). The CEQA Guidelines do not require maps of the actual footprints of facilities. The Draft EIR includes all of these project description requirements. A detailed map of the project site location and the regional location is included as Figure 2-1. The Draft EIR includes the goals and objectives of the proposed project on page 2-3. A general description of the proposed project and its components are included on page 2-6 through 2-14; implementation of the proposed project is described in the Draft EIR on page 2-14 through 2-19. A list of the discretionary actions and approvals for which the Draft EIR will be used is included on page 2-20.

KWBA – 19

The comment states that the project boundary is not defined in the Draft EIR. The project boundaries for the Phase 1 area, Phase 2 area, and Kern Fan Conveyance Facilities area are clearly shown in Figure 2-1 of the Draft EIR. As stated in the Draft EIR on page 2-1:

> The proposed areas for the project facilities are shown in Figure 2-1; based on availability of lands for purchase, the proposed recharge and recovery facilities may be located in the Phase 1 area, Phase 2 area, or anywhere within the project boundary (see Figure 2-1).

KWBA – 20

The comment states that the Draft EIR does not include a description of how the proposed project would be integrated with other projects and programs.

In Chapter 2, Project Description, the Draft EIR includes descriptions of how the proposed project would be integrated with Rosedale's existing Conjunctive Use Program and IRWD's Strand Ranch and Stockdale Integrated Banking Projects on page 2-6 and 2-12; how water for the proposed project may be recharged offsite at other existing facilities on page 2-16; how the proposed Kern Fan Conveyance Facilities could be connected to other facilities in Rosedale's Conjunctive Use Program on page 2-17; and how operation agreements between the Authority and Rosedale would be required for such integration on page 2-19.

KWBA – 21

The comment states that the Draft EIR does not include a clear description of the location of the conveyance facilities and thus it is not possible to evaluate the potentially significant impacts of the project. The comment states that depending on the proximity of the proposed turnout location, deliveries to the CVC and KWB canal could be hampered and the EIR should evaluate this potential impact and provide mitigation.

The area within which the Kern Fan Conveyance Facilities would be location is clearly shown in Figure 2-1 in the Draft EIR and the components are clearly described on pages 2-12 to 2-14, with construction methods included on page 2-15 and operational information included on page 2-17 and 2-18. The Draft EIR evaluates the impacts of location, constructing, and operating the proposed Kern Fan Conveyance facilities anywhere within the area shown in Figure 2-1. In response to comments received by DWR, the Draft EIR has been revised to clarify the planned location of the proposed turnout to be within Reach 12E upstream of Check 28, subject to DWR

approval of final location, (see Letter 3, Response to Comment DWR-6). The Draft EIR evaluates the impacts of locating the proposed turnout within Reach 12E.

As part of the approval process for the proposed turnout, DWR is conducting a hydraulic analysis in cooperation with Kern County Water Agency to ensure other operations are not adversely affected. Please see Response to Comment KCWA-7 (Letter 5) above for more information.

KWBA – 22

The comment states that the Draft EIR should describe how the project would change if WSIP funds are not awarded and how that change might affect environmental benefits and impacts of the project.

The proposed project would provide ecosystem benefits described in the comment as well as others. CEQA does not require the Draft EIR to evaluate the impacts of a project based on funding sources. An analysis of potential impacts, or loss of potential benefits, that may occur in the absence of the WSIP funding is not required to be included in the Draft EIR. In the event that modifications are made to the proposed project, due to project funding opportunities or any other reason, the Authority will determine whether, and what type of, subsequent environmental documentation is required, such as an addendum, subsequent negative declaration or EIR, supplement to the EIR, or no further documentation (CEQA Guidelines, Sections 15162, 15163, 15164).

KWBA – 23

The comment states that proposed water supplies for the project are poorly defined, and that the Draft EIR does not analyze the environmental effects of using the various undefined supplies or how diverting such supplies to proposed recharge basins would impact the water or other rights of parties holding or seeking to appropriate Kern River supplies.

The comment fails to identify any omissions and errors, significant or otherwise, and is not supported by substantial evidence. The project description in the Draft EIR includes all the information required by CEQA to comprise an adequate description of the project without supplying extensive detail beyond that needed for evaluation and review of the environmental impacts (*CEQA Guidelines* §15124). The sources of water that may be utilized in connection with the proposed project are identified as whatever is or becomes available to the Authority at any time, and from time to time, from any source, potentially including federal, state, and local supplies (Draft EIR, Section 2.4.2 pages 2-7 through 2-10). The Draft EIR discusses in greater detail those sources of supply deemed reasonably foreseeable, namely CVP water, the SWP water, and Kern River water. Since this list is not exclusive, the Draft EIR states that the Authority would analyze the use of identified sources for project purposes to determine the need for and/or extent of future analysis (Section 2.4.2 page 2-9). Finally, the Draft EIR acknowledges that these sources of water "…include but are not limited to the following: federal, State, and local supplies through transfers, balanced and unbalanced water exchange agreements, water purchases or temporary transfers, supplies from the CVP, and high-flow Kern River water depending on annual hydrologic availability, water rights and regulatory considerations.

Agreements would be made, as necessary, in advance of any water exchanges or transfers" (Section 3.16.3, page 3.16-7).

As to the use of Kern River water for project purposes, it is only proposed when available from water right holders under banking or temporary water service agreements or when the Kern River is in high-flow conditions (Draft EIR, Section 2.4.2 page 2-10), depending on annual hydrologic availability, water rights and regulatory considerations. The entities with Kern River water rights are responsible for developing programs that demonstrate how Kern River water will be used, and for preparing environmental documentation that evaluates the impacts of such programs. Kern River water utilized by the proposed project would occur consistent with the requirements of such environmental documentation. As such, the environment in and around the Kern River, including plant and animal life and aquifer underlying the Kern River, would not be affected by the proposed project.

The Draft EIR discusses the potential impacts of using the water sources for groundwater recharge on page 3.16-7. The Draft EIR states that the project does not require a new water supply and as such would not affect local water supplies. Opportunistic use of water from the SWP or CVP for example, would not affect other water users or local water supplies. The proposed project would use appropriative water rights, including pre-1914 and post-1914 water rights and other Kern River water also depending on availability. As stated in the Draft EIR, pre-1914 and post-1914 water rights can be transferred to other parties as long as legal users of water are not injured ("no injury rule," per Water Code Sections 1706 and 1702). The Draft EIR explains how the State Water Resources Control Board (SWRCB) supervises transfers of appropriative water rights, and when the SWRCB is required to make a finding that the transfer will not result in unreasonable effects on fish or wildlife or other in-stream beneficial uses.

It is the intent of the Draft EIR to evaluate impacts of recharging water from all such sources to the extent that they are reasonably foreseeable (Section 2.4.2 page 2-7). Considering the larger project, even if some portion thereof is subject to legal challenge, avoids the pitfall of piecemeal review which is clearly prohibited. [See *California Native Plant Society v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603, 619-620; *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 165; *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 114; *Plan for Arcadia, Inc. v. City Council of Arcadia* (1974) 42 Cal.App.3d 712, 726]. Further, even if one or more legal challenge ultimately proves meritorious, such determination would not affect (i.e., increase) the environmental impacts of the proposed project. The Draft EIR examines the environmental effects of the larger project involving recharge water drawn from all known potential sources. If water from a particular source is unavailable for some reason, in whole or in part, recharge for project purposes may be reduced along with all associated environmental effects.

KWBA – 24

The comment states that the Draft EIR is required to analyze quantitatively the potential uses of the water stored by the project. The Draft EIR evaluates the potential for the water stored by the project to be used to meet M&I demand in Chapter 5, *Growth Inducement*. The Draft EIR

evaluates the potential benefits of using the stored water for agricultural irrigation in Section 3.2 *Agriculture and Forestry,* on page 3.2-15.

The comment also states that the analysis should include "the extent to which the supply of water is available from local water supplies." It is unclear whether this pertains to stored water or sources of water for recharge. As stated above in Response to Comment KWBA-24, the sources of water that may be utilized in connection with the proposed project are identified as whatever is or becomes available to the Authority at any time, and from time to time, from any source, potentially including federal, state, and local supplies (Draft EIR, Section 2.4.2 pages 2-7 through 2-10).

KWBA – 25

The comment notes the general requirements for identifying an environmental baseline in an EIR for purposes of evaluating potential impacts. The comment is noted for the record. In the Draft EIR, the requirements for the environmental baseline are explained on page 3-2.

KWBA – 26

The comment states that the Draft EIR fails to describe the environmental baseline for each resource category. The comment is incorrect. As explained in the Draft EIR on pages 3-2 and 3-3, the format of the analysis in the Draft EIR is as follows:

> The assessment of each environmental topic begins with the relevant baseline setting information that is needed to provide context for the impact analysis that follows. Extraneous setting information that does not shed light on the impact analysis is not included in this Draft EIR (CEQA Guidelines Section 15125(a)).
>
> In accordance with CEQA Guidelines Section 15125(a), the environmental setting contains a description of the regional and local physical environmental conditions in the project vicinity at the time of the publication of the NOP. This environmental setting constitutes the baseline physical condition against which the implementation of the proposed project is assessed in order to determine whether a significant environmental impact would occur (CEQA Guidelines Section 15126.2(a)).

The comment identifies the Biological Resources section as an example. The methods used to establish the environmental baseline are described Draft EIR Section 3.4, *Biological Resources* page 3.4-1. The description of existing occupancy of threatened and endangered species in evaluated in detail in Appendix D, *Biological Technical Report*. For those species with a high to medium likelihood to occur in the project area, their habitat suitability and occupancy is provided in the Draft EIR on pages 3.4-12 through 3.4-20.

KWBA – 27

KWBA's description of the methods to establish the baseline is acknowledged. The methods used to establish the environmental baseline are described in Draft EIR Section 3.4, *Biological Resources* page 3.4-1. The setting and analysis of biological resources is based on information from resource agencies, reconnaissance field surveys of the project area, and review of available

literature and data. The project mitigation measures require additional surveys to determine habitat suitability for sensitive species. These mitigation measures were updated in response to comments provided by California Department of Fish and Wildlife (CDFW) and ensure avoidance and minimization of project impacts, and if necessary, mitigation. Please review the Authority's responses to the CDFW comments (Letter 9 below) to understand how the proposed project would be informed by pre-construction surveys.

KWBA – 28

KBWA's recommendation of CDFW and USFWS species-specific protocols is acknowledged. All species-specific mitigation measures were updated in response to CDFW comments and include these protocols, as applicable. Please refer to the Authority's responses to CDFW's comment (Letter 9 below) for the updates to the mitigation measures to include these protocols.

KWBA – 29

The comment asks why certain years (2012 and 2015-2016) were used for hydrology baselines and why 2020 was not used as the baseline. The comment also states that the hydrology baseline was not discussed in terms of wet, normal, dry, and drought years.

The groundwater model used for the Draft EIR uses a reasonable range of water year types. As explained in Section 3.10, *Hydrology and Water Quality, Project Area Hydrogeology*, on page 3.10-9, "extreme changes have occurred between 1988 and 2019, as groundwater levels have fluctuated up to 200 feet or more between historical high levels in 2012 and historical low levels in 2017 (THC 2019)." As explained in Section 3.10, *Hydrology and Water Quality, Groundwater Modeling*, on page 3.10-27, the hydrology data selected for the groundwater model used 2012 data to represent high groundwater conditions and 2015 through 2017 data to represent low groundwater conditions. Thus, the Draft EIR does model a range of recent hydrology conditions ranging from high to low groundwater levels (i.e., wet through dry years). Note that older drought year data that predate 2012 were not selected because the recent groundwater levels are even lower than during historical drought years. Also, note that at the time of the Draft EIR, the hydrology data set for 2020 would not have been complete.

KWBA – 30

The comment claims the Draft EIR analysis is flawed and the project would result in significant impacts related to groundwater levels, local water supply wells, and water quality. This comment does not provide details supporting these specific claims; it is assumed that specific details regarding these claims are provided in other comments and are responded accordingly. The comment claims that much of the information about the project's effects on hydrology (and other resources including biological) is improperly buried in and scattered throughout the Draft EIR appendices; the comment does not identify any specific instances of this. The Draft EIR is organized in a manner typical of Draft EIRs; no information is "buried" or "scattered."

This comment also states that enforceable mitigation measures are not provided in the Draft EIR. As explained in Section 3.10, *Hydrology and Water Quality, Regulatory Setting*, there are numerous laws and regulations that apply to groundwater banking operations that mandate the

operations be conducted in such manner to not cause significant impacts and thus not require mitigation measures. Compliance by the proposed project with applicable federal, state, and local laws and regulations is assumed in this analysis and local and state agencies would be expected to continue to enforce applicable requirements to the extent that they do so now. Note that compliance with some regulations is a condition of permit and project approval.

In addition, and as explained in Section 3.10, *Hydrology and Water Quality, Rosedale Operating Plans*, and provided in Appendix B of the Draft EIR, Rosedale has established and agreed to specific Operating Plans and Memoranda of Understanding (MOUs) that describe the operating procedures. These procedures are Project Design Features that Rosedale has agreed to. Note that the Kern Water Bank Authority, which provided Comment Letter 7, is one of the signatories to these agreements, as one of the "Adjoining Entities." Consequently, the Kern Water Bank Authority was directly involved with establishing the monitoring and operations procedures Rosedale has agreed to perform that will prevent significant impacts related to groundwater levels, local water supply wells, and water quality.

Finally, relative to water quality, the Draft EIR provides Mitigation Measure HAZ-1, described in Section 3.9, *Hazards and Hazardous Materials, Impact 3.9-1*, which would require that samples of soils at new recharge basins are analyzed and removed in accordance with all applicable federal and state regulations if soils contain hazardous concentrations of contaminants. This mitigation measure addresses the potential for soils at new recharge basins to contain residual levels of legacy pesticides from previous agricultural use. The "thresholds or significance" requested in the comment would be the regulatory action levels for individual pesticides. If exceeded, the action would be the removal of the contaminated soil and disposal at a licensed facility permitted to accept the waste. Therefore, impacts to water quality would be considered less than significant with mitigation.

KWBA – 31

This comment is an introductory comment to Comments KWBA-32 through KBWA-37, which are addressed in the responses below. The comment notes, but does not specify or identify, the "future activities that are a reasonably foreseeable consequence of approval of the proposed project."

KWBA – 32

The comment states that the assumed recovery period of two consecutive 10-month periods is too short relative to what is described in the Draft EIR Project Description or what occurred during the recent drought periods. The comment provides no evidence or reason for their conclusion that the recovery time period is too short.

In the Draft EIR, Chapter 2, *Project Description*, does not specify a specific period of time for recovery. It is assumed that the comment is referring to Appendix H, *Hydrogeological Analyses*, which does assume two 10-month recovery time periods. Note that the groundwater model simulated recovery over two 10-month periods that overlapped on March 2015 through December 2015 and March 2016 through December 2016 to model the impacts of recovering water during

low water level conditions, the worst-case scenario. The recovery period demonstrates the extraction of groundwater in accordance with the project features and characteristics as described in the Draft EIR, Chapter 2, *Project Description*.

Regardless of the length or number of recovery periods, or whether the recovery would occur during a drought, the recovery period for this project would be conducted in accordance with the requirements of the Operating Plans and MOUs, provided in Appendix B of the Draft EIR, as previously noted in the response to Comment KWBA-30. As explained in Draft EIR Section 2.6.2, *Recovery*, extraction for the proposed project would be limited to the amount previously recharged less losses, as specified by applicable MOUs. Thus, the length, number, and timing of recovery events would in all cases occur after the water has been stored and would not be allowed to recover more than the amount that was recharged.

KWBA – 33

The comment states that recovery well spacing is less concentrated and less impactful to groundwater levels than is described or permitted in the project description. The comment provides no explanation as to their conclusion that there should be more wells.

Regardless of the number of recovery wells, the recovery of stored water for this project would be conducted in accordance with the requirements of the Operating Plans and MOUs, provided in Appendix B of the Draft EIR, as previously noted in the response to Comment KWBA-30. As explained in Draft EIR Section 2.6.2, *Recovery*, extraction for the proposed project would be limited to the amount previously recharged less losses, as specified by applicable MOUs. Thus, recovery events would in all cases occur after the water has been stored and would not be allowed to recover the full amount that was recharged, regardless of the number of wells.

KWBA – 34

The comment states that the project would recharge for only a 10-month period at a time and unrealistically evaluates associated impacts (e.g., impacts from raising water levels) when other banking projects are recovering water, which is also contrary to baseline conditions and past practice among banking programs operating in the area. As explained below, this is an incorrect understanding of the model assumptions.

As explained in Appendix H, Section 3.1, *Baseline Groundwater Level Conditions*, the baseline conditions used in the groundwater model include all historical hydrological conditions, including recharge and recovery from other projects (e.g. Kern Water Bank, Pioneer Project, Strand Ranch, etc.), which resulted in the calibrated groundwater levels in the model.

As explained in Appendix H, Section 3.2, *Project Operational Scenarios*, project recharge was introduced into the model for the historical period from March 2012 through December 2012 to simulate high groundwater conditions. This was done to model the worst-case scenario where the proposed project and nearby projects would all be recharging at the same time (otherwise, groundwater levels would not be high if banking projects were recovering water) and water levels might become sufficiently shallow as to pose risk to infrastructure, such as canals. Groundwater recovery was simulated over two 10-month periods, which overlapped on baseline groundwater

level conditions for March 2015 through December 2015 and March 2016 through December 2016. This was done to model the worst-case scenario where the proposed project and nearby banking projects would all be recovering water at the same time, risking water levels declining to below levels that would trigger significant impacts (e.g., exposing wells screens or causing dry wells).

While there could be a scenario where the proposed project would be recharging water while nearby banking projects are recovering water, the impacts would be intermediate between the above-described worst-case scenarios.

KWBA – 35

The comment states that the Draft EIR fails to consider and/or adequately discuss cumulative recovery or recharge impacts in light of other nearby existing and future probable banking projects recovering or recharging at the same time, which is a past, existing and reasonably foreseeable future operational scenario.

As explained above in the Response to Comment KWBA-34, the groundwater model specifically models worst-case cumulative scenarios, where the proposed project and the nearby banking projects are all either recharging or recovering water at the same time.

KWBA – 36

The comment states that the Draft EIR does not consider impacts of operating the proposed project in conjunction or in "coordination" or "integration" with other banking or groundwater recovery projects or programs of Rosedale.

As discussed in Draft EIR Appendix H, Section 4.3. *Cumulative Changes in Groundwater Levels During Recovery*, the groundwater model evaluated the cumulative pumping drawdown predicted for nearby private and project wells that could result when the nearby Drought Relief Project (DRP) and Stockdale Integrated Banking Project are operating at full capacity in the future. These two projects are operated by Rosedale.

KWBA – 37

This comment is about Mitigation Measure HAZ-1, which is addressed above in the Response to Comment KBWA-30.

KWBA – 38

This comment states that the "integration," "coordination" and/or "conjunctive" operation of the propose project with the other groundwater projects and programs exacerbates the proposed project's impacts, including (for example) if the integration permits recharge in one or more of the existing program's spreading basins and recovery of the water by pumping from a project well or wells located in a portion of the aquifer distant from the where the water was recharged.

As previously discussed above in the Response to Comment KBWA-34, the groundwater model evaluated the worst-case scenarios of the proposed project and nearby projects all recharging at the same time or the proposed project and nearby banking projects all recovering water at the

same time. While there could be a scenario where the proposed project would be recharging water while nearby banking projects are recovering water (or the reverse), the impacts would be intermediate between the above-described worst-case scenarios. Therefore, the hydrogeologic impact analysis evaluates the full extent of project activities and is CEQA compliant.

KWBA – 39

This comment is an introduction to subsequent comments that state that an incorrect baseline was used in the groundwater model and refers to the comments below to discuss concerns.

KWBA – 40

The comment states that the historical baseline from March 2012 through December 2012, which the groundwater model used to simulate high groundwater conditions, was improper because banking projects in the area were recovering groundwater rather than recharging water. The comment states the model should simulate cumulative maximum mounding conditions by superimposing a recharge event during times when other area banking programs are recharging water (e.g. 2011). In addition, the operational scenario only considers 10 months of recharge during a single year. This is unrealistic and contrary to the historical baseline, which includes consecutive years of recharge for all Kern Fan banking programs (e.g., 2005 and 2006).

As shown on Figure 4 of the modeling report in Appendix H of the Draft EIR, groundwater levels during the 2012 time period were the highest since 2010. Therefore, despite the commenters claim that 2012 was a time period with relatively higher volume of groundwater recovery by local banking operations compared to 2011, the 2012 time period still exhibited the relatively higher groundwater levels. Consequently, to simulate the highest cumulative groundwater levels, the model used the 2012 time period. Note that groundwater levels have continued to decline since 2012 with no subsequent time period with higher groundwater levels.

The project recharge scenario was evaluated based upon Article 21 deliveries and an estimated recharge volume of 100,000 acre-feet per year (AFY), which could reasonably be recharged within a 10-month period of time. In addition, this recharge amount is consistent with the Draft EIR, Chapter 2, *Project Description*. Accordingly, the 10-month operational period was appropriate.

KWBA – 41

The comment notes that the three modeled recharge basins within the project area are not located adjacent to project area boundaries. The comment expresses concern that the modeled result of groundwater levels coming no closer than 64 feet of the ground surface as a result of recharge during relatively high groundwater conditions does not model the worst-case scenario or a reasonably foreseeable scenario where the recharge basins are located adjacent to other banking projects and/or the Cross Valley Canal ("CVC") in the north half of Sections 4, 5 and 6, T30S/R26E, where groundwater levels are much shallower after significant recharge events. Nor does the analysis consider consecutive years of recharge (e.g. similar to 2005 and 2006).

As noted by the comment, the sample recharge basin locations are within the proposed Phase 1 and Phase 2 areas, with the exception of the 480-acre recharge basins that are in between

although within the overall project boundaries identified in Figure 2-1 of the Draft EIR. As stated in the Draft EIR on page 2-1:

> The proposed areas for the project facilities are shown in Figure 2-1; based on availability of lands for purchase, the proposed recharge and recovery facilities may be located in the Phase 1 area, Phase 2 area, or anywhere within the project boundary (see Figure 2-1).

The sample recharge and recovery locations used for the modeling scenarios are based on the latest information that the Authority has regarding the availability of lands for purchase within the project boundaries. As stated in the Draft EIR on page 3.10-28, the analysis of groundwater mounding considers the potential impacts to surface infrastructure such as the CVC and Eastside Canal. The analysis concludes that groundwater levels would not rise to levels that would compromise surface infrastructure or result in significant impacts.

KWBA – 42

This comment states that the model should have considered recovery for a longer period than the modeled two 10-month periods from March 2015 to December 2015 and March 2016 to December 2016.

As previously explained in the Response to Comment KBWA-34, the March 2015 to December 2015 and March 2016 to December 2016 time period was selected as a worst-case scenario of relatively low groundwater conditions. As shown on Figure 4 in Draft EIR Appendix H, this represents the lowest groundwater levels for the entire 1988 to 2019 time period, and is thus the worst-case scenario. Extending the groundwater level data included in the model into previous or subsequent time periods would have included higher groundwater levels in the data set, which would have reduced the potential impacts of the worst-case scenario analysis.

KWBA – 43

This comment expresses concern that the project does not state a total project storage or recovery limit, and that water stored in multiple years and water from other Rosedale/IRWD programs can be recovered by the project wells, which may cause greater drawdown level impacts. The comment states that it should be assumed the project wells may be used to recover more water and over much longer periods that the two 10-month period scenario presented in the model.

As previously explained in the Response to Comment KWBA-32, regardless of the length or number of recovery periods, the recovery for this project would be conducted in accordance with the requirements of the Operating Plans and MOUs, provided in Appendix B of the Draft EIR, as previously noted in the Response to Comment KWBA-30. As explained in Draft EIR Section 2.6.2, *Recovery*, extraction for the proposed project would be limited to the amount previously recharged less losses, as specified by applicable MOUs. Thus, the length, number, and timing of recovery events would in all cases occur after the water has been stored and would not be allowed to recover more than the amount that was recharged.

KWBA – 44

The comment expresses concern that the locations of the recovery wells are not located in the recharge basins. However, Figure 2 in Appendix H of the Draft EIR shows three modeled extraction (recovery) wells in the proposed western basin, two recovery wells in the proposed central basin, and one recovery well just west of the eastern basin. Given that these wells are within or close to the three proposed basins, the modeling results from these wells would simulate the greater impacts. Also, please refer to Response to Comment KWBA-41 regarding the location of recharge and recovery facilities as described in the Draft EIR Chapter 2, *Project Description*.

KWBA – 45

The comment states that the 30-foot "trigger" under Rosedale's Long Term Operations Plan should be reduced to 15-feet for non-domestic wells and 5-feet for domestic wells. The comment also states that Rosedale's Long Term Operations Plan should be included as a mitigation measure.

The comment notes that the Joint Project Recovery Operations Plan is a voluntary program and is a joint plan with adjoining banking projects. The comment also notes that the Joint Project Recovery Operations Plan is of limited duration.

The Draft EIR describes the commitment that the proposed project would be operated in accordance with various MOUs and both the Long Term Operations Plan and the Joint Project Recovery Operations Plan during its term as part of the discussion of Impact 3.10-2 on page 3.10-40 to 3.10-41. Based upon the described results of groundwater modeling and the commitment that the proposed project would comply with the agreements and plans contained within Appendix B, the Draft EIR concludes that the proposed project would not have adverse localized effects to groundwater supplies and would support sustainable groundwater management of the basin (see page 3.10-40 to 3.10-41). Therefore, the impacts to groundwater are less than significant, and no mitigation is required.

KWBA – 46

This comment is unclear. The comment appears to state that the Draft EIR should evaluate the proposed project in the event that Project Recovery Operations Plan and/or Rosedale's stand-alone Long Term Operations Plan are no longer in force. CEQA requires the impact analysis be based on existing conditions. Given that both of the referenced operations plans exist, and would apply to the proposed project as described in the Draft EIR, it would be inappropriate to analyze the proposed project without considering the requirements of the plans. Note that the Kern Water Bank Authority, which provided this Comment Letter 7, is one of the signatories to these agreements. Consequently, the Kern Water Bank Authority was directly involved with establishing the monitoring, operations, and mitigations described in the plans. The purpose of the Draft EIR is to analyze the impacts of the proposed project. Analyzing the impacts of existing plans is not within the purview of the Draft EIR.

In addition, the Draft EIR presents the data and analysis to support the direct, indirect, and cumulative analysis of impacts to groundwater levels, contrary to the comment's allegations. The

modeling analysis that supports the discussion of impacts to groundwater levels, as explained in Impact 3.10-2 on pages 3.10-38 to 3.10-41, is included as Appendix H to the Draft EIR. The analysis concludes that impacts to groundwater levels are less than significant, and no mitigation is required.

KWBA – 47

The comment states that SGMA requires that Groundwater Sustainability Agencies develop minimum thresholds as quantitative values for several sustainability indicators to avoid undesirable results. It is true that SGMA has six criteria to improve groundwater sustainability. However, the purpose of this Draft EIR is not to analyze the impacts of the Groundwater Sustainability Plan, submitted on January 1, 2020, for the local Groundwater Sustainability Agency, which in this case, is the Kern Groundwater Authority.

Nonetheless, the proposed project does support the sustainability goals of SGMA. The proposed project would address the following four of the six SGMA criteria listed in Draft EIR Section 3.10, *Hydrology and Water Quality* on page 3.10-23 and placed in quotes below.

- The proposed project would reduce the "chronic lowering of groundwater levels, indicating a significant and unreasonable depletion of supply," by adding water into storage, some of which would be left in place (losses) (see Draft EIR Section 2.4, *Description of the Proposed Project* and Section 3.10, *Hydrology and Water Quality, Impact 3.10-2*).
- The proposed project would reduce the "significant and unreasonable reduction of groundwater storage," again by adding water into storage, some of which would be left in place (losses) (see Draft EIR Section 2.4, *Description of the Proposed Project* and Section 3.10, *Hydrology and Water Quality, Impact 3.10-2*).
- The proposed project would address "significant and unreasonable degraded water quality" by adding water into the aquifer that has a better water quality than the existing groundwater (see Draft EIR Section 2.4, *Description of the Proposed Project* and Section 3.10, *Hydrology and Water Quality, Impact 3.10-1*).
- The proposed project would reduce the potential for "significant and unreasonable land subsidence that substantially interferes with surface land uses," by adding water to the aquifer and thereby improving the intergranular support within the aquifer (see Draft EIR Section see Draft EIR Section 2.4, *Description of the Proposed Project* and Section 3.10, *Hydrology and Water Quality, Impact 3.7-3*).

KWBA – 48

The comment repeats concerns regarding the potential for the recovery period being longer than two 10-month time periods. This comment is addressed above in the Responses to Comments KBWA-32 and KBWA-42, which explain that length, number, and timing of recovery events would in all cases occur after the water has been stored and would not be allowed to recover more than the amount that was recharged.

In addition, the comment implies that the water levels in many wells would decrease to below the minimum thresholds, which is incorrect. As shown on Appendix H, Figure 11, *Intermediate Aquifer SGMA Minimum Threshold Project Impacts*, the model anticipates that none of the

Intermediate Aquifer wells would have water levels decrease to below the minimum threshold for that well. As shown on Appendix H, Figure 12, *Deep Aquifer SGMA Minimum Threshold Project Impacts*, the model anticipates that only one of the Deep Aquifer wells would have water levels just reach the minimum threshold for that well. In all cases for all wells, water levels then quickly recover to above the minimum thresholds.

KWBA – 49

The comment repeats the Draft EIR Appendix H conclusion on pages 9 and 10 that limiting groundwater pumping or wellhead treatment may be necessary when groundwater levels are at minimum thresholds. The comment does not provide any commentary regarding this conclusion.

As discussed in Section 3.10.1, *Environmental Setting, Project Area Groundwater Quality*, arsenic concentrations in the aquifer increase with depth and are above the MCL in some areas. However, the proposed recharge water does not have elevated concentrations of arsenic, and its addition would be expected to reduce the concentrations of arsenic in the aquifer. Therefore, the addition of the recharge water would be a beneficial impact to groundwater quality.

KWBA – 50

This comment is a summary statement that refers to the comments responded to above and does not provide any new commentary.

KWBA – 51

The comment requests that the Draft EIR identify the wells that have arsenic and/or 1,2,3-Trichloropropane (1,2,3-TCP) at concentrations above their respective MCLs.

As the comment acknowledges, water quality is variable in the area. Water quality data is available in the various monitoring and investigation reports conducted in the area. For example, arsenic results for groundwater wells at the Stockdale Project are available in the Draft EIR Administrative Record in Thomas Harder & Co. (THC), 2015, *Draft Proposed Stockdale Integrated Banking Project –Analysis of Potential Groundwater Level Changes from Recharge and Recovery at the Stockdale West and Stockdale East Facilities*, January 23, 2015. However, rather than depend on the reported concentration of arsenic any individual well, the Draft EIR explains in Section 3.10, *Hydrology and Water Quality, Project Area Groundwater Quality*, page 3.10-14 that arsenic concentrations generally increase with depth, which is generally typical throughout the Kern Fan area. Thus, elevated concentrations of arsenic may be expected to increase with depth anywhere in the project area.

TCP concentrations for specific wells are available in the cited reference in the Draft EIR: Thomas Harder & Co. (THC), 2020a. *Technical Memorandum, Documentation of 1,2,3-Trichloropropane Concentrations in Rosedale-Rio Bravo Water Storage District Banking Project Wells*, August 12.

KWBA – 52

The comment expresses concern that recovered water that is delivered to the proposed new conveyance facility and in water delivered to the Aqueduct via the CVC may degrade the water quality in those conveyance systems and exceed the DWR pump-in policy.

As explained in Section 3.10, *Hydrology and Water Quality, Impact 3.10-1*, pages 3.10-36 and 3.10-37, recovered groundwater introduced into the new proposed conveyance facilities, California Aqueduct, Goose Lake Channel, or the CVC through the Rosedale West Intake Canal would be subject to applicable pump-in water quality requirements. Prior to pumping extracted groundwater into the CVC and California Aqueduct, it would be the Authority's responsibility to ensure that the water quality was sufficient to meet applicable water quality requirements and submit a Pump-In Proposal that identifies the water sources, planned operation, inflow water quality, and any anticipated impacts to water quality and/or operations. Any water that did not meet water quality requirements or could not be blended to meet such requirements, as imposed by the conveyance facility operators, would not be conveyed within the canals. See also Response to Comment DWR-10 in Letter 3, above.

KWBA – 53

This comment states that the Project should ensure that recharge and recovery would be balanced to the extent necessary to eliminate mining good quality water.

The proposed project is not a groundwater "mining" project. Groundwater mining projects extract water that the extractor did not inject. As previously explained in the Response to Comment KWBA-32 and in Draft EIR Section 2.6.2, *Recovery*, extraction for the proposed project would be limited to the amount previously recharged less losses, as specified by applicable MOUs. Thus, recovery would be limited to the water the Authority recharges in the aquifer and would not be allowed to recover more than the amount that was recharged.

KWBA – 54

The comment appears to express concerns that the project may rely on dilution provided by other banking programs, presumably in their water sources. As explained in Section 2.4.2, *Recharge Water Supplies*, the sources of recharge water are all surface water sources.

An explanation of how the proposed project would ensure that the water quality of pumped groundwater introduced into the California Aqueduct or CVC would comply with the water quality policy provisions of DWR and Kern County Water Agency, is included in Section 3.10 of the Draft EIR on page 3.10-36 to 3.10-37. See also edits provided in Response to Comment DWR-10 in Letter 3, above.

KWBA – 55

This comment repeats concerns regarding arsenic and TCP in groundwater. These issues are addressed above in the response to Comment KWBA-51, which describes the Draft EIR analysis for water quality relative to arsenic and TCP.

KWBA – 56

This comment is a summary statement that refers to the comments responded to above and does not provide any new commentary.

KWBA – 57

This comment requests clarification regarding the process by which infiltration of recharge water through the soil column would filter out some of the chemical constituents.

This comment is requesting general information regarding the commonly used process of infiltration through soil that has been in use for many years to improve water quality. A detailed description of the processes by which individual chemicals are removed from infiltrated water in the soil column is beyond the scope of an EIR. In general, the processes include:

- Sorption. There are three types of sorption; adsorption, absorption, and ion exchange. Adsorption is when chemicals bind to the surface of a soil particle. With absorption, a pollutant penetrates the soil and attaches at a molecular level. With ion exchange, existing ions are replaced with other ions.
- Precipitation. Precipitation is the process by which inorganic dissolved species join together to form a settleable or filterable particulate. The particulate are then filtered out of the water and onto soil particles.
- Coagulation. Coagulation is the process by which smaller particles collect together to form larger particles, which then allows the particles to settle out in the soil column.

KWBA – 58

The comment concludes that the Draft EIR statement on page 3.10-37 of the Draft EIR: "The proposed recharge water does not have elevated concentrations of arsenic and its addition would be expected to reduce the concentrations of arsenic in the deeper portions of the aquifer," implies significant mixing between the shallow and deep parts of the aquifer.

As stated in the Draft EIR on page 3.10-14, under existing conditions in the Rosedale service area and Kern Fan area, concentrations of arsenic generally increase with depth.

> Zone sampling (i.e., sampling at different depths within a well) indicates that arsenic concentrations generally increase with depth (Rosedale 2019). Recovery wells constructed by Rosedale for groundwater banking operations reveal arsenic levels increase with depth, which is the conventional thought in the Kern Fan area. (Draft EIR, page 3.10-14)

As stated above in KWBA-49, the proposed recharge water does not have elevated concentrations of arsenic, and its addition would be expected to reduce the concentrations of arsenic in the aquifer. Therefore, the addition of the recharge water would be a beneficial impact to groundwater quality.

In response to the comment, the following text edit is made to page 3.10-37 of the Draft EIR:

> The proposed recharge water does not have elevated concentrations of arsenic and its addition would be expected to reduce the concentrations of arsenic in the ~~deeper portions of the~~ aquifer. Therefore, the addition of the recharge water would be a beneficial impact to groundwater quality.

KWBA – 59

The comment states that the Draft EIR fails to provide analysis of the potential impact on the water sources for the project, or on competing uses of water or water rights from these sources. Please see Response to Comment KWBA-23, above.

The comment states that in the future there will be competition for increasingly limited Article 21 water supplies. The comment is noted for the record. The Authority acknowledges there are applications to appropriate Kern River water pending before the SWRCB, including an application by Rosedale. The Kern Water Bank Authority's Conservation and Storage Project, which is dependent upon the KWBA's water rights application, is included in the list of cumulative projects evaluated in the Draft EIR (see Table 3-2). The proposed project does not include or depend upon the Kern River water for which the noted applications seek to secure water rights, including Rosedale's application. The proposed project is not dependent on the availability of Kern River water in any particular amount, at any particular time, or at all. The conditions under which Kern River water may be used for recharge in the proposed project is explained in the Draft EIR on page 2-9. Since the project is not a water rights project, the Draft EIR need not assess other potential competing uses for unappropriated Kern River water.

Regarding availability of Article 21 for provision of ecosystem benefits in the Delta associated with the proposed project, the quantitative analysis of water availability to the project is described in the Draft EIR, Section 3.4 Biological Resources, on pages 3.4-35 to 3.4-38.

KWBA – 60

Please refer to Response to Comment KWBA-21.

KWBA – 61

KWBA's description of the project's WSIP ecosystem public benefit is acknowledged. KWBA is concerned that the wetland benefits are conditional on grant funding and that design of proposed recharge basins to create intermittent wetlands is not included as mitigation measures.

The proposed project is grant-funded as described in the Draft EIR Section 2.3, *Purpose and Need for the Project,* starting on page 2-3. The description of the referenced wetland benefits summarizes the WSIP ecosystem public benefit that would be required as part of the grant funding for the entire project, not just the intermittent wetland creation component. The intermittent wetland creation is not proposed as a mitigation measure because it is a design feature of the project, and not required to mitigate any potentially significant impact.

KWBA – 62

KWBA's concern over the potential project impacts to blunt-nosed leopard lizard is acknowledged. Mitigation Measure BIO-1 applies to this species. The mitigation measure was

updated in Response to Comment CDFW-16. The updated mitigation measure was updated to include greater clarification regarding species surveys, avoidance measures, and consultation with CDFW and USFWS, if necessary.

KWBA – 63

KWBA's concern with the Draft EIR impact analysis and mitigation measures is acknowledged. The comment references the attached comment letter from South Valley Biological Consulting to KWBA, which includes a review of the Draft EIR, Section 3.4., *Biological Resources.* The Authority requests that KWBA please submit the noted observations of special-status species to CNDDB as many of these observations were not found during the record search conducted for the proposed project. The observations documented are broad and do not specify a date, method of observation, or specific location. As an active HCP/NCCP the Kern Water Bank should be submitting observations of special-status species to CNDDB on at least an annual basis as part of their annual reporting. The comments provided in the attachment are addressed in Responses to Comments KWBA-A-1 through KWBA-A-20 below.

KWBA – 64

KWBA's concern for the blunt-nosed leopard lizard is acknowledged. Please see Response to Comment KWBA-62.

KWBA – 65

KWBA's concern regarding delineation of "waters of the U.S." or "waters of the State" is acknowledged. The Draft EIR proposes delineation of these features on page 3.4-41 as part of Mitigation Measure BIO-13.

KWBA's concern regarding the lack of specificity for the location of the Project conveyance facilities is acknowledged. For the purposes of CEQA, a conveyance facility project area was defined and delineated to assess the potential impacts to biological resources. This project area is depicted on all figures in Section 3.4, *Biological Resources,* and labeled *Kern Fan Conveyance Facilities Area.* All potential impacts to biological resources from the project conveyance facilities are evaluated within this area.

KWBA – 66

KWBA's concern regarding deferred evaluation of impacts and adequacy of the impact analysis is acknowledged. In response to these comments and those provided by CDFW, additional clarification is provided in the mitigation measures to ensure that the level of impact is less than significant with mitigation. Incorporation of CDFW's recommendations ensures that the mitigation measures proposed for the project include the most up-to-date protocols for habitat assessments, species surveys, avoidance measures, and if necessary, consultation with CDFW or USFWS. Please review the revised mitigation measures included in the responses to CDFW's comments (Letter 9 below).

KWBA – 67

The comment provides a summary of the purpose of the analysis of alternatives in an EIR. The Draft EIR provides an overview of the CEQA requirements for alternatives on pages 6-1 and 6-2.

KWBA – 68

The comment states that CEQA "imposes a substantive obligation on the lead agency to select the alternative that reduces the Project's significant impacts." The comment is incorrect. As stated in the Draft EIR on page 6-25, CEQA requires that a Draft EIR identify the environmentally superior alternative of a project other than the No Project Alternative (*CEQA Guidelines* Section 15126.6(e)(2)). One of the primary purposes of the alternatives analysis is to identify project alternatives that may avoid or substantially lessen significant project impacts (*CEQA Guidelines* Section 15126.6). With incorporation of mitigation measures, the proposed project would result in no Significant and Unavoidable impacts.

KWBA – 69

The comment states that the Draft EIR does not evaluate a reasonable range of alternatives, and does not evaluate an alternative that would meet most of the project objectives.

The Draft EIR explains the CEQA requirements for the analysis of alternatives starting on page 6-1. *CEQA Guidelines* state that an EIR shall describe a range of reasonable alternatives to the project, or to the location of a project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project (14 Cal. Code Regs. § 15126.6). As stated in the Draft EIR, an EIR need not consider every conceivable alternative, but must consider a reasonable range of alternatives that fosters informed decision-making and public participation. The "rule of reason" governs the selection and consideration of EIR alternatives, requiring that an EIR set forth only those alternatives necessary to permit a reasoned choice (14 Cal. Code Regs. § 15126.6). Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid any significant environmental effects (14 Cal. Code Regs. § 15126.6(c)). Factors that may be considered when addressing the feasibility of an alternative include site suitability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, economic viability, and whether the lead agency can reasonably acquire, control or otherwise have access to the alternative site.

According to *CEQA Guidelines*, an EIR must identify ways to mitigate or avoid significant effects of a project, and thus "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project" (14 Cal. Code Regs. § 15126.6(b)). As summarized in Table ES-1 in the Draft EIR, the proposed project would not result in any significant and unavoidable environmental impacts. Nonetheless, Chapter 6 of the Draft EIR provides an assessment of one project alternative, as well as five alternatives that were considered but rejected, along with the No Project Alternative as required by CEQA (14 Cal. Code Regs. § 15126.6(e)). Table 6-2 on page 6-26 of the Draft EIR provides a matrix that summarizes the comparison of alternatives (14 Cal. Code Regs. § 15126.6(d)).

KWBA – 70

The comment states that the Draft EIR does not include a meaningful or detailed comparison between the proposed project and the Water Bank Alternative.

The Draft EIR compares the environmental effects of the proposed project and the Water Bank Alternative for each environmental topic, on pages 6-17 to 6-25. A matrix to summarize the comparison is included on page 6-26. As provided in Section 15126.6(d) of the *CEQA Guidelines*, the significant effects of these alternatives are identified in less detail than the analysis of the project in Chapter 3 of the Draft EIR.

KWBA – 71

The comment states that CEQA requires a full discussion of a reasonable range of alternatives and mitigation measures and that one is not a substitute for another.

Please refer to Response to Comment KWBA-69 regarding the reasonable range of alternatives. Regarding the purpose of alternatives to reduce impacts similar to mitigation measures, as described in the Draft EIR on page 6-1, Section 15126.6(f) of the CEQA Guidelines provides direction on the required alternatives analysis (emphasis added):

> *The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice.* ***The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.*** *Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making*

Further, Section 15126.6(b) of the CEQA Guidelines states an EIR:

> *…must identify ways to mitigate or avoid the significant effects that a project may have on the environment,* ***the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project****, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly (emphasis added)*

KWBA – 72

The comment states that the project's mitigation measures are not sufficiently specific or enforceable. Please refer to Responses to Comments KWBA-62 to KWBA-66; KWBA-85; KWBA-86; and KWBA-A-1 to KWBA-A-20.

KWBA – 73

The comment states that the Draft EIR does not clearly describe the location of, or alternatives to, project conveyance facilities. Regarding the location of the Kern Fan Conveyance Facilities, see Response to Comment KWBA-21. Regarding alternatives, the Draft EIR provides a detailed description of alternative alignments for the Kern Fan Conveyance Facilities on pages 6-4 to 6-8, including Figure 6-1. Regarding potential impacts to biological resources of the Kern Water Bank due to the conveyance facilities, see Responses to Comments KWBA-62 to KWBA-66; KWBA-85; KWBA-86; and KWBA-A-1 to KWBA-A-20.

KWBA – 74 and KWBA – 75

The comment states that the Draft EIR fails to analyze an alternative water banking operation similar to the Kern Water Bank HCP/NCCP and that the Draft EIR claims that the project includes intermittent wetland benefits similar to the Kern Water Bank HCP/NCCP are misleading.

The local ecosystem benefits associated with the proposed project, including the intermittent wetlands, are not required as mitigation measures in response to any potentially significant impacts of the project. The intermittent wetlands are a project design feature for purposes of meeting requirements of the WSIP funding. Therefore, given the CEQA requirements for alternatives as described above in Response to Comment KWBA-71, it follows that no additional alternative such as the Kern Water Bank HCP/NCCP is required. In addition, while the recharge basin design would be informed by that of the Kern Water Bank, the proposed project in no way is intended to perform as an HCP/NCCP, and is not described as such in the Draft EIR.

KWBA – 76 and KWBA – 77

The comment states that the Draft EIR should include additional alternatives that address the project's significant impacts to groundwater levels and water quality. As explained in Response to Comments KWBA-30 to KWBA-58, the proposed project would not have significant impacts to groundwater levels or water quality. The Draft EIR includes no mitigation measures related to these issues. Therefore, CEQA does not require the consideration of an alternative because there are no impacts to avoid or substantially lessen.

KWBA – 78

The comment states that the Draft EIR should include an alternative that avoids or substantially lessens significant impacts to neighboring wells. As described in the Draft EIR for Impact 3.10-2 on pages 3.10-38 to 3.10-41, there would be no significant impacts to groundwater levels or neighboring wells, and no mitigation is required. Therefore, CEQA does not require the consideration of an alternative because there are no impacts to avoid or substantially lessen.

KWBA – 79

The comment states that the Draft EIR should include an alternative that avoids or substantially lessens significant impacts to water quality. As described in the Draft EIR for Impact 3.10-1 on pages 3.10-35 to 3.10-38, there would be no significant impacts to water quality, and no mitigation is required. Therefore, CEQA does not require the consideration of an alternative because there are no impacts to avoid or substantially lessen.

KWBA – 80

The comment states that the Draft EIR should include an alternative that avoids or substantially lessens significant impacts to recharge impacts. As described in the Draft EIR for Impact 3.10-2 on pages 3.10-38 to 3.10-41, there would be no significant impacts due to groundwater mounding, and no mitigation is required. Therefore, CEQA does not require the consideration of an alternative because there are no impacts to avoid or substantially lessen.

KWBA – 81 and KWBA – 82

The comment describes the requirements for the analysis of cumulative impacts and states that the Draft EIR limits the cumulative effects analysis to other water banking projects. The comment is incorrect. The methodology for the analysis of cumulative impacts is clearly explained in the Draft EIR on pages 3-6 to 3-16. The projects that are considered in the cumulative analyses for each environmental topic in Chapter 3 are groundwater banking projects in Kern County as listed in Table 3-1, as well as other projects in the Kern Fan area as listed in Table 3-2 that could result in impacts to resources in the project area. For example, Table 3-2 includes development and roadway projects in the City of Bakersfield as well as California Aqueduct repair and maintenance.

KWBA – 83

The comment states that the Draft EIR artificially limits the projects included in the cumulative impacts analysis and therefore fails to establish an adequate baseline for the analysis of cumulative effects and fails to analyze whether the project would substantially contribute to cumulatively significant impacts. The comment is incorrect. Please refer to Response to Comments KWBA-81 and KWBA-82. An analysis of cumulative impacts is included for each environmental topic included in Chapter 3 of the Draft EIR as explained in the methodology on pages 3-6 to 3-16.

KWBA – 84

KWBA's concern that the mitigation measures lack specificity and enforceability is acknowledged. As Lead Agency, the Authority may use this EIR to approve the proposed project, make Findings regarding identified impacts, and if necessary, adopt a Statement of Overriding Considerations regarding these impacts. The proposed project would proceed upon certification of this EIR by the Authority's Board of Directors, adoption of this EIR by both Rosedale's and IRWD's Board of Directors (as Responsible Agencies), and approval of the proposed project by the Authority. The adoption of the EIR by the Authority binds them to implement the mitigation measures along with the project.

The Authority reviewed proposed mitigation measures in response to this comment and others. Based on the comments, additional specificity has been included for clarification. KWBA provides further detail on the mitigation measures of concern. The following comment responses provide revisions to the mitigation measures in response to comments.

KWBA – 85

KWBA's concern that the Draft EIR does not provide specific and enforceable mitigation measures is acknowledged. See Response to Comment KWBA-84.

KWBA – 86

KWBA's identified biological mitigation measures are acknowledged. The Authority revised these mitigation measures in response to CDFW's comments. In general, the revised mitigation measures clearly specify a stepwise approach to reduce biological resource impacts to a less than

significant level. All surveys must be conducted by a qualified biologist. If available, species-specific protocols recommended by CDFW are followed. The step-wise approach is as follows.

- Prior to project initiation, conduct species-specific habitat assessment to determine habitat suitability.
- If suitable habitat is present, conduct species-specific survey within a specified survey window.
- If species is present, implement species-specific disturbance-free buffers.
- If disturbance-free buffers are not possible, in some cases, the buffers may be reduced accompanied by monitoring by a qualified biologist. If required, the reduction of disturbance-free buffers would be approved by CDFW and, if a federally-listed species, USFWS. The Authority will work with CDFW and USFWS, if needed, to ensure take is avoided.
- If take cannot be avoided, the appropriate take permit shall be obtained and required mitigation implemented.

This step-wise approach is implemented for each of the species identified by KWBA. Please see the following comment responses for the updated mitigation measures.

- Blunt-nosed leopard lizard: Mitigation Measure BIO-1 is updated in the Response to Comment CDFW-16.
- Swainson's hawk: Mitigation Measure BIO-3 is updated in the Response to Comment CDFW-29.
- San Joaquin kit fox: Mitigation Measure BIO-5 is updated in the Response to Comment CDFW-12.
- Tipton kangaroo rat: Mitigation Measure BIO-6 is updated in the Response to Comment CDFW-24.
- San Joaquin (Nelson's) antelope squirrel: Mitigation Measure BIO-7 is updated in the Response to Comment CDFW-20.
- American Badger: Mitigation Measure BIO-8 is updated in the Response to Comment CDFW-45.
- Special status plant species: Mitigation Measure BIO-9 is updated in the Response to Comment CDFW-37.
- Operations and maintenance plan: Mitigation Measure BIO-10 is updated in Response to Comment CDFW-53.
- Pesticide use plan: Mitigation Measure BIO-11 is updated in Response to Comment CDFW-53.

KWBA – 87

The comment states that the Draft EIR relies on project features and elements that are not enforceable to mitigation project impacts. Please refer to Response to Comments KWBA-46 and KWBA-61. This comment is a summary statement that refers to the comments responded to above and does not provide any new commentary.

KWBA – 88

The comment states that the Draft EIR includes mitigation measures that are deficient based on other deficiencies identified throughout KWBA's comment letter. This comment is a summary statement that refers to the comments responded to above and does not provide any new commentary.

KWBA – 89

Per CEQA Guidelines Section 15088.5, "[n]ew information added to an EIR is not 'significant' unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project's proponents have declined to implement." Furthermore, "Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR." In response to comments received, some changes have been made to the Draft EIR, which are summarized in Chapter 11 of this Final EIR. However, neither the methodologies employed nor the conclusions reached have changed in any way that implicates a significant environmental impact not identified in the Draft EIR, a substantially more severe significant environmental effect than indicated, or a new feasible alternative or mitigation measure. The Draft EIR is comprehensive and robust, compiled by scientists and experts in their respective environmental fields. The Draft EIR complies with the requirements of CEQA and is supported with substantial evidence. For these reasons, recirculation of the Draft EIR is not required.

KWBA – A-1

KWBA's editorial comment on the list of included quadrangles is acknowledged. In response to the comment, the following text edit will be made on Draft EIR page 3.4-1:

- California Department of Fish and Wildlife (CDFW). 2020. California Natural Diversity Data Base (CNDDB) (Accessed July 2020). Database was queried for special status species records within the Stevens United States Geological Survey (USGS) topographic quadrangle and surrounding eight quadrangles. These eight quadrangles include: East Elk Hills, Tupman, Rosedale, Millux, Mouth of Kern, Taft, Rio Bravo, and Buttonwillow.

The following text edit will be made on Draft EIR page 3.4-13:

> These eight quadrangles include: East Elk Hills, Tupman, Rosedale, Millux, Mouth of Kern, Taft, Rio Bravo, and Buttonwillow (CDFW 2020).

KWBA – A-2

KWBA's additional information on the Swainson's hawk's occurrence and use of the project areas is acknowledged. Swainson's hawk nesting habitat suitability and use of the project areas for foraging was documented in the Draft EIR. Species habitat suitability and use were documented in the Draft EIR on page 3.4-16. The species is considered to be present in the project areas. The information provided by KWBA provides additional information for the existing conditions of the species; however, it does not affect the finding of significance for the

biological resource. In response to the comment, the following text edit will be made on Draft EIR page 3.4-16:

> The species generally forages within 10 miles of their nest tree. Suitable nesting habitat does occur in the project areas as numerous trees were observed. Swainson's hawks are known to nest in many locations within the Conveyance Facilities area and elsewhere in and adjacent to the other portions of the project area. This species frequently nests and forages at the Tule Elk Reserve (adjacent to the project areas) and the Kern Water Bank (within the project areas) (Jonathan Parker, personal communication, November 28, 2020). No nests were observed within the project areas during the reconnaissance surveys; however, two adult Swainson's hawks were observed flying over the Phase 2 project area and is considered present on-site (see Figure 3.4-4).

KWBA – A-3

KWBA's additional information on the tricolored blackbird occurrence and use of the project areas is acknowledged. Tricolored blackbird habitat suitability and use were documented in the Draft EIR. Species habitat suitability and use were documented in the Draft EIR on page 3.4-17. The species is considered to have a medium potential to occur in the project areas. The information provided by KWBA provides additional information for the existing conditions of the species; however, it does not affect the finding of significance for the biological resource. In response to the comment, the following text edits will be made on Draft EIR page 3.4-17:

> The open water canals and agricultural fields on and near the project areas can support this species. This species has adapted to use mesquite trees/shrubs for nest sites when cattails and tules are not available or adequate for their purposes (Jonathan Parker, personal communication, November 28, 2020). Tricolored blackbirds have several CNDDB occurrences on and adjacent to the project areas; however, they are over 25 years old. Tricolored blackbirds frequently nest and forage within the Conveyance Facilities area and elsewhere within other portions of the project areas (Jonathan Parker, personal communication, November 28, 2020). No tricolored blackbirds were observed during the July 2020 reconnaissance.

KWBA – A-4

KWBA's additional information on the Nelson's antelope squirrel occurrence and use of the project areas is acknowledged. Nelson's antelope squirrel habitat suitability and use were documented in the Draft EIR. Species habitat suitability and use were documented in the Draft EIR on page 3.4-17. The species is considered to have a medium potential to occur in the project areas. The information provided by KWBA provides additional information for the existing conditions of the species and recommendations for trapping; however, it does not affect the finding of significance for the biological resource. In response to the comment, the following text edits will be made on Draft EIR page 3.4-17.

> The Nelson's antelope squirrel is known to occur ~~considered to have a medium potential to occur~~ in the project areas.

Suitable habitat for the species exists in the project areas within the non-native grassland, annual grassland, agricultural fields, and many of the earthen berms adjacent to the numerous access roads. Occurrence records for the species have also been recorded to the CNDDB within the Conveyance Facilities project area; however, these occurrences are over 30 years old. Nelson's antelope squirrels have seen an expansion of their populations in recent years into areas that were previously unoccupied for many years. This is the case at the nearby Coles Levee Ecosystem Preserve (outside the project areas) and at the Kern Water Bank (inside the project areas) (Jonathan Parker, personal communication, November 28, 2020). No Nelson's antelope squirrels were observed during the July 2020 reconnaissance.

KWBA – A-5

KWBA's additional information on the Tipton kangaroo rat occurrence and use of the project areas is acknowledged. Tipton kangaroo rat habitat suitability and use were documented in the Draft EIR. Species habitat suitability and use were documented in the Draft EIR on page 3.4-18. The species is considered to have a medium potential to occur in the project areas. The information provided by KWBA provides additional information for the existing conditions of the species and recommendations for trapping; however, it does not affect the finding of significance for the biological resource. In response to the comment, the following text edits will be made on Draft EIR page 3.4-18:

The Tipton kangaroo rat is known to occur ~~considered to have a medium potential to occur~~ in the project areas.

Suitable habitat for the species exists in the project areas in the non-native grassland, annual; grassland, agricultural fields, and many of the earthen berms along the access roads on the project areas. Several CNDDB occurrences have been made on the project areas; however, they are over approximately 30 years old. Tipton kangaroo rats are known to occur on at least two areas within the Conveyance Facilities area and likely occur on other areas with appropriate habitats (Jonathan Parker, personal communication, November 28, 2020). No Tipton kangaroo rat or sign of was observed during the July 2020 reconnaissance.

KWBA – A-6

KWBA's additional information on the San Joaquin kit fox occurrence and use of the project areas is acknowledged. San Joaquin kit fox habitat suitability and use were documented in the Draft EIR on page 3.4-18. The species is considered to have a high potential to occur in the project areas. The information provided by KWBA provides additional information for the existing conditions of the species and recommendations for surveys; however, it does not affect the finding of significance for the biological resource. In response to the comment, the following text edits will be made on Draft EIR page 3.4-18:

~~Based on such habitat requirements,~~ San Joaquin kit fox is known to occur ~~considered to have a high potential to occur~~ in the project areas.

Suitable habitat for the species occurs within the non-native grassland, annual grassland, agriculture fields, and the earthen berms located adjacent to the many access roads on the project areas. Several CNDDB occurrences have been made on the project areas; however, they are all over 30 years old. San Joaquin kit fox are known to occur in many areas within the Conveyance Facilities area and other portions of the project areas (Jonathan Parker, personal communication, November 28, 2020). No San Joaquin kit fox or sign of was observed during the July 2020 reconnaissance.

KWBA – A-7

KWBA's additional information on the Horn's milk vetch occurrence and use of the project areas is acknowledged. Horn's milk vetch is a CNPS 1B.1 species. It was it determined that the species was unlikely to occur in the project area as documented in Appendix D, *Biological Technical Report,* page 29. Based on the information provided by KWBA, this species will be added into the species known or likely to occur in the project areas. The following update will be made to the Draft EIR pages 3.4-18 and 3.4-19:

Special-Status Plant Species

Precipitation for 2019 - 2020 was typical in the project region as well as throughout most of the State (NOAA 2020). Therefore, floristic representation at the time of the survey would have been typical for the month of July.

Based on the database search results and comments received from Kern Water Bank, special-status plant species known to occur or with a medium potential to occur in the project areas are briefly described below. For a more detailed description of special-status plant species, please refer to Appendix D.

Horn's milk vetch

Horn's milk vetch (*Astragalus hornii var. hornii*) has a CNPS status of 1B.1. This species is an annual herb with a blooming period between May and September. Horn's milk vetch is found in meadows and seeps and playas/lake margins in alkaline soils. It is known to occur within the Conveyance Facilities project area in existing earthen water conveyances and groundwater recharge basins.

KWBA – A-8

KWBA's concerns regarding the description of vegetation communities and the specificity included in Mitigation Measure BIO-9 is acknowledged. The setting and analysis of biological resources is based on information from resource agencies, reconnaissance field surveys of the project area, and review of available literature and data as described on page 3.4-1 of the Draft EIR. The entire Conveyance Facilities project area was previously mapped and provided on a dataset by the Geographical Information Center at California State University, Chico (CSU Chico 2018) as stated on page 3.4-7 of the Draft EIR. For this area, the vegetation community classifications were identified and acreages noted on pages 3.4-7 through 3.4-11.

Mitigation Measure BIO-9 was revised in responses to comments provided by CDFW which were similar to those of KWBA. Please see Response to Comment CDFW-37 for the updated Mitigation Measure BIO-9.

KWBA – A-9

KWBA's concerns regarding CDFW reviews and approvals regarding Mitigation Measure BIO-9 is acknowledged. Mitigation Measure BIO-9 was revised in responses to comments provided by CDFW which were similar those of KWBA. Please see Response to Comment CDFW-37 for the updated Mitigation Measure BIO-9.

KWBA – A-10

KWBA's concerns regarding survey protocols and the requirement for take permits is acknowledged. Please see Response to Comment KWBA – 86 for a guide on how the mitigation measures were updated in response to this request and comments provided by CDFW.

KWBA – A-11

KWBA's summary of blunt-nosed leopard lizard occurrences and habitat suitability is acknowledged. The Draft EIR Section 3.4, *Biological Resources* includes a summary of occurrences and habitat suitability on page 3.4-16. The comment is noted for the record.

KWBA – A-12

KWBA's summary of the existing and recommended Mitigation Measure BIO-1 is acknowledged. Mitigation Measure BIO-1 was updated in response to comment CDFW-16 which shared the concerns of this comment. Please refer to Response to Comment CDFW-16 for updated Mitigation Measure BIO-1.

KWBA – A-13

KWBA's summary of Swainson's hawk occurrences, habitat suitability, and Mitigation Measure BIO-3 is acknowledged. The Draft EIR Section 3.4, *Biological Resources* includes a summary of occurrences and habitat suitability on page 3.4-16. Mitigation Measure BIO-3 was updated in response to comment CDFW-29, which shared the concerns of this comment. Please refer to Response to Comment CDFW-29 for updated Mitigation Measure BIO-3.

KWBA – A-14

KWBA's summary of San Joaquin kit fox, Mitigation Measure BIO-5 is acknowledged. Mitigation Measure BIO-5 was updated in response to comment CDFW-12 and CDFW-56, which shared the concerns of this comment. Please refer to Response to Comment CDFW-12 for updated Mitigation Measure BIO-3.

KWBA – A-15

KWBA's summary of scoping comments received is acknowledged. Mitigation Measure BIO-5 was updated in response to comment CDFW-12 and CDFW-56, which shared the concerns of this comment. Please refer to Response to Comment CDFW-12 for updated Mitigation Measure BIO-3.

KWBA – A-16

KWBA's concern regarding the need to consult with CDFW regarding take of San Joaquin kit fox is acknowledged. Mitigation Measure BIO-5 was updated in response to comment CDFW-12 and CDFW-56, which shared the concerns of this comment. Please refer to Response to Comment CDFW-12 for updated Mitigation Measure BIO-3.

KWBA – A-17

KWBA's concern regarding the specificity of the Nelson's antelope squirrel Mitigation Measure BIO-7 is acknowledged. Mitigation Measure BIO-7 was updated in response to comment CDFW-20, which shared the concerns of this comment. Please refer to Response to Comment CDFW-20 for updated Mitigation Measure BIO-7.

KWBA – A-18

KWBA's concern regarding the specificity of the Mitigation Measure BIO-10 is acknowledged. Mitigation Measure BIO-10 was updated in response to comment CDFW-53, which shared the concerns of this comment. Please refer to Response to Comment CDFW-53 for updated Mitigation Measure BIO-10.

KWBA – A-19

KWBA's concern regarding the specificity of the Mitigation Measure BIO-11 is acknowledged. Mitigation Measure BIO-11 was updated in response to comment CDFW-53, which shared the concerns of this comment. Please refer to Response to Comment CDFW-53 for updated Mitigation Measure BIO-11.

KWBA – A-20

KWBA's concern regarding the project's impacts to the KWBA HCP/NCCP and Mitigation Measure-14 are acknowledged. The Draft EIR includes the level of detail available regarding the project location available at this time. No additional detail regarding the potential impacts to the Kern Water Bank lands is available at this time. The Mitigation Measure BIO-14 commits the Authority to working with the KWBA to avoid impacts to covered species within the HCP/NCCP area during construction, operations, and maintenance. It does not contemplate the course of action if impacts would occur. In response to this comment the following updates will be made.

> **BIO-14**. Should facilities be located on the Kern Water Bank, the Authority shall initiate discussions with the Kern Water Bank Authority to ensure Conveyance Facilities located in the Kern Water Bank HCP/NCCP avoid impacts to covered species within the HCP/NCCP area during construction, operations, and maintenance. <u>If the project is located within the Kern Water Bank HCP/NCCP, Mitigation Measure BIO-1 through BIO-13 will be implemented in coordination with the KWBA, and if necessary, CDFW and USFWS to ensure the project is implemented in compliance with the HCP/NCCP. If any of the project activities will conflict with the implementation of the HCP/NCCP, the Authority will consult with CDFW, USFWS, and the KWBA in advance of project implementation to ensure compliance with CESA and ESA.</u>

KWBA's concern regarding the exemption from the Bakersfield Metro HCP is acknowledged. As stated on Draft EIR page 3.4-27, the HCP finds that "commercial agricultural" activities are exempt from the requirements of the plan. Therefore, the proposed project would not be subject to MBHCP requirements. The comment is noted for the record.

Letter 8: City of Bakersfield (BAK)

BAK – 1

The comment states that the City of Bakersfield (City) submitted comments on the NOP and the Authority failed to sufficiently address or respond to the City's comments.

The Authority received the City's comments to the NOP and considered the comments during preparation of the Draft EIR. The comment letter from the City is included in Appendix A to the Draft EIR. CEQA does not require a lead agency to respond to comments provided during the NOP review period. CEQA only requires the lead agency to send the NOP to OPR and to responsible and trustee agencies (14 Cal. Code Regs. §15082); the City is not a responsible or trustee agency.

The City's NOP comments are mostly duplicative of the comments to the Draft EIR. Nonetheless, responses to the City's NOP comment letter are provided in responses to BAK-A-1 through BAK-A-17, which follow these responses to the City's Draft EIR comments.

BAK – 2

The comment states that the Authority failed to provide data, information and analysis in the Draft EIR that is necessary for an EIR of a project that calls for the transfer of a potentially significant amount of local water supplies, including Kern River water supplies to Southern California.

The proposed project does not include any transfer of local water supplies to Southern California. See Response to Comment BAK-3 below for a more detailed response.

BAK – 3

The comment expresses concern that the proposed project would involve out-of-county water sales or transfers causing harm to the local environment, local groundwater basin, the City's water resources and water supplies, the Kern River, and water resources of the entire San Joaquin Valley.

The characterization is inaccurate. As explained in the Draft EIR, the proposed project consists of the construction and operation of recharge and recovery facilities on certain lands owned by the Authority (Section ES.4 page ES-6 and Section 2.1 page 2-1). For Rosedale, the proposed project would augment the recharge, storage, and extraction capabilities of its Conjunctive Use Program and provide greater operational flexibility assisting Rosedale in fulfilling its mission of maintaining groundwater levels within its service area (Section 2.4 page 2-6). For IRWD, the proposed project would enhance water supply reliability by providing contingency storage to augment supplies during periods when other supply sources may be limited or unavailable

(Section 2.3 page 2-4). The Project Description does not include any transfer of local water supplies to IRWD nor does it propose any out-of-county water sales or transfers at all. Therefore, the suggested impacts to the local environment associated with transfer or sale of local water supplies are non-existent.

Water recharged in the project for later recovery by IRWD may or may not include Kern River water. As to the use of Kern River water for project purposes, it is only proposed when available from water right holders under banking or temporary water service agreements or when the Kern River is in high-flow conditions (Section 2.4.2 page 2-10), depending on annual hydrologic availability, water rights and regulatory considerations. The entities with Kern River water rights are responsible for developing programs that demonstrate how Kern River water will be used, and for preparing environmental documentation that evaluates the impacts of such programs.

With regard to the comment's reference to the potential detriment to the local environment from such use of Kern River water, as mentioned above the Kern River is not the primary source, and the project is not dependent on the availability of Kern River water at any particular time or at all, to supply recharge water for the proposed project. Surface water hydrology and water quality for the Kern River are generally described in the Draft EIR on pages 3.10-2 to 3.10-3. The proposed project itself would not change patterns or practices of water diversion from the Kern River, and as such, would not affect flow in the Kern River. The proposed project may recharge Kern River water provided by agencies with existing water rights, such as the City, as described on page 2-9 to 2-10 of the Draft EIR. As stated above, agencies with rights to Kern River water are responsible for developing programs for use of Kern River water and evaluating the impacts of such programs, which may include transfer or exchange of Kern River water with agencies such as Rosedale.

The Draft EIR discusses the potential impacts of using the water sources for groundwater recharge on page 3.16-7. The Draft EIR states that the project does not require a new water supply and as such would not affect local water supplies. Opportunistic use of water from the SWP or CVP for example, would not affect other water users or local water supplies. The proposed project would use appropriative water rights, including pre-1914 and post-1914 water rights and other Kern River water also depending on availability. As stated in the Draft EIR, pre-1914 and post-1914 water rights can be transferred to other parties as long as legal users of water are not injured ("no injury rule," per Water Code Sections 1706 and 1702). The Draft EIR explains how the State Water Resources Control Board (SWRCB) supervises transfers of appropriative water rights, and when the SWRCB is required to make a finding that the transfer will not result in unreasonable effects on fish or wildlife or other in-stream beneficial uses.

As stated above, the entities with Kern River water rights are responsible for developing programs that demonstrate how Kern River water will be used, and for preparing environmental documentation that evaluates the impacts of such programs. Kern River water utilized by the proposed project would occur consistent with the requirements of such environmental documentation. As such, the environment in and around the Kern River, including plant and animal life and aquifer underlying the Kern River, would not be affected by the proposed project.

BAK – 4

The comment continues the City's concerns regarding the Draft EIR, stating that the document does not comply with CEQA and is deficient for various reasons, namely: (1) the Draft EIR does not comply with the policy, purpose or specific requirements of CEQA; (2) the Draft EIR omits or obscures details of the proposed project and as such fails to disclose all potential impacts of the project; (3) the Draft EIR and fails to consider reasonable, feasible alternatives for the proposed project including the "no project" alternative.

The Draft EIR reflects a good faith effort to investigate and disclose environmental impacts of the project in full compliance with the requirements of CEQA. The Draft EIR presents background information about the proposed project in Chapter 1 and clearly presents an overview of the proposed project in Chapter 2, including the project's purpose and objectives on pages 2-3 and 2-4. The environmental impacts of the project are documented in Chapters 3 through 5, along with accompanying appendices. The Draft EIR includes an Alternatives Analysis in Chapter 6, including the No Project Alternative on pages 6-11 through 6-17. As documented in the Draft EIR, the proposed project would have no significant, unavoidable, or irreversible environmental impacts to the local environment or to local or regional water resources and supplies.

CEQA does not require technical perfection in an EIR, but rather adequacy, completeness, and a good-faith effort at full disclosure. [14 Cal. Code Regs. §§ 15003(i)]. A court does not pass upon the correctness of an EIR's environmental conclusions, but only determines if the EIR is sufficient as an informational document. [*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 711]. The Authority has complied with CEQA by providing an adequate, complete, and good-faith effort at full disclosure in the Draft EIR and supporting technical documents. [14 Cal. Code Regs. §§ 15003(i), 15151; *Browning-Ferris Industries v. City Council* (1986) 181 Cal.App.3d 852, 862: "where a general comment is made, a general response is sufficient"; see also, *Eureka Citizens for Responsible Government v. City of Eureka* (2007) 147 Cal.App.4th 357, 378: "Responses to comments need not be exhaustive; they need only demonstrate a 'good faith, reasoned analysis.' (Citations)"].

BAK – 5

The comment states that the City's comments to the NOP set forth the City's initial concerns with the project, that the City attaches, incorporates and refers to such comments as part of the City's comments to the Draft EIR and does so because the Authority had not adequately addressed or responded to the concerns and questions raised by the City in those comments. The Authority received the City's comments to the NOP and considered the comments during preparation of the Draft EIR. Please refer to Response to Comment BAK-1, above.

BAK – 6

The comment states that sales and transfers of local water supplies out of the county, in particular Kern River supplies, are directly contrary to the policies and interests of the City, specifically a long standing policy most recently confirmed in 2001, that Kern River water shall not be utilized outside the boundaries of the San Joaquin Valley portion of Kern County. The comment states that out-of-county water transfers would cause harm to the local environment, local groundwater

basin, the City's water resources and supplies, the Kern River, and the water resources of the entire southern San Joaquin Valley.

This project is not located in the City of Bakersfield and therefore is not governed by the City's policy. The comment does not specifically address the environmental analysis contained in the Draft EIR. The comment is noted for the record. With respect to City's policy and the claim that the project includes the transfer of local supplies to Southern California and would cause substantial harm to the environment and water resources, including those of the City, see Response to Comment BAK-3.

BAK – 7

The comment states that Rosedale does not hold Kern River water rights, but only receives Kern River water from the City pursuant to a water supply agreement. The comment continues to explain that Rosedale is bound, through the agreement to only use Kern River water acquired from the City within its boundaries and that the City reserves the right to challenge and prevent any effort by Rosedale to violate the place of use restriction in this agreement.

The Draft EIR acknowledges Rosedale's Kern River water rights agreement with the City on page 2-9. Regarding potential violations of the claimed restrictions in the agreement, no violation of the agreement is contemplated or intended. As stated in the Draft EIR, Rosedale intends to recharge such Kern River water as is or becomes available to it through banking and temporary water service agreements; and IRWD intends to recharge such Kern River water as is or becomes available to it through its arrangement with Buena Vista Water Storage District under IRWD's Strand Ranch Project, which may be extended to include the proposed project (Section 2.4.2 pages 2-7 through 2-8).

BAK – 8

The comment states that the project would significantly expand IRWD's ability to transfer local water supplies, including Kern River water, out of the region.

The proposed project would not transfer or deliver existing water supplies to Southern California. Please refer to Response to Comment BAK-3.

BAK – 9

The comment restates information in the project description regarding the project receiving a conditional award of funding through the California Water Commission's Water Storage Investment Program (WSIP). The comment then states that project does not appear to comply with or satisfy any of the WSIP requirements and contrarily, the project would adversely impact the local ecosystem rather than providing a public benefit.

As described on page 2-3 of the Draft EIR, the proposed project was analyzed in the 2017 Storage Integration Study prepared by the Association of California Water Agencies to quantify the benefits of integrating the operation of new storage projects with existing SWP and CVP operations to help fulfill statewide water supply needs and priorities. The proposed project was selected as one of eight projects which could provide such benefits. The purpose of the WSIP is

to fund water storage projects that provide public benefits, improve operation of the State water system, and provide a net improvement in ecosystem and water quality conditions. Under the proposed project, up to 25,000 AF of Article 21 water in excess of demand would be stored for DWR in an "Ecosystem Account," and through the implementation of 1-for-1 exchanges, would be used by the State to alleviate stress on endangered and threatened species in the Sacramento-San Joaquin River Delta. Furthermore, during the years that the proposed project takes and recharges water into storage, the proposed basins would be inundated with water and would provide intermittent wetland habitat to support waterfowl, shorebirds, raptors and other migratory birds along the Pacific Flyway. Implementation of the proposed project would not only provide these ecosystem public benefits, but would provide emergency water supply public benefits during extended droughts or a Delta levee failure, and supply benefits for agricultural, M&I and federal wildlife refuge uses; all of which comply and satisfy WSIP requirements.

BAK – 10

The comment expresses concern that the project would violate the Sustainable Groundwater Management Act (SGMA) by contributing to and exacerbating overdraft conditions in the Kern County Sub-basin, contributing to lowered groundwater levels, loss of local waters supplies and increases unsustainable groundwater pumping.

As described on page 2-4 of the Draft EIR, the proposed project is one of many projects in the Kern Groundwater Authority's GSP. The proposed project would assist Rosedale (and by extension the Kern Groundwater Authority) with the stabilization of groundwater levels and help achieve groundwater sustainability in the Kern Fan area. Depending on the availability of surface water, the proposed project could recharge upwards of 100,000 AFY.

As stated in the Draft EIR, groundwater banking projects are designed to maintain a positive project balance such that no net water would be removed from the basin. The projects operate by recharging water in wet years and recovering water in dry years. Water banks only recover water up to the amount previously banked minus an amount to account for losses to the basin. Prominent among the measures intended to avoid continued groundwater decline is the development and implementation of conjunctive use programs utilizing underground storage, such as the proposed project. Thus, it is specifically provided that every GSP shall include where appropriate "[a]ctivities implementing, opportunities for, and removing impediments to, conjunctive use or underground storage" (CWC Section 10727.4(f)). (See also Draft EIR, Section 3.10.2, pages 3.10-23 through 3.10-24). Since water banks only recover water up to the amount previously banked minus an amount to account for losses to the basin, long term trends have shown improvements in groundwater levels, when compared to a no-project condition. Thus, the proposed project would not violate the SGMA.

The comment regarding unsustainable pumping does not specifically address the environmental analysis contained in the Draft EIR or project operations. The comment is noted for the record.

BAK – 11

The comment states that the Draft EIR fails to consider lowered groundwater levels, loss of local water supplies or increased unsustainable groundwater pumping, and instead assumes without

supporting data that the project would "help support" groundwater sustainability efforts. The comment then provides an excerpt from the project description.

The comment quotes language from the project description rather than the applicable technical analysis of the Draft EIR. Section 3.10, *Hydrology and Water Quality* in the Draft EIR analyzes groundwater levels, quality and sustainable management of the Kern County Sub-basin. In addition, Appendix H to the Draft EIR provides supporting data to substantiate how the proposed project would not significantly impact groundwater levels, quality or management, and supports sustainability within the Sub-basin. The proposed project would result in a net increase of groundwater within the basin. As described above, the proposed project is part of the Kern Groundwater Authority's GSP and is consistent with water management goals of California. Refer to Response to Comment BAK-10, above.

BAK – 12

The comment states that the Draft EIR is misleading and does not take into account pumping and extraction of water in connection with the project. The comment continues to state that the Draft EIR fails to consider or account for the fact that water used in the project or lost to the project would have to be replaced, "most likely through increased pumping from the overdrafted groundwater basin". The comment states that the project would not create new water supplies or result in an increase in water in the basin. The comment then states that the Draft EIR does not identify or account for the critically overdrafted condition of the basin, the coordinated GSP, lost recharge from the transfer of water supplies out of the area, or localized impacts on water levels from extractions in connection with the project.

The comment is misinformed as the Draft EIR describes and analyzes the project's proposed pumping/extraction of water via proposed recovery wells and potential recharge/additional storage through the proposed recharge basins. Section 2.4.3, page 2-10 of the Draft EIR describes the recovery facilities component of the proposed project, which includes up to 12 extraction wells with an annual recovery capacity of up to 50,000 AF. Section 2.4.2, page 2-7 of the Draft EIR describes the proposed recharge facilities which area estimated to recharge and store upwards of 100,000 AFY of water into the Sub-basin.

The proposed project would not result in water supply losses for other entities that would need to be replaced through increased pumping. Refer to Response to Comment BAK-3 regarding transfer of water supplies out of the area.

Refer to Responses to Comments BAK 10 and BAK-11 for a discussion of and reference to the overdrafted condition of the basin, GSP, water levels, and sustainable management of the basin.

BAK – 13

The comment states that transfers of local water supplies out of the basin would directly violate and contradict the goals, policies, and requirements of SGMA and principles, goals and objectives of GSPs submitted for the basin. The comment states that the Draft EIR fails to explain how the project relates to, supports and impacts SGMA requirements and the GSP. The comment states that the Draft EIR does not consider the impacts and effect of the project on the goals set forth in

the GSP for the entire basin, including the "master" GSP for the Kern Groundwater Authority GSA and the GSP for the Kern River GSA.

As discussed previously, the proposed project is a part of the Kern Groundwater Authority GSA's GSP. In regards to the transfer of local water supplies out of the basin, please refer to the response to Comment BAK-3. In response to how the proposed project supports the requirements of SGMA and GSP for the basin, refer to responses to Comments BAK-10 and BAK-11.

BAK – 14

The comment states that the Draft EIR fails to explain that the Kern Groundwater Authority only has jurisdiction over part of the Kern County Sub-basin, and its GSP is only a component of a larger GSP through coordination with other GSAs in the basin, including the Kern River GSA. The comment then states that the Draft EIR does not mention the Kern River GSA or the Kern River GSA's GSP and therefore, fails to discuss or consider how the project impacts or is consistent with coordinated GSP for the entire basin.

Page 2-4 of the Draft EIR describes how the proposed project is included in the Kern Groundwater Authority GSP, within the Rosedale-Rio Bravo Management Area, specifically. Further, pages 3.10-23 through 3.10-24 of the Draft EIR discusses how the Sub-basin includes 11 organized GSAs, and that six of those GSAs were elected to be included in the GSP. Section 3.10 of the Draft EIR explains that Kern Groundwater Authority members have sources of water supplies such as local streams, Kern River, State Water Project and Central Valley Project sources. Each member addresses their own individual water supply sources in greater detail in their individual management area plans along with how the beneficial users in their jurisdiction will participate in achieving sustainability.

The comment regarding not specifically mentioning the Kern River GSA as another GSA does not specifically address the environmental analysis contained in the Draft EIR or project operations. The comment is noted for the record.

BAK – 15

The comment states that the Draft EIR fails to identify, explain, and analyze in required detail the specific sources of water that would be utilized in the project and impacts associated with the use of those water supplies. The comment suggests that the water supply description in the Draft EIR violates the requirements of CEQA based on the holding in *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 432.

The comment is not supported by substantial evidence. The sources of water that **may** be utilized in connection with the proposed project are identified as whatever is or becomes available to the Authority at any time, and from time to time, from any source, potentially including federal, state, and local supplies (emphasis added; Section 2.4.2 pages 2-7 through 2-10). The Draft EIR goes on to discuss in greater detail those sources of supply deemed reasonably foreseeable, namely CVP water, the SWP water, and Kern River water (refer to Response to Comment BAK-3). Since this list is not exclusive, the Draft EIR states that the Authority will analyze the use of identified sources for project purposes to determine the need for and/or extent of future analysis (Section

2.4.2 page 2-9). Finally, the Draft EIR acknowledges that these sources of water "…include but are not limited to the following: federal, State, and local supplies through transfers, balanced and unbalanced water exchange agreements, water purchases or temporary transfers, supplies from the CVP, and high-flow Kern River water depending on annual hydrologic availability, water rights and regulatory considerations. Agreements would be made, as necessary, in advance of any water exchanges or transfers" (Section 3.16.3, page 3.16-7). The project description includes all the information required by CEQA to comprise an adequate description of the project without supplying extensive detail beyond that needed for evaluation and review of the environmental impacts (*CEQA Guidelines* §15124).

It is the intent of the Draft EIR to evaluate impacts of recharging water from all such sources to the extent that they are reasonably foreseeable (Section 2.4.2 page 2-7). Considering the larger project, even if some portion thereof is subject to legal challenge, avoids the pitfall of piecemeal review which is clearly prohibited. [See *California Native Plant Society v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603, 619-620; *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 165; *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 114; *Plan for Arcadia, Inc. v. City Council of Arcadia* (1974) 42 Cal.App.3d 712, 726]. Further, even if one or more legal challenge ultimately proves meritorious, such determination would not affect (i.e., increase) the environmental impacts of the proposed project. The Draft EIR examines the environmental effects of the larger project involving recharge water drawn from all known potential sources. If water from a particular source is unavailable for some reason, in whole or in part, recharge for project purposes may be reduced along with all associated environmental effects.

The comment cites *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 432 for the proposition that future water supplies must bear a likelihood of actually proving available, i.e., speculative sources and unrealistic allocations are insufficient bases for decision-making under CEQA. *Vineyard* involved construction of a large development tract. The principal disputed issue was how firmly future water supplies for the proposed project must be identified or, to put the question in reverse, what level of uncertainty regarding the availability of water supplies can be tolerated in an EIR for a land use plan. The proposed project is not a development project, and water supplies for the project are different from water supplies for a development project. As discussed in the Draft EIR Section 5.4, the proposed project would not be capable of providing water every year and therefore cannot support continuous demands associated with population growth. As also discussed in the Draft EIR Section 3.10, extraction would be limited to the amount previously recharged less losses. Unlike a development project which will represent a continuous firm demand, the proposed project would not support a firm demand but an enhancement of IRWD's ability to respond to drought conditions and potential water supply interruptions, and operational flexibility for implementation of Rosedale's Conjunctive Use Program. Clearly, *Vineyard* has no application to the proposed project but, even if it did, the Draft EIR would not be deficient even if the various water supplies fail to materialize. The Draft EIR examines the environmental effects of the larger project, i.e., recharge and recovery of various sources of water foreseeably available. The project potentially provides IRWD with supplemental supplies that can be used under scenarios such as

MWD shortage due to drought, catastrophic failures of water conveyance infrastructure, or water quality issues in the SWP, and then only if and to the extent water has been banked in the project. It would also provide Rosedale with operational flexibility by augmenting the recharge, storage, and extraction capacity of Rosedale's Conjunctive Use Program to assist with fulfillment of its mission of maintaining groundwater levels within its service area and its obligations to existing participants in its Conjunctive Use Program. *Availability* of supplies for the project is evaluated, not as to availability to provide a part of the normal supply as they would need to be for a development project, but as opportunities for exchanges or transfers that may be available on a short term or long term basis for recharge and banking. Replenishment of the bank can be timed by the Authority according to these opportunities. If access to a particular source is ultimately determined to be legally impermissible for some reason, in whole or in part, project operations may be reduced along with potential environmental effects. Considering the larger project, even if the same is subject to legal challenges, avoids the pitfall of piecemeal review.

BAK – 16

The comment states that the Draft EIR fails to identify and review the agreements, judgements, orders, policies and practices which govern and control the diversion and use of water from the Kern River, along with the source and nature of Kern River water to be used under the proposed project. The comment further states that the Draft EIR fails to identify water rights holders on the Kern River, the extent of their rights, and the specific water rights and supplies that the Authority would use for the project. The comment states that without this critical information, the Draft EIR cannot properly review impacts to the Kern River and local suppliers.

The comment fails to identify any omissions and errors, significant or otherwise, and is not supported by substantial evidence. For IRWD, the Draft EIR specifically identifies pre-1914 Kern River water made available through an Exchange Program with Buena Vista Water Storage District (BVWSD) as a potential source of water if the agreement is extended to include the project lands (Section 1.4.3 page 1-13; Section 2.4.2 page 2-9). For Rosedale, the Draft EIR specifically identifies Kern River water made available to Rosedale through water service agreements with the City and from BVWSD and other Kern River interests through banking and temporary water service agreements (Section 2.4.2 page 2-9). For both it is clearly stated that the actual availability of Kern River water for project purposes may depend on appropriate arrangements with the holders of these appropriative water rights as well as entities having jurisdiction over them (Section 2.8 page 2-20; Section 3.16.3 page 3.16-7). Given these limitations, there is no reason to assume that Kern River water rights would be a water source for the proposed project. The Draft EIR also states that Kern River surface water that may be available for the proposed project could occur when this water (1) is offered to all takers willing to sign a "Notice/Order"; or (2) is offered to the Kern River/California Aqueduct Intertie for disposal; or (3) is expected to flood farm acreage; or (4) is expected to be delivered into the Kern River Flood Channel for disposal out-of-county (Section 2.4.2 page 2-9). In addition, the Draft EIR lists multiple potential sources of water for the project in Section 2.4.2, including the CVP and SWP. Please also refer to Response to Comment BAK-15.

Details as to how, where, when and in what quantities specific amounts of Kern River water would be or become available for project purposes depend on many variables, are speculative and cannot be provided. Neither is this information required for a project that is not dependent on the availability of Kern River water at any particular time or at all (14 Cal. Code Regs. §15124). The proposed project does not require the availability of Kern River water to function but clearly contemplates that the Authority would work with, not against, the Kern River water right holders and the Kern River Watermaster to minimize any loss of local water supplies that might occur in the absence of the proposed project (Section 2.4.2 page 2-9, 2-10; Section 3.16.3 page 3.16-7).

BAK – 17

The comment states that the Draft EIR fails to disclose that, under the State Water Resources Control Board (SWRCB) WR Order 2010-10, the Kern River is no longer fully appropriated. The comment states that Rosedale has failed to mention that they, along with other competing entities, have filed an application to appropriate some or all of "surplus" Kern River water supplies. The comment then states that the Draft EIR fails to discuss the alternate uses of those water supplies proposed by the other parties who submitted applications.

With respect to any interpretation of SWRCB rulings, the comment does not involve environmental impacts and is, therefore, beyond the scope of the Draft EIR. The Authority acknowledges that Rosedale has filed an application to appropriate Kern River water. The Kern Water Bank Authority's Conservation and Storage Project, which is dependent upon the KWBA's water rights application, is included in the list of cumulative projects evaluated in the Draft EIR (see Table 3-2). The proposed project does not include or depend upon the Kern River water for which these, or other, applications seek to secure water rights, including Rosedale's application. The proposed project is not dependent on the availability of Kern River water in any particular amount, at any particular time, or at all. Since the project is not a water rights project, the Draft EIR need not assess other potential competing uses for unappropriated Kern River water.

BAK – 18

The comment states that the Draft EIR fails to identify, discuss and review the impacts from the use of unappropriated Kern River water supplies for which Rosedale has submitted application to SWRCB, including secondary and associated impacts involving the transfer of those Kern River water supplies to Rosedale by the project. The comment then states that the Draft EIR fails to consider and review the competing applications to appropriate Kern River water in connection with the discussion of alternatives, and cumulative impacts associated with the project.

Please refer to Responses to Comments BAK-17, BAK-71, and BAK-102.

BAK – 19, BAK – 20, BAK – 21, BAK – 22

The comment states that, given the close relationship between Rosedale and the City, the proposed project would necessarily have significant impacts on the City and its water supply. The comment also states that the proposed project is located adjacent to the City's primary recharge facility, the 2800 Acre Recharge Facility "2800 Acres," and the Kern River, the City's primary

water source. The comment also states that the water supplies of the City and other water suppliers, including banked and stored Kern River water would be impacted. Last, the comment suggests that the project would likely affect flows of the Kern River, and the environment in and around the Kern River within the City, and that the Authority has not completed an accurate assessment of Project impacts on the environment and is therefore in violation of CEQA.

The proposed project would not cause a reduction in the City's water supply. The proposed project would use water from the SWP, CVP, and Kern River as explained in Response to Comment BAK-15 above; the project's opportunistic use of water would not affect other water users or local water supplies, including the City. As stated in the Draft EIR starting on page 2-9, the proposed project would use appropriative water rights, including pre-1914 and post-1914 water rights and other Kern River water also depending on availability. As stated in the Draft EIR, pre-1914 and post-1914 water rights can be transferred to other parties as long as legal users of water are not injured ("no injury rule," per Water Code Sections 1706 and 1702). The Draft EIR explains how the State Water Resources Control Board (SWRCB) supervises transfers of appropriative water rights, and when the SWRCB is required to make a finding that the transfer will not result in unreasonable effects on fish or wildlife or other in-stream beneficial uses. Operation of the project would not result in the need for other entities such as the City to pump water or otherwise replace water. As a result, no associated environmental impacts would occur that have not been analyzed in the Draft EIR. The Draft EIR is therefore not in violation of CEQA (see also Response to Comment BAK-4). Furthermore, groundwater banking projects are designed to maintain a positive project balance such that no net water would be removed from the basin. Water banks only recover water up to the amount previously banked minus an amount to account for losses to the basin. Thus, long term trends have shown improvements in groundwater levels, when compared to a no-project condition (see Section 3.10 starting at page 3.10-38). See also Responses to Comments BAK-64, BAK-65, and BAK-66.

The Draft EIR addresses regional groundwater banking projects in Kern County, including the City's 2800 Acres project, on page 3-9. Discussion of the groundwater model, impacts to groundwater pumping, and cumulative groundwater impacts starts on pages 3.10-27, 3.10-38, and 3.10-45, respectively. In general, as a groundwater banking project that requires recharge prior to extraction, the proposed project would not affect the City's water supplies as a result of groundwater pumping. However, groundwater pumping would result in localized impacts to groundwater levels at wells surrounding the proposed project sites. Impacts were determined to be less than significant without mitigation.

BAK – 23

The comment cites legal principles from California case law and State Guidelines. The comment asserts that the Authority has not made a good faith effort at full disclosure and discussion of the impacts of the project; instead, the Authority has apparently attempted to obscure and hide the details of various elements and components of the project, so as to avoid or minimize the discussion and disclosure of various impacts from the project, including the transfer of local water supplies to Southern California.

The comment is argumentative, not supported by substantial evidence, and grossly inaccurate. Please refer to Response to Comment BAK-4 regarding good faith effort to disclose environmental impacts. See also Responses to Comments BAK-19 through BAK-22, and BAK-3 regarding the transfer of local water out of Kern County and project effects to local water supplies.

The comment does not specifically connect the cited authority to the Draft EIR or otherwise involve environmental impacts and thus, no response is required.

BAK – 24

The comment states that the Draft EIR ignores the fact that the project would have a significant negative impact on surface water supplies, overdrafted local groundwater basin, the City and other entities that currently use the water subject to use in the project, and the local environment, including the environmentally-sensitive Kern River corridor and riparian habitat.

Please refer to Responses to Comment BAK-3, BAK-19 through BAK-22 and BAK-64, BAK-65, and BAK-66.

BAK – 25

The comment states that the Draft EIR also fails to consider secondary impacts associated with the change in use of Kern River water supplies, including impacts associated with increased pumping, environmental damage and replacement water supplies, in the areas and districts that formerly utilized the water proposed for use in the project.

Please refer to Responses to Comment BAK-3, BAK-12, BAK-19 through BAK-22, and BAK-71.

BAK – 26

The comment states that the Draft EIR fails to properly consider reasonable, feasible alternatives for the Project, including the "no project" alternative, fails to properly or sufficiently review cumulative impacts arising from the Project, and fails to provide any meaningful discussion or analysis of mitigation measures and known "areas of controversy."

Please refer to Responses to Comments BAK-90 through BAK-112 for a detailed discussion of concerns related to the alternatives analysis, cumulative impacts, and areas of controversy.

BAK – 27

The comment states that the Draft EIR fails to serve as an informational document, or as a document which accurately and completely assesses the impacts of the project on the environment. The comment states that the Draft EIR instead appears intended to act primarily as an advocacy document to support and advocate for Rosedale's transfer of water supplies out of the area. The comment states that the Draft EIR violates the principle that "[a]n EIR is not a document of advocacy but of information." (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 738.)

The comment does not specify how the Draft EIR fails to serve as an informational document or is an advocacy document in support of the Authority's transfer of water out of the area. Please refer to Responses to Comments BAK-3, BAK-4, BAK-6 BAK-19 through BAK-22.

BAK – 28

The comment states that the Draft EIR fails to identify the current uses of the water supplies proposed for use in the project.

Refer to Response to Comment BAK-15.

BAK – 29

The comment states that the Draft EIR fails to provide information on the Kern River water supplies, Kern River water rights, current right holders, competing uses of the Kern River and other related information. The comment states that the Draft EIR does not provide the necessary information about operation and management of the Kern River and prior rights and agreements of river regulation. Last, the comment states that the Draft EIR fails to discuss sources of water that would replace or substitute supplies that would be used under the proposed project.

Refer to Responses to Comments BAK-3, BAK-6, BAK-7, BAK-12, and BAK-16.

BAK – 30

The comment states that project description focuses more on the physical components of the project, and construction of those physical components, instead of focusing on water supplies for the project, the use of water in connection with the project, or impacts associated with and arising out of the acquisition, use and transfer of water for and from the project.

Refer to Response to Comments BAK-15 and BAK-16.

BAK – 31

The comment states that the Draft EIR, fails to explain how, where and to what extent water produced by the project would provide ecosystem and water supply benefits.

Refer to Response to Comment BAK-9.

BAK – 32

The comment states that the Draft EIR fails to discuss when and to what extent surplus surface water from the SWP, CVP, Kern River and other available water sources would be available for use by the project.

The Draft EIR includes a description of the conditions under which surplus surface water from the SWP, CVP, and Kern River may be available as source water for recharge in the proposed project on pages 2-3 through 2-10.

Refer to Response to Comment BAK-15 regarding the discussion of potential water supplies for the proposed project.

BAK – 33

The comment states that the Draft EIR fails to provide information regarding Rosedale's water rights, other Kern River water rights and supplies, and the use of water from the Kern River, which does not meet CEQA requirements. The comment cites legal principles with reference to California case law *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 431 and *California Oak Foundation v. City of Santa Clarita* (2005) 133 Cal.App.4th 1219, 1244. The comment suggests that the water supply description in the Draft EIR violates the requirements of CEQA based on the holding in *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412 as further explained in *California Oak Foundation v. City of Santa Clarita* (2005) 133 Cal.App.4th 1219, 1244.

Please refer to response to Response to Comment BAK-15 regarding how water supply was addressed in the Draft EIR.

In the *Vineyard* case, since houses require a firm water supply, and since the proposed water supply was not firm, discussion of alternatives was considered necessary. Ultimately, the court found that in the *Vineyard* case, the FEIR's long-term water supply discussion suffered from lack of substantial evidence to support its key factual conclusion. The court stated: "On the factual question of how future surface water supplies will serve this project as well as other projected demand in the area, the project FEIR presents a jumble of seemingly inconsistent figures for future total area demand and surface water supply, with no plainly stated, coherent analysis of how the supply is to meet the demand….In this respect, the FEIR water supply discussion fails to disclose 'the 'analytic route the ... agency traveled from evidence to action' and is thus not 'sufficient to allow informed decision making.'" [*Vineyard*, 40 Cal.4th at pp. 444-445]. Here, the proposed project does not demand a firm water supply and, even if it did, the analytic route from evidence to action is clearly provided.

BAK – 34

The comment explains that courts have previously invalidated EIRs that did not contain sufficient information and details about water supplies proposed for use in a project, and which did not adequately discuss uncertainties associated with water supplies. The comment cites legal principles with reference to California case law *Planning & Conservation League v. Department of Water Resources* (2000) 83 Cal.App.4th 892, 908, fn. 5. And *Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (2003) 106 Cal.App.4th 715, 722.

Please refer to Response to Comment BAK-15 regarding how water supply was addressed in the Draft EIR.

The comment does not specifically address the environmental analysis contained in the Draft EIR. The cases cited are not applicable because the project is not a development project and is not dependent on any firm annual supply. The comment is noted for the record.

BAK – 35

The comment explains that an EIR also cannot rely on information that is not either included or

described and referenced in the document then cites legal principles with reference to California case law *Vineyard Area Citizens for Responsible Growth, Inc., supra*, 40 Cal.4th at 442 *and San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 659.

The comment does not specifically address the environmental analysis contained in the Draft EIR. All information and data used to support the analysis in the Draft EIR is either cited or appended to the Draft EIR. The comment is noted for the record.

BAK – 36

The comment states the brief and vague description of water supplies to be used in the Project violates requirements for the description of water supplies in an EIR. The comment cites legal principles with reference to California case law *Vineyard*, 40 Cal.4th at 432. The comment states that the Draft EIR does not provide the public, and decision-makers, sufficient information to determine (1) the pros and cons of supplying the amounts of water needed for the project from various sources, (2) long term water demands, and potential supplies, (3) the likelihood that the identified water sources will actually be available, and (4) possible replacement or alternative sources if the identified water sources are not available.

Please see Response to Comments BAK- 15, BAK-33 and BAK-34. The description of water supplies in both Section 2.4 of the Project Description and Section 3.10, Hydrology and Water Quality are neither vague nor incomplete. Thus it follows that the description of supplies is adequate.

BAK – 37

The comment cites legal principles with reference to California case law *San Joaquin Raptor/Wildlife Rescue Center* 27 Cal.App.4th at 729.

The comment does not specifically address the environmental analysis contained in the Draft EIR. The case cited is not applicable because the project is not a residential development project that is dependent on an annual supply. The comment is noted for the record.

BAK – 38

The comment cites legal principles with reference to California case law *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 864, 881.

Please see response to Comments BAK- 15, BAK-33 and BAK-34. The comment does not specifically address the environmental analysis contained in the Draft EIR. The comment is noted for the record.

BAK – 39

The comment cites legal principles with reference to California case law *California Oak Foundation*, 133 Cal.App.4th at 1226.

The comment does not specifically address the environmental analysis contained in the Draft EIR. The case cited is not applicable because the project is not a development project that is dependent on an annual supply. The comment is noted for the record.

BAK – 40

The comment continues to state that without relevant or accurate information regarding the status and extent of Kern River water rights, it is not possible to determine how the project would impact the existing Kern River water rights, water right holders or Kern River water supplies.

The proposed project would not impact Kern River water right holders. See Responses to Comments BAK-16, BAK-19 through BAK-22, and BAK-76.

BAK – 41

The comment reiterates proposed uses of water supplies by IRWD as described in the project description. The comment states that the daft EIR is lacking specific detail about intended use of project water, in particular use in Orange County (IRWD Service Area).

Section 2.4.2 adequately describes the intended use of recharged water for both Rosedale and IRWD. The project would not transfer water to Orange County. Please refer to Responses to Comments BAK-3 and BAK-6.

BAK – 42

The comment states that the Draft EIR fails to include other necessary and significant details regarding the project, notably the locations of proposed conveyance facilities. The comment states that it is not possible to determine project impacts without the actual location of new facilities.

Figure 2-1 of the Draft EIR shows the area where the proposed conveyance facilities would be located. For the purposes of CEQA, the proposed conveyance facilities area was defined and delineated to assess the potential impacts of implementing the Kern Fan Conveyance Facilities. In response to comments from DWR, Figure 2-1 has been revised to clarify the segment of the Aqueduct where the proposed turnout would be located. As described in Section 6.2 of the Draft EIR, the entire area available to implement proposed conveyance facilities has been extensively evaluated in the project's 2020 Feasibility Report (IRWD and Rosedale 2020). Implementation of the proposed conveyance facilities are adequately evaluated in all environmental resources sections of the Draft EIR.

BAK – 43

The comment states that the Draft EIR fails to disclose how much water could be recharged in connection with the project each month, or year, or the rate of recharge. The comment further states that the Draft EIR fails to disclose expected rate of recovery, or quantities expected to be recovered each month, or year, in general, and in particular types of water years.

Page 2-6 of the Draft EIR states that the project may be able to recharge and store upwards of 100,000 acre-feet per year. The exact rate by month is dependent on many factors as described in

Section 2.4.2 of the Draft EIR. Page 2-10 of the Draft EIR states that the project has an estimated recovery rate of approximately 5 to 6 cubic feet per second with a capacity of up to 50,000 acre feet per year. Similar to unknown recharge specifics, the Draft EIR cannot speculate the exact amount of recovery by month or water year, and therefore, can only include estimates to the degree known based off historical data and current and future studies of the area.

BAK – 44

The comment states that the Draft EIR fails to identify potential exchange partners, or details of any potential exchanges.

Recovery and recharge by way of exchange is discussed in detail on pages 2-6, 2-9 and 2-17 of the Draft EIR. Please also refer to Responses to Comments DRWD-3 and KCWA-4.

BAK – 45

The comment states that the Draft EIR fails to provide details or information regarding extraction and use of water from the project by IRWD and does not identity the quantities of water that would be recovered by IRWD and rate of extraction.

For IRWD, water recovered from the proposed extraction wells would be conveyed via the new Kern Fan Conveyance Facilities, or any other available facility, for subsequent conveyance to IRWD, IRWD's program partners, and Rosedale's program partners. (Draft EIR page 2-18). IRWD's normal potable supplies are a combination of local groundwater and imported water. IRWD feeds these supplies to its single, integrated distribution system, divided into pressure zones by elevation. IRWD aggregates its demands and supplies throughout its service area and does not allocate specific supplies to cities or other distinct portions of the service area. In a supply shortage scenario in which recovery from the project would be used for supply enhancement, the recovered water or water exchanged for the recovered water would reach IRWD's distribution system through its imported water service connections and could be delivered anywhere in the service area. An operational outage within the MWD supply or delivery system is not predictable as to what areas may be affected. However, as explained in Section 2.6.4 of the Draft EIR, MWD, as the State Water Contractor that imports water to IRWD's service area, would access water from the California Aqueduct at Lake Perris where it would then be conveyed to IRWD's delivery system through an existing turnout. As also discussed in the Draft EIR at Section 2.6.4 and Section 3.10, water recovered from the proposed bank would be subject to the pump-in water quality requirements imposed by the KCWA and DWR for introduction in the California Aqueduct, just as all other imported water transmitted through the delivery system to Southern California, and the water would travel into and through the MWD system and be mixed with other imported water. Thus the water recovered from the project bank would be in the same delivery system with other imported water, and there would be no impact on the environment in IRWD's service area as a result of delivery to and use of the recovered water in IRWD.

BAK – 46

The comment states that the Authority's failure to provide a complete, clear project description constitutes a clear and obvious violation of CEQA. The comment cites legal principles from the following California case laws to support this claim: *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 730; *Sierra Club v. City of Orange* (2008) 163 Cal.App.4th 523; *County of Inyo*, supra, 71 Cal.App.3d at 192-193; *Santiago County Water Dist. v. County of Orange* (1981) 118 Cal.App.3d 818, 830; *Laurel Heights Improvement Association v. Regents of University of California* (1988) 47 Cal.3d 376, 399-400; *San Joaquin Raptor/Wildlife Rescue Center*, supra, 27 Cal.App.4th at 729.; *County of Amador v. El Dorado County* (1999) 76 Cal.App.4th 931; *McQueen v. Board of Directors* (1988) 202 Cal.App.3d 1136, 1143; *Cadiz Land Co. v. Rail Cycle, L.P*. (2000) 83 Cal.App.4th 74; and *Santiago County Water Dist. v. County of Orange* (1981) 118Cal.App.3d. 818, 829.

The suggestion that the project description is incomplete is not supported by substantial evidence. The Draft EIR includes an Introduction and a clear, accurate Project Description (Chapters 1 and 2) that include all the information required by CEQA to comprise an adequate description of the project without supplying extensive detail beyond that needed for evaluation and review of the environmental impacts (CEQA Guidelines Section 15124). According to the CEQA Guidelines, an EIR should include (1) a detailed map of the location and boundaries of the proposed project as well as a regional map; (2) a statement of the objectives of the proposed project; (3) a general description of the project′s characteristics; and (4) a brief statement describing the intended uses of the EIR (CEQA Guidelines Section 15124). The CEQA Guidelines do not require maps of the actual footprints of facilities. The Draft EIR includes all of these project description requirements. A detailed map of the project site location and the regional location is included as Figure 2-1. The Draft EIR includes the goals and objectives of the proposed project on page 2-3. A general description of the proposed project and its components are included on page 2-6 through 2-14; implementation of the proposed project is described in the Draft EIR on page 2-14 through 2-19. A list of the discretionary actions and approvals for which the Draft EIR will be used is included on page 2-20.

BAK – 47

The comment suggests that the Draft EIR does not describe the "entire project" and, therefore, the Authority has engaged in improper piecemealing in violation of CEQA. The comment cites legal principles based on California case law *City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438, 1450; *County of Inyo*, 71 Cal.App.3d at 193; *Orinda Association v. Board of Supervisors* (1986) 182 Cal.App.3d 1145, 1171; *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428].

This comment does not connect the cited authority to the Draft EIR or otherwise raise any specific environmental issues. Thus, no response is required. The comment is noted for the record. Also see Response to Comment BAK-15 regarding piecemealing.

BAK – 48 and BAK – 49

The comment states that the Draft EIR fails to comply with CEQA because it fails to provide any information on certain baseline conditions in the project area, or only provides a brief, general and incomplete description of baseline conditions.

The comment does not specify what information the Draft EIR does not include with respect to baseline conditions, nor does it connect the cited authority to the Draft EIR. For each environmental resource evaluated in the Draft EIR in Chapters 3 and 4, the baseline conditions are explained as part of the Environmental Setting. The Environmental Setting includes both regional and local environmental conditions. This format is explained on page 3-2 of the Draft EIR.

BAK – 50

The comment expresses dissatisfaction with the Draft EIR's identification of baseline conditions in Rosedale's service area and Irvine, and states the Draft EIR is deficient in its analysis of impacts to the Kern River.

See Responses to Comment BAK-3, BAK-19 to BAK-22, BAK-48, BAK-49, and BAK-64 to 66.

BAK – 51

The comment states that the Draft EIR is incomplete and in violation of CEQA for inadequate project description and baseline discussion, and assessment of project impacts.

See Responses to Comment BAK-3, BAK-19 to BAK-22, BAK-46, BAK-48 and BAK-49.

BAK – 52

The comment cites legal principles from California case law and State Guidelines [14 Cal. Code Regs. § 15362; 14 Cal. Code Regs. §§ 15126.2(a), 15130; Pub. Res. Code§§ 21060.5, 21061; *Environmental Planning and Information Council v. County of El Dorado* (1982) 131 Cal.App.3d 350, 354; 14 Cal. Code Regs. §15151; *Napa Citizens for Honest Government. v. Napa County Board of Supervisors* (2001) 91Cal.App.4th342, 356; *Laurel Heights Improvement Assn.*, 47 Cal.3d at 392]. The comment concludes with the assertion that the Authority has not made a good faith effort at full disclosure and discussion of the impacts of the project; instead, the Authority has apparently attempted to obscure and hide the details of various elements and components of the project, so as to avoid or minimize the discussion and disclosure of various impacts from the project.

The comment is argumentative, not supported by substantial evidence, and grossly inaccurate. Please refer to Response to Comment BAK-4 regarding good faith effort to disclose environmental impacts.

The comment does not specifically connect the cited authority to the Draft EIR or otherwise involve environmental impacts and thus, no response is required.

BAK – 53

The comment states the Draft EIR is fundamentally flawed because it does not acknowledge that the project would decrease the City's water supply or analyze associated impacts. The comment states that the Draft EIR does not analyze the impact of using the potential water sources on the environment, other water users, and local water supplies. The comment states that the Draft EIR does not satisfy CEQA requirements for a large water supply and storage project as articulated in *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007).

Please see Response to Comment BAK-19 through BAK-21 for responses regarding decreases in water supplies for the City and other water suppliers and associated environmental impacts.

With regard to evaluation of supplies and the application of the *Vineyard* decision, please see Response to Comment BAK-15.

BAK – 54

While the comment states that the Draft EIR dismisses many impacts on the environment, it does not provide evidence for conclusions, and it does not provide specific instances of claimed deficiencies. It is therefore not possible for the Authority to provide an adequate response to this comment.

BAK – 55

The comment claims that the Draft EIR does not sufficiently identify and discuss in any detail the impact of the Project on other banking projects and programs in the area, groundwater levels, and related impacts on the basin and local water supplies as a result of the extraction of water in connection with the Project, and the transfer of water from the Project out of the region.

The Draft EIR describes regional groundwater banking projects in Kern County, including the City's 2800 Acres project, on Pages 3.9-4 and 3.9-5 and Figure 3.9-1. Impacts associated with the proposed groundwater pumping are described in the Draft EIR in Section 3.10.3, *Impacts Analysis and Mitigation Measures, Methodology, Groundwater Modeling*, and in Impact 3.10-2. In general, as a groundwater banking project that requires recharge prior to extraction, the proposed project would not affect the City's water supplies as a result of groundwater pumping. However, groundwater pumping would result in localized impacts to groundwater levels at wells surrounding the proposed project sites. The impact would be greatest directly adjacent to the recovery well sites and at the closest neighboring wells and would decrease with distance from the project sites.

Well 30S/25E-06K01, shown on Figure 3.10-7 in the Draft EIR, is located along the north side of City's 2800 Acres project. This well was included in the groundwater modeling effort and simulates the potential effect of recharge and recovery during a relatively low groundwater level period. As shown in the hydrograph for Well 30S/25E-06K01 in Figure 3.10-7, recharge would first raise the water level above the historic baseline conditions. Then, during the recovery ("period of pumping" on the hydrograph), water levels would return to baseline conditions. In addition, the model considered cumulative recovery impacts, where project recovery was occurring from proposed project wells at the same time as the Drought Relief Project (DRP),

Stockdale Project, and Kern Fan Groundwater Storage Project (KFGSP). As shown on Figure 3.10-10 in the Draft EIR, the maximum interference (cumulative impact) was modeled to be a decrease of about 2.5 feet, which is not expected to result in a significant impact, given that water levels in the regional wells fluctuate on the order of tens to hundreds of feet, as noted on Page 3.10-9 of the Draft EIR. Impacts were determined to be less than significant without mitigation.

With regard to the "transfer of water outside the district," the comment appears to be referring to the general prohibition of transferring groundwater from one basin to another. The comment may be referring to Kern County Code 19.118.070, which prohibits the transfer of "native groundwater" if it would result in an "unreasonable effect on the overall economy or the environment of any part of the county." This refers to the transfer of *groundwater* that originated from within the district to users outside of the district. However, in this case, the proposed project would be acquiring *surface water* that would be stored and then later recovered for use.

BAK – 56

The comment incorrectly claims that the Draft EIR does not provide data and information to support that the proposed project would provide a groundwater level benefit, and specifically identifying the potential rate of extraction, timing of extraction, conditions for extraction, and location of extraction facilities as missing information.

Draft EIR in Section 3.10.3, *Impacts Analysis and Mitigation Measures, Methodology, Groundwater Modeling*, discusses the potential rates of extraction and the proposed number and location of recovery wells. The proposed (although not finalized) location of the recharge areas and recovery wells are shown on Figure 3.10-7. For the purpose of the model, the timing of the extraction is assumed to be two ten-month time periods. However, the actual recovery timing would depend both on water having been previously banked and needs of the users; the actual recovery timing cannot be speculated upon at this time.

BAK – 57

The comment states that the Draft EIR only evaluates localized impacts on groundwater resources within Rosedale and the project area and adjacent wells and does not evaluate longer term impacts on the groundwater basin or groundwater levels and quantities farther removed from the project areas.

The Draft EIR evaluates the extent to which operating the proposed project would affect groundwater levels in Section 3.10.3, *Impacts Analysis and Mitigation Measures, Methodology, Groundwater Modeling*, and in Impact 3.10-2. As discussed above under the response to BAK-55, the localized impacts would be greatest directly adjacent to the project sites and would decrease with distance from the project sites. The longer-term impacts to the Kern County sub-basin due to operating the project in conjunction with other groundwater banking programs are discussed as part of the analysis of cumulative impacts in Impact 3.10-6.

The analysis considers other groundwater banking programs in the Kern Fan area, identified on Pages 3.10-4 and 3.10-5, and shown on Figure 3.10-1. Impact 3.10-6 explains how groundwater

banking projects are designed to maintain a positive project balance such that no harm would result to other water banks, since water banks only recover water up to the amount previously banked minus an amount to account for losses to the basin.

BAK – 58

The comment notes that Draft EIR page 3.10-38 states that "Recovery would be limited to the amount previously recharged less losses, up to 50,000 AFY." The comment then claims that this does not take into account migration of water away from Project site and pumping of banked and stored water by neighboring water districts and water banks.

The "losses" referred to in the comment are precisely referring to water that is left in place and may migrate to outside of the project site, depending on groundwater flow directions and the location and nature of groundwater recovery by nearby banking operations and well users. However, groundwater does not count the stored water by the origination and ultimate destination of each individual molecule. Instead, the water is tracked on a water-in and water-out basis, much like a checking account, which does not track where a specific individual dollar in the banking account came from or goes to. Instead, the account only counts the volume of water (or dollars) that are in the account.

As previously explained in the Response to Comment BAK-55 and BAK-57, the analysis does consider the potential impacts to neighboring water districts and water banks, and concluded that the impacts would be less than significant.

BAK – 59

This comment states that the Draft EIR concludes without evidence that water levels would not decrease 30 feet or greater.

The comment is incorrect. The Draft EIR does not make the conclusion described in the comment. The Draft EIR describes the results of groundwater modeling conducted for the proposed project, including operation of other existing and neighboring groundwater banking projects as discussed in Section 3.10 as part of Impact 3.10-2 on pages 3.10-38 to 3.10-41. The Draft EIR also described the commitment that the project would be operated in accordance with various agreements and plans as part of the discussion of Impact 3.10-2 on page 3.10-41. Based upon the described results of groundwater modeling and the commitment that the proposed project would comply with the agreements and plans contained within Appendix B, the Draft EIR concludes that the proposed project would not have adverse localized effects to groundwater supplies and would support sustainable groundwater management of the basin.

BAK – 60

The comment states that the Draft EIR does not sufficiently describe the local groundwater basin or consider other uses of or burdens on the basin. The comment states that the Draft EIR does not identify other entities that pump water from the basin, describe the quantities and timing of groundwater extractions from the basin, or discuss the impact of pumping of other parties on the basin in connection with the proposed project.

The local groundwater basin, namely the Kern County Sub-basin of the San Joaquin Valley Groundwater Basin, is described in the Draft EIR on Pages 3.10-2 through 3.10-13. The regional and local setting discussions include both regional and project-site specific information about hydrogeology and groundwater levels; groundwater banking, recharge, recovery, and storage; and groundwater quality. The other entities that pump from the basin are identified on Page 3.10-4 and 3.10-5, and shown on Figure 3.10-1. Groundwater recovery operations in the Kern Fan area are discussed on Page 3.10-4 through 3.10-7, and 3.10-9 through 3.10-13. Hydrographs of two wells are shown on Figure 3.10-3, which show groundwater level history from 1981 through 2019. The impact of pumping associated with the proposed project together with pumping associated with other entities and groundwater banking programs are discussed as part of the cumulative impacts analysis in the Draft EIR on pages 4-13 through 4-15.

As discussed in Section 3.10.3, *Impacts Analysis and Mitigation Measures, Methodology, Groundwater Modeling*, and in Impact 3.10-2, the groundwater model does model the impact of pumping of other parties on the basin in connection with the proposed project. The analysis concluded the impacts to be less than significant.

BAK – 61

The comment states that the Draft EIR relies on historical groundwater pumping data that is not reasonable in the present situation due to the long-term drought, which is increasing pumping and leading to new banking projects and facilities. The comment states that the reliance on past historical data does not accurately assess the impacts of the proposed project.

The Draft EIR includes a description of the justification for using the range of historical groundwater conditions as its baseline in Section 3.10.3, *Impacts Analysis and Mitigation Measures, Methodology, Groundwater Modeling*, and in Appendix H, *Hydrogeological Analysis*. The period chosen includes historical low and historical high groundwater conditions. In particular, note that the model evaluated recovery during the period of time with the lowest recorded water levels during 2015 to 2016. This was done to simulate a worst-case scenario and evaluate the maximum potential effects.

BAK – 62

The comment incorrectly states that the Draft EIR simply assumes that any adverse impacts would be mitigated.

Firstly, as explained by the results of the groundwater modeling discussed in Section 3.10.3, *Impacts Analysis and Mitigation Measures, Methodology, Groundwater Modeling*, and in Appendix H, *Hydrogeological Analysis*, and analyzed in Impact 3.10-2 and 3.10-6, the proposed project by itself or in conjunction with other projects would not have any significant impacts that would require mitigation.

Secondly, as discussed in the *Memorandums of Understanding* and the *Long Term Operations Plan* provided in Appendix B, *Rosedale Operation Plans*, Rosedale has agreed to specific requirements to monitor the project's impacts and adjust the operations or take other actions as needed. These action are project design features that legally require Rosedale to carefully manage

their operations so as to not adversely affect neighboring banking operations of well users. Consequently, mitigation measures are not required and would be duplicative of the agreements.

BAK – 63

This is a summary comment that repeats many of the comments addressed above in the Responses to Comments BAK-55 through BAK-62.

BAK – 64, BAK – 65, BAK – 66

The comment states that the Draft EIR reveals that the proposed project would use substantial quantities of Kern River water and that the Draft EIR does not analyze the impacts on the Kern River, including impacts on the quantity and timing of flows in the Kern River, the environment in and around the Kern River including plant and animal life, the aquifer underlying the Kern River, and the patterns of diversion and use of water from the River.

The Kern River is not the primary source of recharge water for the proposed project. As described in the Draft EIR starting on page 2-9, there are many potential water sources for the project, including the Central Valley Project, the State Water Project, and other appropriative water rights. Kern River water is not necessary for implementation of the proposed project.

Surface water hydrology and water quality for the Kern River are generally described in the Draft EIR on pages 3.10-2 and 3.10-3. The proposed project itself would not change patterns or practices of water diversion from the Kern River, and as such, would not affect flow in the Kern River. As a result, the proposed project would have no impact on baseline Kern River flow and as such was not evaluated in the Draft EIR. Therefore, the environment in and around the Kern River, including plant and animal life and aquifer underlying the Kern River, would not be affected by the proposed project.

The proposed project would use Kern River water, if and when available, through transfers or other agreements with entities that hold existing rights to Kern River water. The entities with Kern River water rights are responsible for developing programs that demonstrate how Kern River water will be used, and for preparing environmental documentation that evaluates the impacts of such programs. Kern River water utilized by the proposed project would occur consistent with the requirements of such environmental documentation.

BAK – 67

The comment states that the plan to use substantial quantities of Kern River water for a new water banking project would necessarily result in changes, and impacts, in the diversion and use of water from the Kern River, which changes would necessarily have an impact on the Kern River.

The proposed project is not dependent on the availability of Kern River water in any particular amount, at any particular time, or at all. Thus, implementation of the proposed project would not "necessarily result" in the changes and impacts described. Please also see Responses to Comments BAK-64 to BAK-66.

BAK – 68

The comment cites legal principles with reference to California case law [*Napa Citizens for Honest Government*, 91 Cal.App.4th at 386; *County of Amador,* 76 Cal.App.4th at 948; *Friends of the Santa Clara River v. Castaic Lake Water Agency* (2002) 95 Cal.App.4th 1373; *Santiago County Water District*, 118 Cal.App.3d at 831]. The comment does not specifically address the environmental analysis contained in the Draft EIR.

The comment cites legal principles with reference to California case law [*Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099]. The comment states that the analysis of impacts of the project on Kern River flow is incomplete for the same reasons as found in cited case law. Unlike the facts of the cited authority, the proposed project would not cause a reduction in the surface flows of a stream. Please see Responses to Comments BAK-64 to BAK-66.

BAK – 69

The comment notes that certain other agencies may have approval authority over the use of appropriative rights for project purposes and requests further information about such rights. Appropriative water rights are discussed in the Draft EIR starting on page 2-9. The Draft EIR states on page 2-9 that pre-1914 and post-1914 appropriative water rights can be transferred to other parties as long as the legal users of water are not injured (per Water Code Section 1706 and 1702). Also, regarding Kern River water rights, please see Responses to comments BAK-64 to BAK-66.

BAK – 70

The comment states that the Draft EIR should review project impacts on entities that have submitted competing applications to appropriate Kern River water, including Rosedale's application.

The proposed project does not include or depend upon the Kern River water for which the noted applications seek to secure water rights, including Rosedale's application. The proposed project is not dependent on the availability of Kern River water in any particular amount, at any particular time, or at all. The conditions under which Kern River water may be used for recharge in the proposed project is explained in the Draft EIR on page 2-9.

BAK – 71

The comment states that the Draft EIR fails to review secondary environmental impacts as a result of replacement of water supplies displaced by the project.

The proposed project would not affect existing Kern River water rights or water supplies associated with such water rights. The conditions under which Kern River water may be available to the proposed project during wet years, is explained in the Draft EIR on page 2-9. The proposed project would not cause a reduction in the surface flows of the Kern River or of any other entity's water supply. Operation of the proposed project would not result in the need for other entities to pump water or otherwise replace water. As a result, no associated secondary environmental impacts would occur for entities currently using Kern River water.

BAK – 72

The comment states that the Draft EIR should include complete and accurate information regarding groundwater conditions in the area and the proposed project's impacts on groundwater resources. The Draft EIR provides an accurate description of existing groundwater supplies starting on page 3.10-3, and addresses groundwater impacts that could result from the project on page 3.10-38 to 3.10-41, and 3.10-45 to 3.10-47.

BAK – 73

The comment expresses concern that the proposed project would involve the transfer of local water supplies out of Kern County to a large Southern California urban water district, and that the project proposes out-of-county water sales or transfers to the detriment of the local environment.

See response to BAK-3 and BAK-6.

BAK – 74

The comment assumes that the proposed project involves out-of-area transfers and criticizes the Draft EIR for failing to disclose or discuss impacts associated therewith.

See response to BAK-3 and BAK-6.

BAK – 75

The comment states the Draft EIR fails to provide information about out-of-area transfers and suggests the Draft EIR is therefore invalid and not in compliance with CEQA.

See response to BAK-3 and BAK-6.

BAK – 76

The comment states that the Draft EIR does not discuss the impacts of the proposed project on the City and does not include information about baseline conditions within the City including the City's baseline water rights. The comment states that the City would provide one of the primary water sources to the proposed project through its transfer of Kern River water to Rosedale pursuant to the 1961 agreement and as such the City's water supply would be affected. The comment states that the boundaries of the City overlap with the boundaries of Rosedale and as such the extraction of groundwater associated with the proposed project would impact the City's operation of the nearby 2800 Acre recharge and water banking facility.

The proposed project would have no impact to the City or its water supplies. The 1961 agreement with Rosedale for the transfer of Kern River is an existing agreement that would not be altered by the proposed project and as such would not affect the City's water supply.

The Draft EIR addresses regional groundwater banking projects in Kern County, including the City's 2800 Acres project, on page 3-9. Discussion of the groundwater model, impacts to groundwater pumping, and cumulative groundwater impacts is discussed starting on pages 3.10-27, 3.10-38, and 3.10-45, respectively. In general, as a groundwater banking project that requires recharge prior to extraction, the proposed project would not affect the City's water supplies as a

result of groundwater pumping. However, groundwater pumping would result in localized impacts to groundwater levels at wells surrounding the proposed project sites. Impacts were determined to be less than significant without mitigation.

See also responses to BAK-19, BAK-20, BAK-21, and BAK-22.

BAK – 77

The comment assumes that the City would provide water to Rosedale for project purposes and opines (with reference to California case law (*Friends of the Santa Clara River v. Castaic Lake Water Agency* (2002) 95 Cal.App.4th 1373)) that the Draft EIR must describe and assess the impacts of the alleged transfer.

The assumption is incorrect; the proposed project is not dependent on a transfer of water from the City to Rosedale at any particular time, in any particular amount, or at all. Also as stated above, any actual transfers as may occur would be subject to consent of the water right holders and entities having jurisdiction as necessary.

BAK – 78

This comment claims that the Draft EIR does not provide supporting data that the proposed project would have a positive impact on water quality. The comment goes on to quote text from Page 3.10-36 of the Draft EIR.

As discussed on Page 3.10-13 and 3.10-14 of the Draft EIR, while the water quality of local groundwater is generally good, portions of the aquifer are known to have arsenic and 1,2,3-TCP at concentrations above MCLs in some wells. The source of the arsenic is likely derived from arsenic-bearing pyrite sediment in the deeper portions of the aquifer. As discussed on page 3.10-37, less is known about the extent of 1,2,3-TCP in the regional aquifer. Current information regarding 1,2,3-TCP is provided in the Draft EIR supporting document: Thomas Harder & Co. (THC), 2020a. *Technical Memorandum, Documentation of 1,2,3-Trichloropropane Concentrations in Rosedale-Rio Bravo Water Storage District Banking Project Wells*, August 12.

In comparison, the water quality of recharge water would depend on the sources but is expected to be of better quality. As discussed in Section 2.6.4 in the Draft EIR, recharge water sourced from the SWP and the CVP would be subject to the DWR pump-in requirements that would not allow water that has concentrations of any constituent that exceeds MCLs. Recharge from local surface water sources would not be expected to have elevated concentrations of arsenic because the source of the arsenic is likely derived from arsenic-bearing pyrite sediment in the deeper portions of the aquifer (see Page 3.10-14 of the Draft EIR). With the recent adoption in 2017 of a MCL for 1,2,3-TCP, water conveyance systems and banking projects would not be allowed to accept water with concentrations above MCLs (see page 3.10-37).

Consequently, the water quality of the surface water derived recharge sources would be of better quality than the local groundwater. Thus, the addition of better quality surface water would improve the quality of groundwater.

BAK – 79

The comment claims that impacts from the extraction of water relative to water quality are not analyzed. The comment notes that the extraction of groundwater that results in lowering of groundwater levels can result in increased concentrations of certain constituents.

As explained in the results of the groundwater modeling discussed in Section 3.10.3, *Impacts Analysis and Mitigation Measures, Methodology, Groundwater Modeling*, and in Appendix H, *Hydrogeological Analysis*, and analyzed in Impact 3.10-2, minimum thresholds have been established on a per well basis. Recovery of water would not be allowed to result in causing water levels to decrease to below these minimum thresholds, as prohibited by the agreements provided in Appendix B of the Draft EIR. One of the primary reasons is to prevent the increase of concentrations of arsenic in wells due to extraction from a larger portion of deeper groundwater relative to shallower groundwater.

BAK – 80

The comment states the Draft EIR assessment of housing and population growth is inaccurate due to the fact that it would be used to meet IRWD's municipal and domestic demands.

As explained in the Draft EIR on page 5-7, IRWD has more than adequate water supplies to meet projected demands in its service area. Rather, the project provides a means of augmenting supplies during periods when existing sources may be temporarily reduced or interrupted and provides a cost effective means of managing contingency and drought planning needs. As further explained on page 5-8, The proposed project neither supports nor encourages growth within the IRWD or Rosedale service areas to a greater degree than presently estimated by the agencies with land use jurisdiction within their service areas. The proposed project would not remove any obstacles to growth and would not indirectly have a significant impact on growth inducement.

BAK – 81

The comment states the Draft EIR does not account for the loss of Kern River water supplies that would be transferred out of the area, which could have a significant effect on population and housing in the region. The comment also states that the Draft EIR does not account for the impacts the project would have on drinking water needs of individual residents in Rosedale's service area.

See response to BAK-3 and BAK-6 and BAK-12 for a response on loss of Kern River water supplies. As explained in the Draft EIR on page 5-7, the proposed project would allow storage of surplus water in Rosedale's service area that could help alleviate water supply shortfalls and work to achieve groundwater sustainability within the Kern County Sub-basin of the San Joaquin Valley Groundwater Basin. The project would not have any effect on drinking water needed in Rosedale's service area, and would further provide water supply reliability to Rosedale and IRWD through redundancy and diversification of water supply options available in future years.

BAK – 82

The comment states that the Draft EIR should have considered agricultural impacts as a result of water transfers from Kern County to Orange County.

The Project Description does not include any transfer of local water supplies to IRWD nor does it propose any out-of-county water sales or transfers at all. Therefore, the suggested impacts to loss in agricultural production associated with transfer of local water supplies are non-existent. Moreover, by increasing groundwater recharge capacity in the Kern River Fan region, it is expected that the proposed project would enhance Rosedale's ability to capture and retain Kern River water within the basin that might otherwise be lost by flowing out of the region. This retained water could support agriculture in the region, as explained in the Draft EIR on page 3.2-15.

BAK – 83

The comment states that the Draft EIR fails to identify and consider any air quality impacts associated with use of the 12 proposed extraction wells.

Operation of extraction wells would not result in direct emissions of criteria pollutants, such as CO, PM10, PM2.5, ROG and NOx, but rather would require consumption of energy in the form of electricity. As explained in the Draft EIR starting on page 3.6-12, total electricity to operate the pump stations and recovery wells would total 39,000 MWh/year. Based on the intermittent increase in demand to local energy providers associated with intermittent operation of the proposed wells, the project was found to have a less than significant impact on energy consumption (Draft EIR page 3.6-14). Refer to Response to Comment BAK-86 for discussion of GHG emissions associated with operation of proposed extraction wells.

BAK – 84

The comment states the Draft EIR fails to consider biological resources impacts in and around the Kern River and for water exported out of the region. The comment states that the Draft EIR should have disclosed information and potential impacts regarding critical habitat for the Buena Vista Lake Shrew. The comment states that the City's 2800 Acre Recharge Area has been "designated or proposed for designation as 'critical habitat' for the Buena Vista Lake Shrew." The comment further states that the Draft EIR should have determined and discussed whether the species could be found on the project site.

The Draft EIR discusses impacts to the Kern River/ Goose Lake Channel in the context of biological resources on page 3.4-40. Please refer to response to BAK-3, BAK-6 and BAK-12 for a discussion of loss of Kern River supplies and associated environmental impacts.

The Buena Vista Lake shrew was disclosed in the Biological Resources Technical Report, included as Appendix D to the Draft EIR. As explained therein on page 36, the Buena Vista Lake ornate shrew occupies the marshlands of the San Joaquin Valley and the Tulare Basin and is unlikely to occur in the project area. Only the species with a medium or high potential to occur in the project area and associated vicinity are explained in detail in Section 3.4 Biological Resources; Appendix D Biological Resources Technical Report includes a full listing of all species considered.

BAK – 85

The comment questions the Draft EIR's conclusions on subsidence during dry year conditions.

For context, as stated in the Draft EIR on page 3.7-10, historical data indicates subsidence has not resulted from KWB recovery operations during extended droughts. The Draft EIR further explains that "Groundwater banking programs generally benefit water levels in the local aquifer because the amount of water available for recovery is less than the amount recharged; this difference can raise groundwater levels." The project is a groundwater banking program and as stated in the Draft EIR on page 3.10-38, recovery would be limited to the amount previously recharge less losses. As a result, recharge capacity would be in excess of recovery, resulting in less than significant impacts to subsidence.

BAK – 86

The comment states that the Draft EIR fails to identify and consider any greenhouse gas impacts associated with use of the 12 proposed extraction wells.

In the Draft EIR, Section 3.8 *Greenhouse Gas Emissions* includes analysis of project operation of the 12 extraction wells on page 3.8-13 through page 3.8-15. Specifically, in Table 3.8-3, the Draft EIR includes energy-related emissions from recovery operations (2,893 metric tons of CO2e per year). Additionally, as explained in the Draft EIR starting on page 3.6-12, total electricity to operate the pump stations and recovery wells would total 39,000 MWh/year. Based on the intermittent increase in demand to local energy providers associated with operation of extraction wells or pump stations, the project was found to have a less than significant impact on energy consumption (Draft EIR page 3.6-14).

BAK – 87

The comment states that the Draft EIR should have considered land use impacts as a result of water transfer from Kern County to Orange County.

The Project Description does not include any transfer of local water supplies to IRWD nor does it propose any out-of-county water sales or transfers at all. Therefore, the suggested impacts to land use and planning associated with transfer of local water supplies are non-existent.

BAK – 88

The comment states the Draft EIR is contradictory in its explanation of the Kern River water supplies available for use in the project. The comment also states that Rosedale would have to submit an application to the SWRCB to appropriate the Kern River water characterized as "flood water" in the Draft EIR.

In the Draft EIR, Chapter 2 Project Description, various recharge water supplies are described on pages 2-7 to 2-10, including Kern River supplies. The Draft EIR states that Kern River supplies may be available depending on annual hydrologic availability, water rights and regulatory considerations (page 2-7). The Draft EIR explains that the USACE makes Kern River water available during wet years when releases from Isabella Reservoir are required for flood control (pages 2-9, 3.10-15).

Details as to how, where, when and in what quantities specific amounts of Kern River water would be or become available for project purposes depend on many variables, are speculative and

cannot be provided. Neither is this information required for a project that is not dependent on the availability of Kern River water at any particular time or at all (14 Cal. Code Regs. §15124). The proposed project does not require the availability of Kern River water to function but clearly contemplates that the Authority would work with, not against, the Kern River water right holders and the Kern River Watermaster to minimize any loss of local water supplies that might occur in the absence of the proposed project (Section 2.4.2 page 2-9, 2-10; Section 3.16.3 page 3.16-7).

Please see also Responses to Comments BAK-3, BAK-7 and BAK-17 regarding the use of Kern River Water for the proposed project.

BAK – 89

The comment states the Draft EIR does not consider growth inducing impacts within Kern County and Bakersfield as a result of loss of valuable local water supplies to Southern California.

Please see Response to Comment BAK-81.

BAK – 90

The comment states the Draft EIR alternatives analysis is deficient and not in compliance with CEQA for only including the no project alternative and a water banking project.

The Draft EIR explains the CEQA requirements for the analysis of alternatives starting on page 6-1. *CEQA Guidelines* state that an EIR shall describe a range of reasonable alternatives to the project, or to the location of a project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project (14 Cal. Code Regs. § 15126.6). As stated in the Draft EIR, an EIR need not consider every conceivable alternative, but must consider a reasonable range of alternatives that fosters informed decision-making and public participation. The "rule of reason" governs the selection and consideration of EIR alternatives, requiring that an EIR set forth only those alternatives necessary to permit a reasoned choice (14 Cal. Code Regs. § 15126.6). Alternatives may be eliminated from detailed consideration in the EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid any significant environmental effects (14 Cal. Code Regs. § 15126.6(c)). Factors that may be considered when addressing the feasibility of an alternative include site suitability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, economic viability, and whether the lead agency can reasonably acquire, control or otherwise have access to the alternative site.

According to *CEQA Guidelines*, an EIR must identify ways to mitigate or avoid significant effects of a project, and thus "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project" (14 Cal. Code Regs. § 15126.6(b)). As summarized in Table ES-1 in the Draft EIR, the proposed project would not result in any significant and unavoidable environmental impacts. Nonetheless, Chapter 6 of the Draft EIR provides an assessment of one project alternative, as well as five alternatives that were considered but rejected, along with the No Project Alternative as required by CEQA (14 Cal. Code Regs. § 15126.6(e)). Table 6-2 on

page 6-26 of the Draft EIR provides a matrix that summarizes the comparison of alternatives (14 Cal. Code Regs. § 15126.6(d)).

BAK – 91

The comment states that the Draft EIR did not consider meaningful alternatives, including alternate sources of supply, as well as conservation to reduce water demand and therefore meet the project objectives. The comment also states that the Authority did not properly consider the "no project alternative."

The Draft EIR does not need to evaluate the additional alternatives suggested in the comment because none of them would serve to mitigate a significant and unavoidable environmental impact. The Draft EIR does include conservation as an alternative considered but ultimately rejected starting on page 6-10. While IRWD manages a water conservation program to reduce demand in its service area, such programs do not achieve the objective of the proposed project to provide IRWD customers with increased water supply reliability through redundancy and diversification during periods when existing imported supplies are reduced or interrupted (page 6-10). The No Project Alternative was adequately covered in the Draft EIR, per CEQA (14 Cal. Code Regs. § 15126.6(e)), on Draft EIR page 6-11 through 6-17.

BAK – 92

The comment states that the Draft EIR does not consider alternatives for the Authority that might improve operational flexibility, and thus the Draft EIR is deficient. The comment goes on to list other potential alternatives.

The Draft EIR does not need to evaluate the additional alternatives suggested in the comment because none of them would serve to mitigate a significant and unavoidable environmental impact.

BAK – 93

The comment states that the alternatives analysis is deficient because Rosedale does not consider an alternative to out-of-County sales of local water to IRWD. The comment states that Rosedale should consider alternatives involving local districts. The comment also states that IRWD should have considered sources of supply other than local water supplies.

The proposed project would not result in the sale of local Kern River water to IRWD, and the project recharge is not dependent on the availability of Kern River water at any particular time or at all. Alternatives involving local districts instead of IRWD would not satisfy the objectives for IRWD's portion of the proposed project. Moreover, the Draft EIR does not need to evaluate the additional, more "local" alternatives suggested in the comment, because none of them would serve to mitigate a significant and unavoidable environmental impact.

BAK – 94

The commenter states that the Draft EIR's discussion of the No Project Alternative is flawed, focuses improperly on project benefits, and should have compared the status quo conditions with the actual impacts of the project.

While the No Project Alternative discussion does state the benefits of the project in comparison to conditions that would be realized under a no project scenario, a full analysis of impacts that would result should the project not be implemented is provided starting on page 6-12. This impact analysis is provided for all environmental resource topics included in the Draft EIR according to CEQA (14 Cal. Code Regs. § 15126.6(e)). "Status quo" conditions are not required to be analyzed for the No Project Alternative according to CEQA. As stated in the Draft EIR on page 6-11, according to Section 15126.6(e) of the *CEQA Guidelines*, the No Project Alternative must include a description of existing conditions and reasonably-foreseeable future conditions that would exist if the project were not approved, which is different from status quo conditions.

BAK – 95

The commenter states that an alternative analyzed in the Draft EIR, the Water Bank Alternative, is not a credible alternative because it is merely the same project in a different location.

According to *CEQA Guidelines*, an EIR must identify ways to mitigate or avoid significant effects of a project, and thus "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project" (14 Cal. Code Regs. § 15126.6(b)). As evidenced from CEQA Guidelines, an alternative location is an appropriate alternative to consider in an EIR.

BAK – 96

The comment states the Draft EIR fails to provide a valid explanation of the rejection of conservation and recycled water as alternatives to the proposed project. The comment also states that the Draft EIR fails to identify how much water these alternatives can produce, especially in comparison to the amount of supplemental water IRWD needs.

Although not required, the Draft EIR did consider conservation and additional recycled water as possible alternatives to the proposed project, in whole or in part, and both were found insufficient as explained on pages 6-10 and 6-11 of the Draft EIR. While IRWD manages a water conservation program to reduce demand in its service area, such programs do not achieve the objective of the proposed project to provide IRWD customers with increased water supply reliability through redundancy and diversification during periods when existing imported supplies are reduced or interrupted. Similarly, as explained on page 6-11, even though IRWD operates an extensive recycled water program meeting approximately 26 percent of that district's total water resource demand, additional recycled water use expansion could not be implemented as an alternative to the proposed project because IRWD needs to augment reliability for its potable water supply.

Regarding IRWD's water needs, the objective of the project is to increase water supply reliability during periods when other supply sources may be reduced or interrupted. As stated in the Chapter 2, Project Description, on page 2-6, the proposed project would provide IRWD with a minimum of 37,500 AF of storage capacity, and IRWD would use the water recharged in its storage account for agriculture and M&I uses during droughts and emergencies.

BAK – 97

The comment states that recharge within the Kern River channel was not considered as an alternative and would reduce adverse impacts on the environment and water users compared to the project.

As discussed previously, an EIR must identify ways to mitigate or avoid significant effects of a project, and thus "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project" (14 Cal. Code Regs. § 15126.6(b)). As summarized in Table ES-1 in the Draft EIR, the proposed project would not result in any significant and unavoidable environmental impacts. The Draft EIR does not need to evaluate recharge into the Kern River, as suggested in the comment, because it would not serve to mitigate a significant and unavoidable environmental impact.

BAK – 98

The comment includes case law about the fact that an EIR should not exclude an alternative that would reduce project impacts that does not meet project objectives. The comment states that the Draft EIR should have considered other alternatives, which may be required of Rosedale in the future to comply with SGMA.

As summarized in Table ES-1 in the Draft EIR, the proposed project would not result in any significant and unavoidable environmental impacts. As a result, the Draft EIR has not mistakenly excluded analysis of an alternative that would reduce significant environmental impacts, irrespective of whether the alternative meets project objectives. The Draft EIR does not need to evaluate alternatives suggested in the comment because they would not serve to mitigate a significant and unavoidable environmental impact.

BAK – 99

The comment questions why the project does not consider use of other existing banking projects in Kern County that would also meet project objectives.

The Draft EIR does not need to evaluate the additional, more "local" alternatives suggested in the comment, because none of them would serve to mitigate a significant and unavoidable environmental impact.

BAK – 100

The comment states that the Draft EIR's failure to consider viable alternatives is a violation of CEQA. The comment cites several court cases regarding replacement water and the need to identity alternative water sources.

Please see Responses to Comments BAK-90 through BAK-99.

With regard to evaluation of supplies and the application of the *Vineyard* decision, please see Response to Comment BAK-15.

BAK – 101

The comment states that without information about operation of other banking projects, and other cumulative extraction activities in general, the Draft EIR cannot accurately assess the cumulative impact of substantial increased pumping in the region as a result of the project.

The 12 groundwater banking programs considered in the cumulative analysis are listed in Table 3-1 on page 3-9 of the Draft EIR. The commenter does not specifically identify any omitted projects that the Authority could add to the analysis, and as a result, no additional projects can be considered by the Authority in this Draft EIR. Furthermore, as described in the Draft EIR on page 3.10-46, Rosedale's Operations Plan would be used to "prevent, eliminate or mitigate significant adverse impacts" resulting from project operations, including effects to neighboring wells. Consequently, the proposed project would be operated in such a way as to prevent cumulative impacts with neighboring water banking operations. Implementation of the Operations Plans would ensure that local groundwater users and neighboring well owners/operators to the proposed recharge and recovery facilities would not be adversely affected during operation of the proposed recovery wells.

BAK – 102

The comment states that the Draft EIR should have considered and addressed cumulative impacts associated with projects proposed by other applicants for unappropriated water.

The comment is incorrect in that the proposed project does not include, or depend upon, Rosedale's pending application to appropriate Kern River water. Since the project is not a water rights project, the Draft EIR need not assess other potential competing uses for unappropriated Kern River water. The Draft EIR accurately assesses other recharge/water banking projects in the analysis of cumulative impacts, many of which use Kern River water, as stated on page 3-9 and page 3.10-46. In particular, the list of cumulative projects includes the Kern Water Bank Authority's Conservation and Storage Project (see Draft EIR Table 3-2), which is noted in the comment.

BAK – 103

The comment states that the Draft EIR should have considered the cumulative impact of other water transfer projects in Kern County and Southern California.

The commenter does not specifically identify any omitted projects that the Authority could add to the analysis, and as a result, no additional projects can be considered by the Authority in this Draft EIR.

BAK – 104

The comment states the purpose and requirements of cumulative impacts analysis.

The comment is noted for the record. Cumulative impacts are discussed in the Draft EIR starting on page 3-8 and for every environmental topic included in Chapter 3 (see Section 3.1 through Section 3.17).

BAK – 105

The comment expresses vague dissatisfaction with the cumulative impact analysis performed in the Draft EIR.

Without detailed comments about the adequacy of the cumulative analysis, the Authority is unable to provide a detailed response. The comment is noted for the record.

BAK – 106

The comment states that the Draft EIR does not discuss cumulative impacts of the proposed project on the Kern River and other local water supplies and sources. The comment states that the Draft EIR does not provide information about baseline conditions in the Kern River and the impact of the proposed project on the Kern River.

Surface water hydrology and water quality for the Kern River are generally described in the Draft EIR on starting on page 3.10-2. Please refer to Responses to Comments BAK-64 to BAK-66 regarding project impacts to the Kern River. The proposed project itself would not change patterns or practices of water diversion from the Kern River, and as such, would not affect flow in the Kern River. As a result, the proposed project would have no impact on baseline Kern River flow and as such was not evaluated in the Draft EIR. Thus, the proposed project would not have potential to contribute to cumulative impacts to the Kern River.

BAK – 107

The comment states that the Draft EIR's assessment of cumulative impacts related to water banking projects lacks data and details particularly related to conditions or activities that would contribute to cumulative impacts, and is therefore understated and speculative.

The comment does not identify which facts and details are lacking. The Draft EIR clearly states on page 3.10-46 that all cumulative water supply projects would be subject to the same regulations as the project, which would establish groundwater monitoring programs for each of the water banking operations. The Draft EIR goes on to explain the Operations Plan that would be used to "prevent, eliminate or mitigate significant adverse impacts" resulting from project operations, including effects to neighboring wells. Consequently, the proposed project would be operated in such a way as to prevent cumulative impacts with neighboring water banking operations. Implementation of the Operations Plans would ensure that local groundwater users and neighboring well owners/operators to the proposed recharge and recovery facilities would not be adversely affected during operation of the proposed recovery wells.

BAK – 108

The comment cites legal principles with reference to California case law [*Citizens to Preserve the Ojai v. County of Ventura* (1985) I 76 Cal.App.3d 421, 431; *Whitman v. Board of Supervisors*, (1979) 88 Cal.App.3d 397, 408]. The comment states that the Draft EIR should have listed and considered the cumulative impacts on all other entities/projects in the region that divert Kern River water, including the City.

Refer to Response to Comment BAK-71. The proposed project would not cause a reduction in the surface flows of the Kern River or a reduction of any entity's water rights/supply, including the City, that could result in cumulative impacts, as suggested by the comment. The project would involve groundwater recharge and extraction, the cumulative impacts of which are discussed in the Draft EIR on pages 3-9 and page 3.10-46.

BAK – 109

The comment states that the Draft EIR cumulative impacts analysis should have considered secondary impacts resulting from groundwater pumping that would be needed to replace water used by the project.

The proposed project would not cause a reduction in the City's water supply or any other entity. Operation of the project would not result in the need for other entities such as the City to pump water or otherwise replace water. As a result, no associated environmental impacts or secondary cumulative impacts would occur that have not been analyzed in the Draft EIR.

BAK – 110

The commenter states that the Draft EIR fails to adequately identify areas of controversy. The comment states that the Draft EIR fails to identify City's opposition to transfers of Kern River water supplies out of the region to Southern California, and other concerns the City raised in its comments to the NOP

The Draft EIR appropriately identifies areas of controversy on page ES-10 as required in the CEQA Guidelines Section 15123, which states that the EIR summary should identify "areas of controversy known to the Lead Agency including issues raised by agencies and the public". The Draft EIR need not include every single issue raised in the NOP comment letters, but should focus on the main topics. The Draft EIR is not required to review or analyze the areas of controversy as suggested in the comment. In addition, the City's opposition to transfers of Kern River water supplies out of the region is a City policy. The proposed project is not located in the City of Bakersfield and therefore is not governed by this policy. In addition, the Project Description does not include any transfer of local water supplies to IRWD nor does it propose any out-of-county water sales or transfers at all (see Response to Comment BAK-3).

The commenter is referred to Responses to Comments BAK-A-1 through BAK-A-17, below, for responses to the City's NOP letter.

BAK – 111

The comment states that the Draft EIR should have included prior vaguely-described disputes among the Kern River Interests that could impact the Authority's ability to carry out the project. The comment also notes that Rosedale was previously involved in litigation with neighboring water districts.

The comment does not connect the disputes to any potential environmental impacts stemming from the proposed project. The treatment of potential areas of known controversy is described in the Draft EIR in Section 1.3.2 at page 1-6. The comment letters received on the NOP are

included in Appendix A to the Draft EIR and were considered by the Authority during the preparation of the Draft EIR.

BAK – 112

The comment states that the EIR should summarize controversies and issues of concern.

See Responses to Comments BAK-110 and BAK-11.

BAK – 113

The comment states that the City reserves the right to comment on and raise objections and challenges to the project.

The comment is noted for the record.

BAK – A-1

Please refer to Responses to Comments BAK-6 and BAK-7.

BAK – A-2

The proposed project would not transfer local groundwater supplies out of the basin to Southern California. Please refer to Responses to Comments BAK-73 to BAK-75.

BAK – A-3

Please refer to Response to Comment BAK-14.

BAK – A-4

Please refer to Response to Comment BAK-15.

BAK – A-5

Please refer to Response to Comment BAK-16.

BAK – A-6

Please refer to Responses to Comments BAK-17 and BAK-18.

BAK – A-7

Please refer to Responses to Comments BAK-19 to BAK-22.

BAK – A-8

The Draft EIR includes all environmental topics included in the CEQA Guidelines Appendix G, Environmental Checklist. Please see Section 3.0, *Introduction to the Analysis*, in the Draft EIR on page 3-1 for more explanation.

BAK – A-9

Please refer to Responses to Comments BAK-90 to BAK-100.

BAK – A-10

Please refer to Responses to Comments BAK-101 to BAK-109.

BAK – A-11

The Draft EIR evaluates all direct, indirect, and cumulative impacts to biological resources in the Section 3.4, *Biological Resources*. Please also refer to Response to Comment BAK-84.

BAK – A-12

The Draft EIR evaluates the impacts associated with construction and operation of the proposed recharge and recovery facilities as described in Chapter 2, *Project Description*, in accordance with the level of detail that is known at this time. If the Authority certifies this Final EIR and approves the project, and then identifies specific locations for the proposed facilities, the Authority will determine whether additional environmental analysis in required in accordance with CEQA.

BAK – A-13

Please refer to the discussion of population and housing in the Draft EIR on page 3-4 to 3-5. Please also refer to Chapter 5, *Growth Inducement*, and Responses to Comments BAK-80 and BAK-81.

BAK – A-14

The Draft EIR evaluates the impacts associated with the proposed Kern Fan Conveyance Facilities as described in Chapter 2, *Project Description*.

BAK – A-15

Please refer to Responses to Comments BAK-110 through BAK-112

BAK – A-16

Rosedale's Onyx Ranch South Fork Valley Water Project (Onyx Ranch Project) is a separate project that is being evaluated in a separate EIR. The Onyx Ranch Project is considered as a cumulative project in this Draft EIR for the Kern Fan Groundwater Storage Project and is listed in Table 2-3 on page 3-12.

BAK – A-17

The comment is noted for the record.

Letter 9: California Department of Fish and Wildlife (CDFW)

CDFW – 1

CDFW acknowledges receipt of a Notice of Availability for the Draft EIR and thanks the Authority for the opportunity to provide comments and recommendations regarding those project activities that may affect California fish and wildlife or that may require CDFW's approval authority under the Fish and Game Code. The comment is noted for the record.

CDFW – 2

The summary of CDFW's role as Trustee Agency and Responsible Agency is acknowledged. The Draft EIR identifies CDFW's roles as a trustee/responsible agency in Section 3.4.2, *Regulatory Setting*. The comment is noted for the record.

CDFW – 3

The summary of the CDFW's interest in water flows related their biological expertise is acknowledged. The comment is noted for the record.

CDFW – 4

CDFW's summary of the project proponent and objective is acknowledged. The Draft EIR provides this information in Chapter 1, *Introduction and Project Background.* The comment is noted for the record.

CDFW – 5

CDFW's summary of the project description is acknowledged. The Draft EIR provides this information in Chapter 2, *Project Description.* The comment is noted for the record.

CDFW – 6

CDFW's offer of comments and recommendations and the usefulness of California Natural Diversity Database (CNDDB) is acknowledged. The analysis in the Draft EIR, Section 3.4 *Biological Resources* discusses that special status species may be present in locations not depicted in the California Natural Diversity Database (CNDDB) where there is suitable habitat and features capable of supporting them. As described in the Draft EIR, on page 3.4-1, the CNDDB and other databases were reviewed. Additionally, special-status species observed during field surveys (e.g., American badger) that were not included in the database review were also evaluated in the Draft EIR. Evaluation of special status species occurs on pages 3.4-11, 3.4-16 to 3.4-19, 3.4-29 to 3.4-39. The comment is noted for the record.

CDFW – 7

The special-status species listed in the CDFW comment letter were evaluated in the Draft EIR Section 3.4, *Biological Resources*. Evaluation of special status species occurs on pages 3.4-11, 3.4-16 to 3.4-19, 3.4-29 to 3.4-39. The comment is noted for the record.

CDFW – 8

CDFW's summary of San Joaquin kit fox occurrences and habitat suitability is acknowledged. The Draft EIR Section 3.4, *Biological Resources* includes a summary of occurrences and habitat suitability on page 3.4-18. The comment is noted for the record.

CDFW – 9

CDFW's summary of the Draft EIR Mitigation Measure BIO-5 and its degree of specificity is acknowledged. The revised mitigation measures are provided in the response to comment CDFW-12. The revised mitigation measure includes use of the specified USFWS Survey Protocol for Northern San Joaquin Kit Fox Populations (USFWS 1999) and consultation with CDFW for impacts to San Joaquin kit fox, if necessary.

CDFW – 10

CDFW's summary of the specific impact is acknowledged. The Draft EIR includes an assessment of the potential species impacts in Section 3.4, *Biological Resources,* on pages 3.4-28, -29, -30, and -34. The comment is noted for the record.

CDFW – 11

CDFW's summary of the evidence of the impact as potentially significant is acknowledged. The Draft EIR includes an assessment of the impact significance in Draft EIR Section 3.4, *Biological Resources,* on pages 3.4-29, -30, and -34. The comment is noted for the record.

CDFW – 12

CDFW's summary of the recommended mitigation measures is acknowledged. The mitigation measures will be updated as follows, consistent with CDFW's recommendations.

> **BIO-5**. Prior to commencement of project activities, a qualified biologist shall conduct a San Joaquin kit fox habitat assessment to determine if the Project area or its immediate vicinity contains suitable habitat for the species. The habitat assessment will be conducted in accordance with the most recent USFWS *San Joaquin Kit Fox Survey Protocol.* ~~USFWS-approved "early evaluation" of the project area to determine if the project sites represent San Joaquin kit fox habitat.~~ If it is determined that San Joaquin kit fox has the potential to utilize the project areas, then the following measures are required to avoid potential adverse effects to this species:
>
> - A qualified biologist will assess presence/absence of San Joaquin kit fox for all project phases and components within potentially suitable habitat. Transect surveys will be conducted of the project areas plus a 500-foot buffer to detect San Joaquin kit fox and their sign. These surveys will occur in all areas of potentially suitable habitat no less than 14 days and more than 30 days prior to beginning of ground disturbing activities. The USFWS (2011) *Standardized Recommendations for Protection of San Joaquin Kit Fox prior to or during Ground Disturbance* includes measures to be implemented if the species is detected.
>
> ~~If the evaluation shows that the San Joaquin kit fox does not utilize the project sites, and the project will not result in take, then no further mitigation shall be required for this endangered species. If the "early evaluation" finds the presence of kit fox, a San Joaquin kit fox survey shall be conducted by a qualified biologist, in accordance with the most recent USFWS San Joaquin Kit Fox Survey Protocol. If it is determined that the~~ If San Joaquin kit fox is detected (e.g., dens, individuals using the property) ~~utilizes the property~~, then the following measures are required to avoid potential adverse effects to this species:
>
> - The Authority will consult with CDFW and USFWS to discuss how to avoid take, or if avoidance is not feasible, to acquire a state Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081, and a federal ITP, pursuant to Section 10 of the U.S. Endangered Species Act (ESA) prior to ground disturbing activities.
>
> - ~~shall determine appropriate project modifications to protect kit fox, including avoidance, minimization, restoration, preservation, or compensation.~~

- ~~If evidence of active or potentially active San Joaquin kit fox dens is found within the area to be impacted by the proposed project, appropriate compensation for the habitat loss shall be determined and provided.~~

CDFW – 13

CDFW's summary of blunt-nosed leopard lizard occurrences and habitat suitability is acknowledged. The Draft EIR Section 3.4, *Biological Resources* includes a summary of occurrences and habitat suitability on page 3.4-16. The comment also states the Draft EIR mitigation measure lacks specificity. Please refer to Response to Comment CDFW-16 for modifications to the mitigation measure.

CDFW – 14

CDFW's summary of the specific impact is acknowledged. The Draft EIR includes an assessment of the potential species impacts in Section 3.4, *Biological Resources,* on pages 3.4-28, 3.4-29 and 3.4-34. The comment is noted for the record.

CDFW – 15

CDFW's summary of the evidence of the impact as potentially significant is acknowledged. The Draft EIR includes an assessment of the impact significance in Draft EIR Section 3.4, *Biological Resources,* on pages 3.4-29 and 3.4-34. The comment is noted for the record.

CDFW – 16

CDFW's summary of the recommended mitigation measures is acknowledged. The mitigation measure will be updated as follows, consistent with CDFW's recommendations.

> **BIO-1.** Prior to commencement of project vegetation or ground disturbing construction, a qualified biologist shall conduct a habitat assessment ~~survey~~ for blunt-nosed leopard lizard to determine if the Project area or its immediate vicinity contains suitable habitat for the species.
>
> ~~, in accordance with the most recent CDFW *Approved Survey Methodology for the Blunt-Nosed Leopard Lizard.*~~ If suitable habitat is present, prior to initiating any vegetation or ground disturbing activity, surveys will be conducted in accordance with CDFW *Approved Survey Methodology for the Blunt-Nosed Leopard Lizard* (CDFW 2019). This survey protocol, designed to optimize blunt-nosed leopard lizard detection, reasonability assures CDFW that ground disturbance will not result in take of this fully protected species.
>
> Blunt-nosed leopard lizard surveys will be conducted within one year prior to initiation of ground disturbance. Protocol-level surveys must be conducted on multiple dates during late spring, summer, and fall of the same calendar year, and within these time periods, there are specific protocol-level date, temperature, and time parameters that must be adhered to. Blunt-nosed leopard lizard protocol specifies different survey effort requirements based on whether the disturbance results from maintenance activities or if the disturbance results in habitat removal (CDFW 2019).

> Blunt-nosed leopard lizard is a State fully protected species pursuant to Fish and Game Code Section 5050 and CDFW is unable to authorize take of this species for any reason. If blunt-nosed leopard lizard is detected during protocol-level surveys, then the Authority shall modify the Project design to avoid this species. If the project design cannot be modified, then the Authority shall consult with CDFW to discuss whether take of blunt-nosed leopard lizard can be avoided during ground-disturbing Project activities and during operations and maintenance of Project facilities. The USFWS will also be consulted to ensure that avoidance measure meet their standard for the avoidance of take for this species.
>
> ~~it is determined that blunt-nosed leopard lizard is present within the project areas, the Authority shall initiate the appropriate project modifications to protect blunt-nosed leopard lizard, including avoidance, minimization, restoration, preservation, or compensation.~~

CDFW recommends that the Draft EIR be revised to provide information on specific avoidance measures for this species during construction, operations, and maintenance throughout the life of the Project. The Draft EIR relies on the results of pre-activity surveys to determine habitat suitability and occurrence of blunt-nosed leopard lizard and other special status species. The previously provided updates describe the process for including specific avoidance measures for this species, if necessary. For project operations and maintenance, the Mitigation Measure BIO-10 will be updated in response to this comment, as provided in Response to Comment CDFW-53.

CDFW – 17

CDFW's summary of San Joaquin (Nelson's) antelope squirrel occurrences and habitat suitability is acknowledged. The Draft EIR Section 3.4, *Biological Resources* includes an evaluation of this species and uses the common name "Nelson's antelope squirrel." A summary of occurrences and habitat suitability is provided on page 3.4-17. The comment is noted for the record.

CDFW's summary of the Draft EIR Mitigation Measure BIO-7 and its degree of specificity is acknowledged. The revised mitigation measure is provided in Response to Comment CDFW-20.

CDFW – 18

CDFW's summary of the specific impact is acknowledged. The Draft EIR includes an assessment of the potential species impacts in Section 3.4, *Biological Resources,* on pages 3.4-28, 3.4-29, 3.4-30, and 3.4-34. The comment is noted for the record.

CDFW – 19

CDFW's summary of the evidence of the impact as potentially significant is acknowledged. The Draft EIR includes an assessment of the impact significance in Draft EIR Section 3.4, *Biological Resources,* on pages 3.4-28, 3.4-29, 3.4-30, and 3.4-34. The comment is noted for the record.

CDFW – 20

CDFW's summary of the recommended mitigation measures is acknowledged. The mitigation measures will be updated as follows, consistent with CDFW's recommendations.

BIO-7. Prior to commencement of project activities, a qualified biologist shall conduct a habitat assessment to determine if the Project area or its immediate vicinity contains suitable habitat for Nelson's antelope squirrel. If suitable habitat is present and surveys are feasible, a qualified biologist shall conduct focused daytime visual surveys for Nelson's antelope squirrel using line transects with 10- to 30-meter spacing within Project areas and a 50-foot buffer around those areas between April 1 and September 20, during daytime temperatures between 68° and 86° F (CDFG 1990), to maximize detectability. If suitable habitat is present and surveys are not feasible, a 50-foot minimum no-disturbance buffer around all small mammal burrow entrances will be established until the completion of Project activities. If Nelson's antelope squirrels are detected, consultation with CDFW will occur to discuss how to avoid take, or if avoidance is not feasible, to acquire a State ITP prior to ground-disturbing activities, pursuant to Fish and Game Code Section 2081 subdivision (b). ~~survey for Nelson's antelope squirrel. If it is determined that Nelson's antelope squirrel is detected on the project areas, then the following measures are required to avoid potential adverse effects to this species:~~

- ~~The Authority shall determine appropriate project modifications to protect Nelson's antelope squirrel, including avoidance, minimization, restoration, preservation, or compensation.~~

CDFW – 21

CDFW's summary of Tipton kangaroo rat occurrences and habitat suitability is acknowledged. The Draft EIR Section 3.4, *Biological Resources* includes a summary of occurrences and habitat suitability on page 3.4-17 through 3.4-18. The comment is noted for the record.

CDFW's summary of the Draft EIR Mitigation Measure BIO-6 and its degree of specificity is acknowledged. The revised mitigation measure is provided in Response to Comment CDFW-24.

CDFW – 22

CDFW's summary of the specific impact is acknowledged. The Draft EIR includes an assessment of the potential species impacts in Section 3.4, *Biological Resources,* on pages 3.4-28, 3.4-29, 3.4-30, and 3.4-34. The comment is noted for the record.

CDFW – 23

CDFW's summary of the evidence of the impact as potentially significant is acknowledged. The Draft EIR includes an assessment of the impact significance in Draft EIR Section 3.4, *Biological Resources,* on pages 3.4-29, 3.4-30, and 3.4-34. The comment is noted for the record.

CDFW – 24

CDFW's summary of the recommended mitigation measures is acknowledged. The mitigation measures will be updated as follows, consistent with CDFW's recommendations.

BIO-6. Prior to commencement of project activities, a qualified biologist shall conduct a habitat assessment to determine if the Project area or its immediate vicinity contains suitable habitat for Tipton kangaroo rat. If suitable habitat is present, a 50-foot minimum no-disturbance buffer around all small mammal

burrow entrances of suitable size for Tipton kangaroo rat use, will be established and maintained during Project activity. If burrow avoidance is not feasible, focused protocol-level trapping surveys according to the USFWS (2013) protocol will be conducted by a qualified wildlife biologist that is permitted to do so by both CDFW and USFWS, to determine if Tipton kangaroo rat occurs in the Project area. If Tipton kangaroo rats are detected, CDFW will be consulted to discuss how to avoid take, or if avoidance is not feasible, to acquire an ITP prior to ground-disturbing activities, pursuant to Fish and Game Code Section 2081 subdivision (b).

~~survey for Tipton kangaroo rat, in accordance with the most USFWS *Survey Protocol for Determining* Presence *of San Joaquin Kangaroo Rats*. If it is determined that Tipton kangaroo rat utilizes the project areas, then the following measures are required to avoid potential adverse effects to this species:~~

- ~~The Authority shall have a qualified biologist conduct trapping to determine if there is a presence of the Tipton kangaroo rat.~~

- ~~If there is presence, the Authority shall determine appropriate project modifications to protect Tipton kangaroo rat, including avoidance, minimization, restoration, preservation, or compensation.~~

CDFW – 25

CDFW's summary of Swainson's hawk occurrences and habitat suitability is acknowledged. The Draft EIR Section 3.4, *Biological Resources* includes a summary of occurrences and habitat suitability on page 3.4-16. The comment is noted for the record.

CDFW's summary of the Draft EIR Mitigation Measure BIO-3 and its degree of specificity is acknowledged. The revised mitigation measure is provided in Response to Comment CDFW-29.

CDFW – 26

CDFW's summary of the specific impact is acknowledged. The Draft EIR includes an assessment of the potential species impacts in Section 3.4, *Biological Resources,* on pages 3.4-28, -29, -30, and -34. The comment is noted for the record.

CDFW – 27

CDFW's summary of the evidence of the impact as potentially significant is acknowledged. The Draft EIR includes an assessment of the impact significance in Draft EIR Section 3.4, *Biological Resources,* on pages 3.4-28 -29, -30, and -34. The comment is noted for the record.

CDFW – 28

CDFW request for focused SWHA Surveys is acknowledged. In the Draft EIR Section 3.4, *Biological Resources,* Mitigation Measure BIO-3 includes species surveys using the indicated protocol on page 3.4-32. The comment is noted for the record.

CDFW – 29

CDFW's summary of the recommended mitigation measures is acknowledged. The mitigation measure will be updated as follows, consistent with CDFW's recommendations.

> **BIO-3**. If construction activities are scheduled to take place outside of the Swainson's hawk nesting season (which runs from March 1 – September 15), then no preconstruction clearance surveys or subsequent avoidance buffers are required.
>
> If construction activities are initiated within the nesting season then preconstruction nesting surveys shall be conducted by a qualified biologist prior to ground disturbance, in accordance with the guidance provided in the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee, 2000). The required windshield surveys shall cover the project area plus a one-half mile radius around the project sites.
>
> If an active nest site is found, ~~the qualified biologist shall determine the appropriate buffer zone around the nest within which project-related construction activities would be avoided.~~ a minimum ½-mile no-disturbance buffer will be maintained around each nest, until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival, to prevent nest abandonment, other forms of take, and other potentially significant impacts to Swainson's hawk as a result of Project activities.
>
> If a known Swainson's hawk nest tree requires removal, even outside the nesting season, it shall be replaced with an appropriate native tree species planting at a ratio of 3:1 near the Project area or in another area that will be protected in perpetuity. This mitigation would offset the local and temporal impacts of Swainson's hawk nesting habitat loss.
>
> If Swainson's hawk are detected and a ½-mile no-disturbance nest buffer is not feasible, consultation with CDFW is warranted to determine if the Project can avoid take. If Swainson's hawk take cannot be avoided, issuance of an ITP prior to Project activities is warranted to comply with CESA.

CDFW – 30

CDFW's summary of tricolored blackbird occurrences and habitat suitability is acknowledged. The Draft EIR Section 3.4, *Biological Resources,* includes a summary of occurrences and habitat suitability on page 3.4-17. The comment is noted for the record.

CDFW's summary of the Draft EIR Mitigation Measure BIO-2 and its degree of specificity is acknowledged. The revised mitigation measure is provided in the Response to Comment CDFW-33.

CDFW – 31

CDFW's summary of the specific impact is acknowledged. The Draft EIR includes an assessment of the potential species impacts in Section 3.4, *Biological Resources,* on pages 3.4-28, 3.4-29, and 3.4-34. The comment is noted for the record.

CDFW – 32

CDFW's summary of the evidence of the impact as potentially significant is acknowledged. The Draft EIR includes an assessment of the impact significance in Draft EIR Section 3.4, *Biological Resources,* on pages 3.4-28 3.4-29, and 3.4-34. The comment is noted for the record.

CDFW – 33

CDFW's summary of the recommended mitigation measures is acknowledged. The mitigation measure will be updated as follows, consistent with CDFW's recommendations.

> **BIO-2**. If the nesting bird season cannot be avoided and construction or vegetation removal occurs between February ~~March~~ 1 – September 15 (January 1 to July 31 for raptors), the following measures would reduce potential impacts to nesting and migratory birds and raptors to less than significant levels:
>
> - Within 10 ~~15~~ days of site clearing, a qualified biologist shall conduct a preconstruction, migratory bird and raptor nesting survey. The biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. This survey shall include species protected under the Migratory Bird Treaty Act including California horned lark, which was detected during the July 2020 reconnaissance and tri-colored blackbird, which has a medium potential to occur on-site. The survey shall cover all reasonably potential nesting locations for the relevant species on or closely adjacent to the proposed project site.
> - The preconstruction survey shall cover all reasonably potential nesting locations on and within 300 feet of the proposed removal areas, and areas that would be occupied by ground-nesting species such as killdeer. A 500-foot radius shall be surveyed in areas containing suitable habitat for nesting raptors, such as trees, utility poles and buildings.
> - Nesting habitat should be removed prior to the bird breeding season (February ~~March~~ 1 – September 15).
> - If an active nest is confirmed by the biologist, no construction activities shall occur within 250 feet of the nesting site for migratory birds, within 300 feet for tri-colored blackbird, and within 500 feet of the nesting site for raptors. The buffer zones around any nest within which project-related construction activities would be avoided can be reduced as determined acceptable by a qualified biologist. Construction activities may resume once the breeding season ends (February ~~March~~ 1 – September 15), or the nest has either failed or the birds have fledged.
> - If buffer distances are reduced, nest monitoring shall be conducted by a qualified biologist until the birds have fledged and are no longer reliant upon the nest or parental care for survival.

- If tri-colored blackbird take avoidance at a nesting colony is not feasible, acquisition of an ITP pursuant to Fish and Game Code Section 2081(b), prior to any Project activities, would be warranted to comply with CESA.

CDFW – 34

CDFW's summary of special-status plant occurrences and habitat suitability is acknowledged. The Draft EIR Section 3.4, *Biological Resources* includes a summary of occurrences and habitat suitability on page 3.4-18 through 3.4-19. The comment is noted for the record.

CDFW's summary of the Draft EIR Mitigation Measure BIO-9 and its degree of specificity is acknowledged. The revised mitigation measure is provided in the Response to Comment CDFW-37.

CDFW – 35

CDFW's summary of the specific impact is acknowledged. The Draft EIR includes an assessment of the potential species impacts in Section 3.4, *Biological Resources,* on pages 3.4-28, 3.4-29, 3.4-31, and 3.4-34. The comment is noted for the record.

CDFW – 36

CDFW's summary of the evidence of the impact as potentially significant is acknowledged. The Draft EIR includes an assessment of the impact significance in Draft EIR Section 3.4, *Biological Resources,* on pages 3.4-28, 3.4-29, 3.4-31, and 3.4-34. The comment is noted for the record.

CDFW – 37

CDFW's summary of the recommended mitigation measures is acknowledged. The mitigation measures will be updated as follows, consistent with CDFW's recommendations.

> **BIO-9.** Prior to the start of construction activities that could affect special-status plant species, a qualified botanist shall conduct a focused survey within the Conveyance Facilities project area for California jewelflower, Hoover's eriastrum, Kern mallow, recurved larkspur, San Joaquin woollythreads, slough thistle, and subtle orache. The survey shall be based on the survey protocols in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). Focused rare plant surveys shall occur during the typical blooming periods of special-status plants with the potential to occur. If a special-status plant species is found to be present, a no-disturbance buffer of at least 50 feet shall be implemented. Buffer distance many be adjusted by a qualified biologist for non-state listed species or in consultation with CDFW for state-listed species. If take of a state-listed plant species cannot be avoided, take authorization is warranted through acquisition of an ITP, pursuant to Fish and Game Code Section 2081 subdivision (b) and acquisition of a permit for rare plants pursuant to procedures set forth in the California Code of Regulations, title 14, section 783 et seq. (Cal. Code Regs., tit. 14 section 786.9). If avoidance measures are required for San Joaquin woolly threads, the USFWS will be notified of the species presence and avoidance measures that are sufficient to avoid species impacts.

- ~~and avoidance of the species and/or habitat is not feasible, the Authority shall prepare and implement a Revegetation/Restoration Mitigation Plan. The Revegetation/Restoration Mitigation Plan will guide activities during construction and operations and maintenance to avoid and minimize impacts to special-status plant species.~~

CDFW – 38

CDFW's summary of burrowing occurrences and habitat suitability is acknowledged. The Draft EIR Section 3.4, *Biological Resources* includes a summary of occurrences and habitat suitability on page 3.4-16. The comment is noted for the record.

CDFW's summary of the Draft EIR Mitigation Measure BIO-4 and its degree of specificity is acknowledged. The revised mitigation measure is provided in the Response to Comment CDFW-41.

CDFW – 39

CDFW's summary of the specific impact is acknowledged. The Draft EIR includes an assessment of the potential species impacts in Section 3.4, *Biological Resources,* on pages 3.4-28, 3.4-29, 3.4-30, and 3.4-34. The comment is noted for the record.

CDFW – 40

CDFW's summary of the evidence of the impact as potentially significant is acknowledged. The Draft EIR includes an assessment of the impact significance in Draft EIR Section 3.4, *Biological Resources,* on pages 3.4-28, 3.4-29, 3.4-30, and 3.4-34. The comment is noted for the record.

CDFW – 41

CDFW's summary of the recommended mitigation measures is acknowledged. The mitigation measures will be updated as follows, consistent with CDFW's recommendations.

BIO-4. A qualified biologist will conduct a habitat assessment in advance of project implementation to determine if the Project area or its vicinity contains suitable habitat for burrowing owl. If suitable habitat is present, a pre-construction survey shall be conducted for burrowing owls 14 to 30 days prior to clearing of the site by a qualified biologist in accordance with the most recent CDFW protocol, currently the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). Surveys shall cover suitable burrowing owl habitat disturbed by construction including a 500-foot buffer. The survey would identify adult and juvenile burrowing owls and signs of burrowing owl occupation. This survey shall include two early morning surveys and two evening surveys to ensure that all owl pairs have been located. If occupied burrowing owl habitat is detected on the proposed project site, measures to avoid, minimize, or mitigate impacts shall be incorporated into the proposed project and shall include, but not be limited to, the following:

- ~~If owls are identified on or adjacent to the site, a qualified biologist shall provide a pre-construction Worker's Environmental Awareness Program to contractors and their employees that describes the life history and species~~

~~protection measures that are in effect to avoid impacts to burrowing owls. Construction monitoring will also occur throughout the duration of ground-disturbing construction activities to ensure no impacts occur to burrowing owl.~~

- Construction exclusion areas shall be established around the occupied burrows in which no disturbance shall be allowed to occur while the burrows are occupied. Buffer areas shall be determined by a qualified biologist based on the recommendations outlined in the most recent *Staff Report on Burrowing Owl Mitigation* (CDFW 2012).

- If occupied burrows cannot be avoided, a qualified biologist shall develop and implement a Burrowing Owl Management Plan, consistent with *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). Burrow exclusion shall be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirm empty through non-invasive methods, such as surveillance. Occupied burrows shall be replaced with artificial burrows at a ratio of one burrow collapsed to one artificial burrow constructed (1:1) to mitigate for evicting burrowing owls and the loss of burrows. Periodic surveillance shall be conducted to ensure that burrowing owls do not return to the eviction site.

CDFW – 42

CDFW's summary of other state species is acknowledged. The Draft EIR Appendix D, *Biological Resources Technical Report* includes a summary of occurrences and habitat suitability on pages 22-37. The comment is noted for the record.

CDFW's summary of the Draft EIR Mitigation Measure BIO-8 and its inclusion of only American badger is acknowledged. The comment is noted for the record.

CDFW – 43

CDFW's summary of the specific impact is acknowledged. The Draft EIR includes an assessment of the potential to occur on the Project site in Appendix D, *Biological Resources Technical Report,* on pages 22-37. Given the species' habitat requirements and potential to occur on the Project site, all the noted species except American Badger were screened out. Tulare grasshopper mouse, San Joaquin Coachwhip, western spadefoot, coast horned lizard, and California glossy snake were determined to have a low or unlikely potential to occur on site because of the lack of suitable species habitat present. The comment is noted for the record.

CDFW – 44

CDFW's summary of the evidence of the impact as potentially significant is acknowledged. The Draft EIR includes an assessment of the impact significance in Draft EIR Section 3.4, *Biological Resources,* on pages 3.4-28, 3.4-29, 3.4-30, and 3.4-34. The comment is noted for the record.

CDFW – 45

CDFW's summary of the recommended mitigation measures is acknowledged. The mitigation measure was updated to include the specified measures for American badger.

BIO-8. Prior to commencement of project activities, a qualified biologist shall conduct a habitat assessment for American badger to determine if the Project area contains suitable habitat for this species. If suitable habitat is present, a qualified biologist will conduct focused surveys for this species. Though there isn't a specific survey protocol for this species, American badger share similar habitat as burrowing owl and San Joaquin kit fox. Surveys shall be conducted for American badger concurrently with either burrowing owl or San Joaquin kit fox. If it is determined that American badger are detected on the project areas, a 50-foot no disturbance buffer will be established around the den site. If a 50-foot buffer is not feasible, then the buffer distance may be reduced as informed by the qualified biologist. ~~then the following measures are required to avoid potential adverse effects to this species:~~

- ~~The Authority shall determine appropriate project modifications to protect American badger, including avoidance, minimization, restoration, preservation, or compensation.~~

CDFW – 46

CDFW's summary of wetland and riparian habitats is acknowledged. The Draft EIR Section 3.4, *Biological Resources* includes a summary of vegetation communities on pages 3.4-7 through 3.4-10. The comment is noted for the record.

CDFW's summary of the Draft EIR Mitigation Measure BIO-12 and BIO-13 is acknowledged. The comment is noted for the record.

CDFW – 47

CDFW's summary of the specific impact is acknowledged. The Draft EIR a description of the potential impacts in Section 3.4, *Biological Resources,* on pages 3.4-40 through 3.4-41. The comment is noted for the record.

CDFW – 48

CDFW's summary of the evidence of the impact as potentially significant is acknowledged. The Draft EIR includes an assessment of the impact significance in Section 3.4, *Biological Resources,* on pages 3.4-40 through 3.4-41. The comment is noted for the record.

CDFW – 49

CDFW's summary of the recommended mitigation measures is acknowledged. The proposed project area is quite large and the exact location of the project features are not known at this time. Formal stream mapping and wetland delineations would occur consistent with Mitigation Measure BIO-13, which includes the mapping requirements proposed by CDFW with the exception of the preparation of the map for the Draft EIR. Stream and wetland habitat mitigation, if required, would be determined through the required permitting processes as described in Mitigation Measure BIO-13. The comment is noted for the record.

CDFW – 50

CDFW's summary of the fishery ecosystem and special status fish benefits is acknowledged. The model detail is provided in Appendix D, *Biological Resources Technical Report,* Appendix C, *Ecosystem Benefits from Kern Fan Groundwater Storage Project – Cramer Fish Sciences.* This document provides detail on how the models used to predict benefits to fisheries are accurate enough to specify the precise number of fish that would benefit from the Project, as requested by the reviewer. The comment is noted for the record.

CDFW – 51

CDFW's summary of the operations and maintenance plan and pesticide use plan is acknowledged. The Draft EIR Section 3.4, *Biological Resources* includes a summary of the potential operations and maintenance impacts on p. 3.4-34. The comment is noted for the record.

CDFW's summary of the Draft EIR Mitigation Measure BIO-10 is acknowledged. See Response to Comment CDFW-53 for the updated mitigation measure.

CDFW – 52

CDFW's summary of the degree of specificity of Mitigation Measure BIO-10 is acknowledged. See Response to Comment CDFW-53 for the updated mitigation measure. The comment is noted for the record.

CDFW – 53

CDFW's summary of the recommended mitigation measures is acknowledged. The following updates will be made to Mitigation Measure BIO-10 and Mitigation Measure BIO-11 in response to comments.

> **BIO-10:** Prior to commencement of project operations and maintenance activities, the Authority shall develop an Operations and Maintenance Plan that details how special-status plant and wildlife species, nesting birds and sensitive natural communities will not be impacted by operations and maintenance activities. The operations and maintenance plan will be informed by habitat assessments, species surveys, and if applicable, CDFW consultations, completed prior to project construction. A map of special status species, sensitive natural communities, and habitat features (sensitive resource map) will be developed. Workers will be provided the map and trained on how to recognize and avoid impacts to these species, natural communities and habitat features. The Operations and Maintenance Plan will require periodic species surveys to ensure the project ecosystem benefits are realized. These surveys will be used to update the sensitive resource map and inform adjustment to required avoidance and minimization measures The Operations and Maintenance Plan will include speed limits to avoid vehicle collisions or trampling of special status species.
>
> ~~Vehicle collisions with special-status wildlife or vehicle trampling of special-status plant species or sensitive natural communities is one example of how operations and maintenance activities could potentially impact biological resources. Some operations and maintenance activities may include pump and facility maintenance and vehicle operation on access roads.~~

BIO-11. If pesticides will be applied to any areas within the project areas, the Authority shall develop a Pesticide Use Plan that will detail how pesticides, rodenticides, and/or herbicides will be used and how application will not impact special-status plant and wildlife species, nesting birds, wetlands and jurisdictional features, and sensitive natural communities. The Pesticides Use Plan will be informed by the results of the species surveys and habitat assessments conducted prior to project construction. A map of special status species, sensitive natural communities, and habitat features (sensitive resource map) will be developed. Workers will be provided the map and trained on how to recognize and avoid impacts to these species, natural communities and habitat features. The Operations and Maintenance Plan will require periodic species surveys to ensure the project ecosystem benefits are realized. These surveys will be used to update the sensitive resource map and inform adjustment to required avoidance and minimization measures for the Pesticide Use Plan.

CDFW – 54

CDFW's summary of the potential impacts to the Kern Water Bank HCP/NCCP is acknowledged. The Draft EIR includes the level of detail available regarding the project location available at this time. No additional detail regarding the potential impacts to the Kern Water Bank lands is available at this time. The Mitigation Measure BIO-14 would ensure the potential impacts described by CDFW are avoided. In response to this comment and the KWBA comments (see Comment KWBA-A-20) the following updates will be made:

BIO-14. Should facilities be located on the Kern Water Bank, the Authority shall initiate discussions with the Kern Water Bank Authority to ensure Conveyance Facilities located in the Kern Water Bank HCP/NCCP avoid impacts to covered species within the HCP/NCCP area during construction, operations, and maintenance. If the project is located within the Kern Water Bank HCP/NCCP, Mitigation Measure BIO-1 through BIO-13 will be implemented in coordination with the KWBA, and if necessary, CDFW and USFWS to ensure the project is implemented in compliance with the HCP/NCCP. If any of the project activities will conflict with the implementation of the HCP/NCCP, the Authority will consult with CDFW, USFWS, and the KWBA in advance of project implementation to ensure compliance with CESA and ESA.

CDFW – 55

CDFW's summary of Metropolitan Bakersfield HCP is acknowledged. The Project is not proposed for coverage under the Metropolitan Bakersfield HCP, nor is it eligible for coverage. The comment is noted for the record.

CDFW – 56

CDFW's summary of federally listed species with the potential to occur in the project area is acknowledged. The updated mitigation measures provided in responses CDFW-12, CDFW-16, and CDFW-37 include consultation or notification of the USFWS, as appropriate.

CDFW – 57

CDFW's summary of the potential need for a Lake and Streambed Alteration Agreement is acknowledged. This is addressed on Draft EIR page 3.4-40 and in Mitigation Measure BIO-13. The comment is noted for the record.

CDFW – 58

CDFW's summary of the Lake and Streambed alteration requirements is acknowledged. The description of potential aquatic resources is provided on Draft EIR pages 3.2-11 through 3.2-12. The comment is noted for the record.

CDFW – 59

CDFW's summary of project-related actions outside the project area is acknowledged. The comment is noted for the record.

CDFW – 60

CDFW's summary of the Onyx Ranch South Fork Valley Water Project and its relation to the Project is acknowledged. The Onyx Ranch South Fork Valley Water Project involves changing the points of diversion and place of use for certain South Fork of the Kern River water rights from lands in the South Fork Valley to lands on the San Joaquin Valley floor in Kern County. (Rosedale-Rio Bravo Water Storage District 2020). The Draft EIR for the Onyx Ranch South Fork Valley Water Project evaluates the direct, indirect, and cumulative impacts of that project to watersheds and biological resources in the South Fork Kern River Valley.

The proposed project is not dependent on the availability of Kern River water in any particular amount, at any particular time, or at all. Surface water exchanges associated with the proposed project to provide ecosystem benefits in the Delta would not involve Kern River water and would only involve SWP water banked in DWR's Ecosystem Account.

CDFW – 61

CDFW's request for a description of a future acquisition of water rights is acknowledged. A description of all water sources anticipated to serve the proposed project is included in the Draft EIR in Chapter 2, *Project Description*. The comment is noted for the record. The sources of water that may be utilized in connection with the proposed project are identified as whatever is or becomes available to the Authority at any time, and from time to time, from any source, potentially including federal, state, and local supplies (Section 2.4.2 pages 2-7 through 2-10). The Draft EIR discusses in greater detail those sources of supply deemed reasonably foreseeable, namely CVP water, the SWP water, and Kern River water. Since this list is not exclusive, the Draft EIR states that the Authority will analyze the use of identified sources for project purposes to determine the need for and/or extent of future analysis (Section 2.4.2 page 2-9). Finally, the Draft EIR acknowledges that these sources of water "…include but are not limited to the following: federal, State, and local supplies through transfers, balanced and unbalanced water exchange agreements, water purchases or temporary transfers, supplies from the CVP, and high-flow Kern River water depending on annual hydrologic availability, water rights and regulatory

considerations. Agreements would be made, as necessary, in advance of any water exchanges or transfers" (Section 3.16.3, page 3.16-7).

CDFW – 62

CDFW requests additional information about whether Rosedale or IRWD would be filing a change petition or a new application for additional surface water. A description of all water sources anticipated to serve the proposed project is included in the Draft EIR in Chapter 2, *Project Description*. Refer to Response to Comment CDFW-61 for a discussion of potential water supplies for the proposed project. As noted in Response to Comment CDFW-61, the Draft EIR states that the Authority would analyze the use of identified sources for project purposes to determine the need for and/or extent of future analysis (Section 2.4.2 page 2-9), which may include a change petition or new application for additional surface water and required consultation with CDFW.

CDFW – 63

CDFW's request for information about the project ecosystem benefits is acknowledged. The Draft EIR describes the ecosystem benefits in Section 3.4, *Biological Resources,* pages 3.4-35 through 3.4-39. The significance determination is determined to be a net benefit and no mitigation measures are proposed. The project-specific permits that may be required are described in mitigation measures for the other resource areas. The mitigation measures describe the project related permits that may be necessary, if triggered by species or resource presence and actions that may result in take or impact. CDFW agreements required for the WSIP program are beyond the scope of the Draft EIR and are not part of the present analysis. The CDFW agreement for administration of ecosystem benefits is included in the list of approvals in the Draft EIR on page 2-20. The comment is noted for the record.

CDFW – 64

CDFW's summary of the ecosystem account and WSWB Conjunctive Use Project are acknowledged. As requested, the following edits will be made to the Draft EIR, Executive Summary, page ES-6 and Chapter 2, *Project Description*, page 2-6:

> DWR, in consultation with the California Department of Fish and Wildlife, would determine when water from the Ecosystem Account would be needed for such ecosystem benefits. California Department of Fish and Wildlife is the administrating agency of the WSIP public ecosystem benefit. The pulse flow's out of Oroville would be implemented at California Department of Fish and Wildlife's discretion with coordination with DWR and SWP operations.

CDFW – 65

CDFW's summary of the intermittent/incidental wetlands as a WSIP ecosystem public benefit is acknowledged. The following text edits are proposed in response to the comment.

> **Section 2.4**
>
> The proposed project would establish intermittent wetland habitat through intermittent recharge events. This is a WSIP ecosystem public benefit. (p. 2-7)

Section 3.4.3

The recharge basins that would be created as a result of the proposed project will be designed to establish intermittent wetland habitat through intermittent recharge events. This is a WSIP ecosystem public benefit. (p. 3.4-38)

Wetlands resources could be beneficially affected by habitat modifications during operations and maintenance of the proposed project via creation of intermittent wetlands. This is a WSIP ecosystem public benefit. (p. 3.4-40)

Appendix D

The recharge basins that would be created as a result of the proposed will be designed to establish intermittent wetland habitat through intermittent recharge events. This is a WSIP ecosystem public benefit. (p. 47)

CDFW – 66

CDFW's summary of the Migratory Bird Treaty Act requirements, potential project impacts, and the recommended avoidance and minimization measures are acknowledged. Implementation of Mitigation Measure BIO-2 would reduce potential impacts to special-status, common nesting and migratory birds to less than significant levels. See comment response CDFW-33 for updates to Mitigation Measure BIO-2 in response to this comment.

CDFW – 67

CDFW's monitoring, buffer, and notification requirements for active nests are acknowledged. See comment response CDFW-33 for updates to Mitigation Measure BIO-2 in response to this comment.

CDFW – 68

CDFW's requirement to report special-status species and natural communities observed during project surveys is acknowledged. Observations of Swainson's Hawk, California horned lark, and American badger will be reported to CNDDB.

CDFW – 69

CDFW's instruction for filing fees is acknowledged. Comment is noted for the record.

CDFW – 69

CDFW's appreciation for the opportunity to comment on the Draft EIR is acknowledged.

References

California Department of Water Resources (DWR), 2019. *California Aqueduct Subsidence Study: Supplemental Report.* San Luis Field Division, San Joaquin Field Division. March 2019. Available at: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Engineering-And-Construction/Files/Subsidence/CASS_Supplement_final_a_1119.pdf?la=en&hash=9FBD3FEDF8EDB758E57ADA781499AF555900DBF7

CHAPTER 11
Revisions to the Draft EIR

This chapter presents revisions to the Draft EIR based on comments received during the comment period. The following corrections and changes are made to the Draft EIR, and are incorporated herein as part of the Final EIR. Revised language or new language is underlined. Deleted language is indicated by ~~strikethrough~~ text.

Revisions presented in this chapter are corrections and clarifications and do not significantly alter the proposed project, change the Draft EIR's significance conclusions, or result in a conclusion that substantially more adverse environmental impacts will result from the proposed project.

Specifically, CEQA Guidelines Section 15088.5 requires the lead agency to recirculate an EIR only when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR for public review. New information added to an EIR is not significant unless the EIR has changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse, environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project's proponents have declined to implement (CEQA Guidelines Section 15088.5).

In summary, significant new information consists of: (1) disclosure of a new significant impact; (2) disclosure of a substantial increase in the severity of an environmental impact; (3) disclosure of a feasible project alternative or mitigation measure considerably different from the others previously analyzed that would clearly lessen environmental impacts of the project, but the project proponent declines to adopt it; and/or (4) the Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded (CEQA Guidelines Section 15088.5). Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications to an adequate EIR (CEQA Guidelines Section 15088.5).

The changes below present information that clarifies the scope of the proposed project and the analysis of the proposed project's impacts, but do not fundamentally alter the significance conclusions presented in the Draft EIR circulated for public review. The changes present information and analyses in response to comments and merely provide further details on the analyses already provided in the Draft EIR.

Executive Summary

Page ES-6:

The proposed project would consist of construction of up to 1,300 acres of recharge basin facilities and up to 12 recovery wells on the Kern Fan Project Properties. The Kern Fan Conveyance Facilities would consist of canals and/or pipelines, pump stations and a new turnout at the California Aqueduct The turnout is planned for Reach 12E upstream of Check 28, subject to DWR approval of final location, to convey water between the project facilities and the California Aqueduct. Subject to agreements between Rosedale and IRWD, the project facilities may be integrated with the other facilities operated in Rosedale's Conjunctive Use Program. Water stored by the proposed project would be recovered when needed to provide ecosystem and water supply benefits.

Pages ES-6 to ES-7:

Pursuant to the award of funds under the WSIP, twenty-five percent, up to 25,000 AF, of the ~~unallocated~~ Article 21 water in excess of demand would be stored for use for pulse flows ~~DWR~~ in an "Ecosystem Account." Through the implementation of 1-for-1 exchanges, the Article 21 water stored in the Ecosystem Account would be used by the State of California to alleviate stress on endangered and threatened species in the Sacramento-San Joaquin River Delta. DWR, in consultation with the California Department of Fish and Wildlife, would determine when water from the Ecosystem Account would be needed for such ecosystem benefits. California Department of Fish and Wildlife is the administrating agency of the WSIP public ecosystem benefit. The pulse flow's out of Oroville would be implemented at California Department of Fish and Wildlife's discretion with coordination with DWR and SWP operations. ~~The 1-for-1 exchanges would result in the reclassification of Table A water being held in Lake Oroville for delivery to Rosedale or IRWD as SWP Project water, while the~~ Article 21 water stored in the proposed project's Ecosystem Account would be eligible for use for a pulse flow released pursuant to an agreement between DWR and CDFW to provide ecosystem benefits. The pulse flow released from Oroville Reservoir would be replenished by SWP operational 1 for 1 exchanges of ~~reclassified as~~ Table A water from ~~for use by~~ Rosedale as a member unit of the Kern County Water Agency and IRWD as a landowner in Dudley Ridge Water District. ~~After the 1-for-1 exchange is complete, DWR would release the SWP Project water from Lake Oroville at its discretion to provide ecosystem benefits.~~ The Table A water would be recovered from the proposed project facilities in Kern County and used by Rosedale, IRWD, and DRWD.

The remaining storage capacity would be shared equally between Rosedale and IRWD. Project storage available to Rosedale and IRWD is estimated to be a minimum of 37,500 AF each. Rosedale and IRWD would use the water recharged in their respective storage accounts for agriculture and M&I uses, improving water supply reliability during droughts and emergencies. Article 21 stored in IRWD's storage account, made available to IRWD as a landowner in DRWD, would be made available for use in IRWD's service area through exchanges for Table A water as described in Section 2.6.2. Subject to agreements between Rosedale and IRWD, the operation of storage for the Authority members would be integrated with storage in Rosedale's Conjunctive

Use Program and IRWD's Strand and Stockdale Integrated Banking Projects to store Article 21, Section 215, and other water supplies as well as for implementing exchange programs with SWP and CVP Contractors.

Chapter 2: Project Description

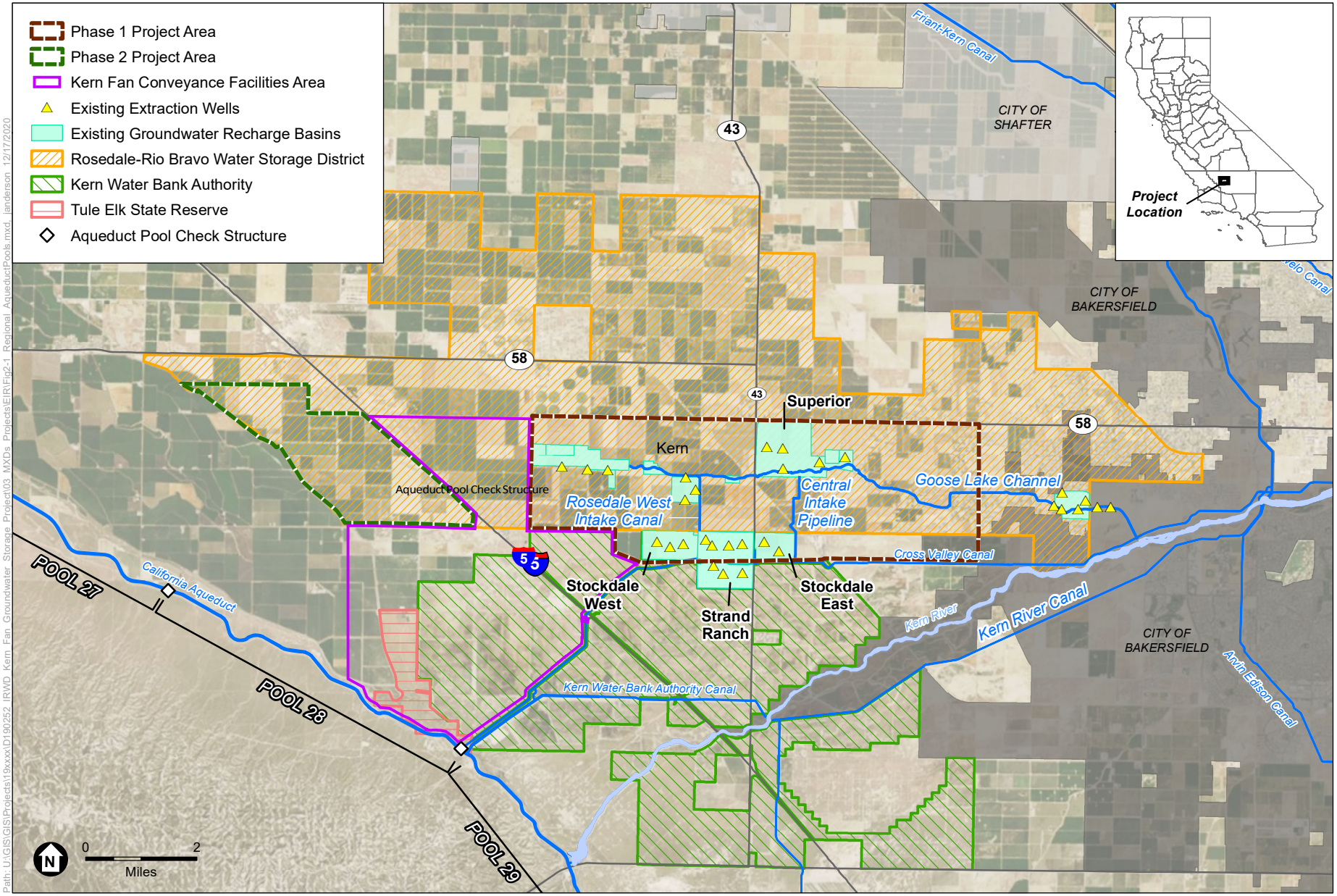
Figure 2-1 on Page 2-2: Figure 2-1 of the Draft EIR is revised to show the location of Pool 28 of the California Aqueduct, which is directly adjacent to the area identified for the Kern Fan Conveyance Facilities, of which the proposed turnout would be a component.

Page 2-4 to 2-5:

In addition to allocating Table A water, DWR periodically makes water supplies available under Article 21 of the SWP contracts. Article 21 states that DWR may offer to sell and deliver surplus SWP water when its available supplies exceed scheduled Table A delivery requests from the SWP contractors, the Sacramento-San Joaquin Delta is in an excess flow condition under applicable regulatory standards, and SWP facilities have available conveyance capacity. When "Article 21 water" becomes available, SWP contractors submit their delivery requests to DWR; when Article 21 supplies exceed SWP contractor demands, there is additional Article 21 supply that becomes available for allocation if there is additional demand and delivery capability. ~~unallocated."~~ The proposed project would increase the ability to capture, store and reregulate "unallocated" Article 21 water~~"~~ for beneficial use by Authority members Rosedale and IRWD. The proposed project would increase the overall water within the SWP system, reduce the loss of water to the ocean, and provide ecosystem benefits in accordance with the proposed project's funding conditions.

Page 2-6:

The proposed project would consist of construction of up to 1,300 acres of recharge basin facilities and up to 12 recovery wells on the Kern Fan Project Properties. The Kern Fan Conveyance Facilities would consist of canals and/or pipelines, pump stations and a new turnout at the California Aqueduct. The turnout is planned for Reach 12E upstream of Check 28, subject to DWR approval of final location, to convey water between the project facilities and the California Aqueduct (see Figure 2-1). Subject to agreements between Rosedale and IRWD, the project facilities may be integrated with the other facilities operated in Rosedale's Conjunctive Use Program. Water stored by the proposed project would be recovered when needed to provide ecosystem and water supply benefits.



SOURCE: Mapbox; Kern County

Kern Fan Groundwater Storage Project

Figure 2-1 Revised

Regional Project Location

ESA

Page 2-6:

Pursuant to the award of funds under the WSIP, twenty-five percent, up to 25,000 AF, of the ~~unallocated~~ Article 21 water in excess of demand would be stored for use for pulse flows ~~DWR~~ in an "Ecosystem Account." Through the implementation of 1-for-1 exchanges, the Article 21 water stored in the Ecosystem Account would be used by the State of California to alleviate stress on endangered and threatened species in the Sacramento-San Joaquin River Delta. DWR, in consultation with the California Department of Fish and Wildlife, would determine when water from the Ecosystem Account would be needed for such ecosystem benefits. California Department of Fish and Wildlife is the administrating agency of the WSIP public ecosystem benefit. The pulse flow's out of Oroville would be implemented at California Department of Fish and Wildlife's discretion with coordination with DWR and SWP operations. ~~The 1-for-1 exchanges would result in the reclassification of Table A water being held in Lake Oroville for delivery to Rosedale or IRWD as SWP Project water, while the~~ Article 21 water stored in the proposed project's Ecosystem Account would be eligible for use for a pulse flow released pursuant to an agreement between DWR and CDFW to provide ecosystem benefits. The pulse flow released from Oroville Reservoir would be replenished by SWP operational 1 for 1 exchanges of ~~reclassified as~~ Table A water from ~~for use by~~ Rosedale as a member unit of the Kern County Water Agency and IRWD as a landowner in Dudley Ridge Water District. ~~After the 1-for-1 exchange is complete, DWR would release the SWP Project water from Lake Oroville at its discretion to provide ecosystem benefits.~~ The Table A water would be recovered from the proposed project facilities in Kern County and used by Rosedale, IRWD, and DRWD.

The remaining storage capacity would be shared equally between Rosedale and IRWD. Project storage available to Rosedale and IRWD is estimated to be a minimum of 37,500 AF each. Rosedale and IRWD would use the water recharged in their respective storage accounts for agriculture and M&I uses, improving water supply reliability during droughts and emergencies. Article 21 stored in IRWD's storage account, made available to IRWD as a landowner in DRWD, would be made available for use in IRWD's service area through exchanges for Table A water as described in Section 2.6.2. Subject to agreements between Rosedale and IRWD, the operation of storage for the Authority members would be integrated with storage in Rosedale's Conjunctive Use Program and IRWD's Strand and Stockdale Integrated Banking Projects to store Article 21, Section 215, and other water supplies as well as for implementing exchange programs with SWP and CVP Contractors.

Page 2-7:

The proposed project would establish intermittent wetland habitat through intermittent recharge events. This is a WSIP ecosystem public benefit.

Page 2-12:

The proposed project includes a new turnout, additional canals and/or pipelines, and pump stations (collectively the "Kern Fan Conveyance Facilities") to convey water to and from the California Aqueduct and proposed recharge and recovery facilities. The exact locations of the

new conveyance facilities have not yet been determined but would have up to 500 cfs of conveyance capacity. Water would be conveyed to and from a new turnout at the California Aqueduct and a new conveyance system approximately 10 miles long that may include an open canal, closed conduit or some combination thereof. A typical turnout on the California Aqueduct is shown in **Figure 2-4**. Open channel construction may be concrete, shotcrete, high-density polyethylene (HDPE) or earth-lined, while closed-conduit materials may include reinforced-concrete pipe, HDPE, or cement-mortar-lined-and-coated steel pipe. In addition to a new conveyance, existing facilities ~~within Rosedale's Conjunctive Use Program~~ may be used to move water to/from the proposed project, subject to any necessary approvals, such as through the Friant-Kern Canal or the Kern River by exchange through the Goose Lake Channel, or from the CVC through the Rosedale Intake Canal. However, the proposed project will not introduce into the Friant-Kern Canal water that is not drawn from Millerton Lake. It is expected that the Kern Fan Conveyance Facilities could have siphon crossings at the following major locations depending on the final alignment:

- East Side Canal
- Kern Water Bank Main Canal
- West Kern Water District 36" DIP Transmission Main
- Stockdale Highway
- Kosareff Storage Yard & Residence

Page 2-16:

Construction of the proposed facilities is anticipated to begin with Phase 1 in fall 2021, with the Phase 1 recharge facilities ready to receive water by 2022, subject to variation of the construction schedule. Construction of Phase 2 facilities is anticipated to begin in 2022. Construction of the Kern Fan Conveyance Facilities, including the proposed turnout, is anticipated to begin in fall 2023. Construction of the project will be in multiple sequential or concurrent segments, each ranging from approximately 3 months to 40 months. The project is anticipated to be completed by fall 2026, subject to variations in the construction schedule.

Page 2-17:

DRWD Exchange Process

Under the proposed project, IRWD would receive Article 21 water as a land owner in DRWD, where 25 percent would be stored in the proposed project Ecosystem Account and the remaining water would be stored for IRWD and DRWD in IRWD's storage account. DRWD would facilitate the exchange of the Article 21 stored in IRWD's storage account for Table A; occurring either in-ground or by surface deliveries. This Table A water would then be available for IRWD to recover for use in DRWD or for delivery through MWD to IRWD's service area as described in Section 2.6.4.

Page 2-20:

Other approvals required, including those by Responsible and Trustee Agencies, may include the following:

- Kern County Water Agency: Approval for construction and operation of a new turnout on the California Aqueduct; Approval to deliver, exchange, and convey water through the California Aqueduct
- Department of Water Resources: (as a Responsible Agency)
  - Approval for use of the California Aqueduct to convey water;
  - Agreement authorizing the construction and operation of a new turnout on the California Aqueduct;
  - Operational Agreement facilitating the ~~1-for-1~~ exchanges necessary for the replenishment of pulse flows from Oroville Reservoir ~~of Table A water held in Lake Oroville as SWP Project Water for Article 21~~ from water held in the Kern Fan Groundwater Storage Project Ecosystem Account;
  - Agreement to coordinate the emergency response benefits associated with the WSIP funding
  - Agreement facilitating the exchange of DRWD Article 21 water stored in IRWD's storage account in the Kern Fan Groundwater Storage Project for DRWD Table A water.
- Dudley Ridge Water District:
  - Agreement facilitating the exchange of DRWD Article 21 water stored in IRWD's storage account in the Kern Fan Groundwater Storage Project for DRWD Table A water.

Chapter 3, Section 3.4 Biological Resources

Page 3.4-1:

- California Department of Fish and Wildlife (CDFW). 2020. California Natural Diversity Data Base (CNDDB) (Accessed July 2020). Database was queried for special status species records within the Stevens United States Geological Survey (USGS) topographic quadrangle and surrounding eight quadrangles. These eight quadrangles include: East Elk Hills, Tupman, Rosedale, Millux, Mouth of Kern, Taft, Rio Bravo, and Buttonwillow.

Page 3.4-13:

These eight quadrangles include: East Elk Hills, Tupman, Rosedale, Millux, Mouth of Kern, Taft, Rio Bravo, and Buttonwillow (CDFW 2020).

Page 3.4-16:

The species generally forages within 10 miles of their nest tree. Suitable nesting habitat does occur in the project areas as numerous trees were observed. Swainson's hawks are known to nest in many locations within the Conveyance Facilities area and elsewhere in and adjacent to the other portions of the project area. This species frequently nests and forages at the Tule Elk Reserve (adjacent to the project areas) and the Kern Water Bank (within the project areas) (Jonathan Parker, personal communication, November 28, 2020). No nests were observed within the project areas during the reconnaissance surveys; however, two adult Swainson's hawks were observed flying over the Phase 2 project area and is considered present on-site (see Figure 3.4-4).

Page 3.4-17:

The open water canals and agricultural fields on and near the project areas can support this species. This species has adapted to use mesquite trees/shrubs for nest sites when cattails and tules are not available or adequate for their purposes (Jonathan Parker, personal communication, November 28, 2020). Tricolored blackbirds have several CNDDB occurrences on and adjacent to the project areas; however, they are over 25 years old. Tricolored blackbirds frequently nest and forage within the Conveyance Facilities area and elsewhere within other portions of the project areas (Jonathan Parker, personal communication, November 28, 2020). No tricolored blackbirds were observed during the July 2020 reconnaissance.

Page 3.4-17.

The Nelson's antelope squirrel is known to occur ~~considered to have a medium potential to occur~~ in the project areas.

Suitable habitat for the species exists in the project areas within the non-native grassland, annual grassland, agricultural fields, and many of the earthen berms adjacent to the numerous access roads. Occurrence records for the species have also been recorded to the CNDDB within the Conveyance Facilities project area; however, these occurrences are over 30 years old. Nelson's antelope squirrels have seen an expansion of their populations in recent years into areas that were previously unoccupied for many years. This is the case at the nearby Coles Levee Ecosystem Preserve (outside the project areas) and at the Kern Water Bank (inside the project areas) (Jonathan Parker, personal communication, November 28, 2020). No Nelson's antelope squirrels were observed during the July 2020 reconnaissance.

Page 3.4-18:

The Tipton kangaroo rat is known to occur ~~considered to have a medium potential to occur~~ in the project areas.

Suitable habitat for the species exists in the project areas in the non-native grassland, annual; grassland, agricultural fields, and many of the earthen berms along the access roads on the project areas. Several CNDDB occurrences have been made on the project areas; however, they are over approximately 30 years old. Tipton kangaroo rats are known to occur on at least two areas within

the Conveyance Facilities area and likely occur on other areas with appropriate habitats (Jonathan Parker, personal communication, November 28, 2020). No Tipton kangaroo rat or sign of was observed during the July 2020 reconnaissance.

Page 3.4-18:

~~Based on such habitat requirements,~~ San Joaquin kit fox is known to occur ~~considered to have a high potential to occur~~ in the project areas.

Suitable habitat for the species occurs within the non-native grassland, annual grassland, agriculture fields, and the earthen berms located adjacent to the many access roads on the project areas. Several CNDDB occurrences have been made on the project areas; however, they are all over 30 years old. San Joaquin kit fox are known to occur in many areas within the Conveyance Facilities area and other portions of the project areas (Jonathan Parker, personal communication, November 28, 2020). No San Joaquin kit fox or sign of was observed during the July 2020 reconnaissance.

Pages 3.4-18 and 3.4-19:

Special-Status Plant Species

Precipitation for 2019 - 2020 was typical in the project region as well as throughout most of the State (NOAA 2020). Therefore, floristic representation at the time of the survey would have been typical for the month of July.

Based on the database search results and comments received from Kern Water Bank, special-status plant species known to occur or with a medium potential to occur in the project areas are briefly described below. For a more detailed description of special-status plant species, please refer to Appendix D.

Horn's milk vetch

Horn's milk vetch (*Astragalus hornii var. hornii*) has a CNPS status of 1B.1. This species is an annual herb with a blooming period between May and September. Horn's milk vetch is found in meadows and seeps and playas/lake margins in alkaline soils. It is known to occur within the Conveyance Facilities project area in existing earthen water conveyances and groundwater recharge basins.

Pages 3.4-31 to 3.4-34

> **BIO-1.** Prior to commencement of project vegetation or ground disturbing construction, a qualified biologist shall conduct a habitat assessment ~~survey~~ for blunt-nosed leopard lizard to determine if the Project area or its immediate vicinity contains suitable habitat for the species.
>
> ~~, in accordance with the most recent CDFW *Approved Survey Methodology for the Blunt-Nosed Leopard Lizard.*~~ If suitable habitat is present, prior to initiating any vegetation or ground disturbing activity, surveys will be conducted in accordance with CDFW *Approved*

Survey Methodology for the Blunt-Nosed Leopard Lizard (CDFW 2019). This survey protocol, designed to optimize blunt-nosed leopard lizard detection, reasonability assures CDFW that ground disturbance will not result in take of this fully protected species.

Blunt-nosed leopard lizard surveys will be conducted within one year prior to initiation of ground disturbance. Protocol-level surveys must be conducted on multiple dates during late spring, summer, and fall of the same calendar year, and within these time periods, there are specific protocol-level date, temperature, and time parameters that must be adhered to. Blunt-nosed leopard lizard protocol specifies different survey effort requirements based on whether the disturbance results from maintenance activities or if the disturbance results in habitat removal (CDFW 2019).

Blunt-nosed leopard lizard is a State fully protected species pursuant to Fish and Game Code Section 5050 and CDFW is unable to authorize take of this species for any reason. If blunt-nosed leopard lizard is detected during protocol-level surveys, then the Authority shall modify the Project design to avoid this species. If the project design cannot be modified, then the Authority shall consult with CDFW to discuss whether take of blunt-nosed leopard lizard can be avoided during ground-disturbing Project activities and during operations and maintenance of Project facilities. The USFWS will also be consulted to ensure that avoidance measure meet their standard for the avoidance of take for this species.

~~it is determined that blunt-nosed leopard lizard is present within the project areas, the Authority shall initiate the appropriate project modifications to protect blunt-nosed leopard lizard, including avoidance, minimization, restoration, preservation, or compensation.~~

BIO-2. If the nesting bird season cannot be avoided and construction or vegetation removal occurs between February ~~March~~ 1 – September 15 (January 1 to July 31 for raptors), the following measures would reduce potential impacts to nesting and migratory birds and raptors to less than significant levels:

- Within 10 ~~15~~ days of site clearing, a qualified biologist shall conduct a preconstruction, migratory bird and raptor nesting survey. The biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. This survey shall include species protected under the Migratory Bird Treaty Act including California horned lark, which was detected during the July 2020 reconnaissance and tri-colored blackbird, which has a medium potential to occur on-site. The survey shall cover all reasonably potential nesting locations for the relevant species on or closely adjacent to the proposed project site.

- The preconstruction survey shall cover all reasonably potential nesting locations on and within 300 feet of the proposed removal areas, and areas that would be occupied by ground-nesting species such as killdeer. A 500-foot radius shall be surveyed in areas containing suitable habitat for nesting raptors, such as trees, utility poles and buildings.

- Nesting habitat should be removed prior to the bird breeding season (February ~~March~~ 1 – September 15).

- If an active nest is confirmed by the biologist, no construction activities shall occur within 250 feet of the nesting site for migratory birds, within 300 feet for tri-colored blackbird, and within 500 feet of the nesting site for raptors. The buffer zones around any nest within which project-related construction activities would be avoided can be reduced as determined acceptable by a qualified biologist. Construction activities may resume once the breeding season ends (February ~~March~~ 1 – September 15), or the nest has either failed or the birds have fledged.

- If buffer distances are reduced, nest monitoring shall be conducted by a qualified biologist until the birds have fledged and are no longer reliant upon the nest or parental care for survival.

- If tri-colored blackbird take avoidance at a nesting colony is not feasible, acquisition of an ITP pursuant to Fish and Game Code Section 2081(b), prior to any Project activities, would be warranted to comply with CESA.

BIO-3. If construction activities are scheduled to take place outside of the Swainson's hawk nesting season (which runs from March 1 – September 15), then no preconstruction clearance surveys or subsequent avoidance buffers are required.

If construction activities are initiated within the nesting season then preconstruction nesting surveys shall be conducted by a qualified biologist prior to ground disturbance, in accordance with the guidance provided in the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee, 2000). The required windshield surveys shall cover the project area plus a one-half mile radius around the project sites.

If an active nest site is found, ~~the qualified biologist shall determine the appropriate buffer zone around the nest within which project-related construction activities would be avoided.~~ a minimum ½-mile no-disturbance buffer will be maintained around each nest, until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival, to prevent nest abandonment, other forms of take, and other potentially significant impacts to Swainson's hawk as a result of Project activities.

If a known Swainson's hawk nest tree requires removal, even outside the nesting season, it shall be replaced with an appropriate native tree species planting at a ratio of 3:1 near the Project area or in another area that will be protected in perpetuity. This mitigation would offset the local and temporal impacts of Swainson's hawk nesting habitat loss.

If Swainson's hawk are detected and a ½-mile no-disturbance nest buffer is not feasible, consultation with CDFW is warranted to determine if the Project can avoid take. If Swainson's hawk take cannot be avoided, issuance of an ITP prior to Project activities is warranted to comply with CESA.

BIO-4. A qualified biologist will conduct a habitat assessment in advance of project implementation to determine if the Project area or its vicinity contains suitable habitat for burrowing owl. If suitable habitat is present, a pre-construction survey shall be conducted for burrowing owls 14 to 30 days prior to clearing of the site by a qualified biologist in accordance with the most recent CDFW protocol, currently the *Staff Report on Burrowing*

Owl Mitigation (CDFW 2012). Surveys shall cover suitable burrowing owl habitat disturbed by construction including a 500-foot buffer. The survey would identify adult and juvenile burrowing owls and signs of burrowing owl occupation. This survey shall include two early morning surveys and two evening surveys to ensure that all owl pairs have been located. If occupied burrowing owl habitat is detected on the proposed project site, measures to avoid, minimize, or mitigate impacts shall be incorporated into the proposed project and shall include, but not be limited to, the following:

- ~~If owls are identified on or adjacent to the site, a qualified biologist shall provide a pre-construction Worker's Environmental Awareness Program to contractors and their employees that describes the life history and species protection measures that are in effect to avoid impacts to burrowing owls. Construction monitoring will also occur throughout the duration of ground-disturbing construction activities to ensure no impacts occur to burrowing owl.~~

- Construction exclusion areas shall be established around the occupied burrows in which no disturbance shall be allowed to occur while the burrows are occupied. Buffer areas shall be determined by a qualified biologist based on the recommendations outlined in the most recent *Staff Report on Burrowing Owl Mitigation* (CDFW 2012).

- If occupied burrows cannot be avoided, a qualified biologist shall develop and implement a Burrowing Owl Management Plan, consistent with *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). Burrow exclusion shall be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirm empty through non-invasive methods, such as surveillance. Occupied burrows shall be replaced with artificial burrows at a ratio of one burrow collapsed to one artificial burrow constructed (1:1) to mitigate for evicting burrowing owls and the loss of burrows. Periodic surveillance shall be conducted to ensure that burrowing owls do not return to the eviction site.

BIO-5. Prior to commencement of project activities, a qualified biologist shall conduct a San Joaquin kit fox habitat assessment to determine if the Project area or its immediate vicinity contains suitable habitat for the species. The habitat assessment will be conducted in accordance with the most recent USFWS *San Joaquin Kit Fox Survey Protocol.* ~~USFWS-approved "early evaluation" of the project area to determine if the project sites represent San Joaquin kit fox habitat.~~ If it is determined that San Joaquin kit fox has the potential to utilize the project areas, then the following measures are required to avoid potential adverse effects to this species:

- A qualified biologist will assess presence/absence of San Joaquin kit fox for all project phases and components within potentially suitable habitat. Transect surveys will be conducted of the project areas plus a 500-foot buffer to detect San Joaquin kit fox and their sign. These surveys will occur in all areas of potentially suitable habitat no less than 14 days and more than 30 days prior to beginning of ground disturbing activities. The USFWS (2011) *Standardized Recommendations for Protection of San Joaquin Kit Fox prior to or during Ground Disturbance* includes measures to be implemented if the species is detected.

~~If the evaluation shows that the San Joaquin kit fox does not utilize the project sites, and the project will not result in take, then no further mitigation shall be required for this endangered species. If the "early evaluation" finds the presence of kit fox, a San Joaquin kit fox survey shall be conducted by a qualified biologist, in accordance with the most recent USFWS San Joaquin Kit Fox Survey Protocol. If it is determined that the~~ If San Joaquin kit fox is detected (e.g., dens, individuals using the property) ~~utilizes the property~~, then the following measures are required to avoid potential adverse effects to this species:

- The Authority will consult with CDFW and USFWS to discuss how to avoid take, or if avoidance is not feasible, to acquire a state Incidental Take Permit (ITP), pursuant to Fish and Game Code section 2081, and a federal ITP, pursuant to Section 10 of the U.S. Endangered Species Act (ESA) prior to ground disturbing activities.

- ~~shall determine appropriate project modifications to protect kit fox, including avoidance, minimization, restoration, preservation, or compensation.~~

~~If evidence of active or potentially active San Joaquin kit fox dens is found within the area to be impacted by the proposed project, appropriate compensation for the habitat loss shall be determined and provided.~~

BIO-6. Prior to commencement of project activities, a qualified biologist shall conduct a habitat assessment to determine if the Project area or its immediate vicinity contains suitable habitat for Tipton kangaroo rat. If suitable habitat is present, a 50-foot minimum no-disturbance buffer around all small mammal burrow entrances of suitable size for Tipton kangaroo rat use, will be established and maintained during Project activity. If burrow avoidance is not feasible, focused protocol-level trapping surveys according to the USFWS (2013) protocol will be conducted by a qualified wildlife biologist that is permitted to do so by both CDFW and USFWS, to determine if Tipton kangaroo rat occurs in the Project area. If Tipton kangaroo rats are detected, CDFW will be consulted to discuss how to avoid take, or if avoidance is not feasible, to acquire an ITP prior to ground-disturbing activities, pursuant to Fish and Game Code Section 2081 subdivision (b).

~~survey for Tipton kangaroo rat, in accordance with the most USFWS *Survey Protocol for Determining* Presence *of San Joaquin Kangaroo Rats*. If it is determined that Tipton kangaroo rat utilizes the project areas, then the following measures are required to avoid potential adverse effects to this species:~~

- ~~The Authority shall have a qualified biologist conduct trapping to determine if there is a presence of the Tipton kangaroo rat.~~

- ~~If there is presence, the Authority shall determine appropriate project modifications to protect Tipton kangaroo rat, including avoidance, minimization, restoration, preservation, or compensation.~~

BIO-7. Prior to commencement of project activities, a qualified biologist shall conduct a habitat assessment to determine if the Project area or its immediate vicinity contains suitable habitat for Nelson's antelope squirrel. If suitable habitat is present and surveys are feasible, a qualified biologist shall conduct focused daytime visual surveys for Nelson's antelope squirrel using line transects with 10- to 30-meter spacing within Project areas and a 50-foot buffer around those areas between April 1 and September 20, during daytime

temperatures between 68° and 86° F (CDFG 1990), to maximize detectability. If suitable habitat is present and surveys are not feasible, a 50-foot minimum no-disturbance buffer around all small mammal burrow entrances will be established until the completion of Project activities. If Nelson's antelope squirrels are detected, consultation with CDFW will occur to discuss how to avoid take, or if avoidance is not feasible, to acquire a State ITP prior to ground-disturbing activities, pursuant to Fish and Game Code Section 2081 subdivision (b). ~~survey for Nelson's antelope squirrel. If it is determined that Nelson's antelope squirrel is detected on the project areas, then the following measures are required to avoid potential adverse effects to this species:~~

- ~~The Authority shall determine appropriate project modifications to protect Nelson's antelope squirrel, including avoidance, minimization, restoration, preservation, or compensation.~~

BIO-8. Prior to commencement of project activities, a qualified biologist shall conduct a habitat assessment for American badger to determine if the Project area contains suitable habitat for this species. If suitable habitat is present, a qualified biologist will conduct focused surveys for this species. Though there isn't a specific survey protocol for this species, American badger share similar habitat as burrowing owl and San Joaquin kit fox. Surveys shall be conducted for American badger concurrently with either burrowing owl or San Joaquin kit fox. If it is determined that American badger are detected on the project areas, a 50-foot no disturbance buffer will be established around the den site. If a 50-foot buffer is not feasible, then the buffer distance may be reduced as informed by the qualified biologist. ~~then the following measures are required to avoid potential adverse effects to this species:~~

- ~~The Authority shall determine appropriate project modifications to protect American badger, including avoidance, minimization, restoration, preservation, or compensation.~~

BIO-9. Prior to the start of construction activities that could affect special-status plant species, a qualified botanist shall conduct a focused survey within the Conveyance Facilities project area for California jewelflower, Hoover's eriastrum, Kern mallow, recurved larkspur, San Joaquin woollythreads, slough thistle, and subtle orache. The survey shall be based on the survey protocols in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). Focused rare plant surveys shall occur during the typical blooming periods of special-status plants with the potential to occur. If a special-status plant species is found to be present, a no-disturbance buffer of at least 50 feet shall be implemented. Buffer distance many be adjusted by a qualified biologist for non-state listed species or in consultation with CDFW for state-listed species. If take of a state-listed plant species cannot be avoided, take authorization is warranted through acquisition of an ITP, pursuant to Fish and Game Code Section 2081 subdivision (b) and acquisition of a permit for rare plants pursuant to procedures set forth in the California Code of Regulations, title 14, section 783 et seq. (Cal. Code Regs., tit. 14 section 786.9). If avoidance measures are required for San Joaquin woolly threads, the USFWS will be notified of the species presence and avoidance measures that are sufficient to avoid species impacts.

- ~~and avoidance of the species and/or habitat is not feasible, the Authority shall prepare and implement a Revegetation/Restoration Mitigation Plan. The~~

~~Revegetation/Restoration Mitigation Plan will guide activities during construction and operations and maintenance to avoid and minimize impacts to special-status plant species.~~

Page 3.4-34 to 3.4-35

BIO-10: Prior to commencement of project operations and maintenance activities, the Authority shall develop an Operations and Maintenance Plan that details how special-status plant and wildlife species, nesting birds and sensitive natural communities will not be impacted by operations and maintenance activities. The operations and maintenance plan will be informed by habitat assessments, species surveys, and if applicable, CDFW consultations, completed prior to project construction. A map of special status species, sensitive natural communities, and habitat features (sensitive resource map) will be developed. Workers will be provided the map and trained on how to recognize and avoid impacts to these species, natural communities and habitat features. The Operations and Maintenance Plan will require periodic species surveys to ensure the project ecosystem benefits are realized. These surveys will be used to update the sensitive resource map and inform adjustment to required avoidance and minimization measures The Operations and Maintenance Plan will include speed limits to avoid vehicle collisions or trampling of special status species.

~~Vehicle collisions with special-status wildlife or vehicle trampling of special-status plant species or sensitive natural communities is one example of how operations and maintenance activities could potentially impact biological resources. Some operations and maintenance activities may include pump and facility maintenance and vehicle operation on access roads.~~

BIO-11. If pesticides will be applied to any areas within the project areas, the Authority shall develop a Pesticide Use Plan that will detail how pesticides, rodenticides, and/or herbicides will be used and how application will not impact special-status plant and wildlife species, nesting birds, wetlands and jurisdictional features, and sensitive natural communities. The Pesticides Use Plan will be informed by the results of the species surveys and habitat assessments conducted prior to project construction. A map of special status species, sensitive natural communities, and habitat features (sensitive resource map) will be developed. Workers will be provided the map and trained on how to recognize and avoid impacts to these species, natural communities and habitat features. The Operations and Maintenance Plan will require periodic species surveys to ensure the project ecosystem benefits are realized. These surveys will be used to update the sensitive resource map and inform adjustment to required avoidance and minimization measures for the Pesticide Use Plan.

Page 3.4-38

The recharge basins that would be created as a result of the proposed project will be designed to establish intermittent wetland habitat through intermittent recharge events. This is a WSIP ecosystem public benefit.

Page 3.4-40

Wetlands resources could be beneficially affected by habitat modifications during operations and maintenance of the proposed project via creation of intermittent wetlands. This is a WSIP ecosystem public benefit.

Page 3.4-43

> **BIO-14**. Should facilities be located on the Kern Water Bank, the Authority shall initiate discussions with the Kern Water Bank Authority to ensure Conveyance Facilities located in the Kern Water Bank HCP/NCCP avoid impacts to covered species within the HCP/NCCP area during construction, operations, and maintenance. If the project is located within the Kern Water Bank HCP/NCCP, Mitigation Measure BIO-1 through BIO-13 will be implemented in coordination with the KWBA, and if necessary, CDFW and USFWS to ensure the project is implemented in compliance with the HCP/NCCP. If any of the project activities will conflict with the implementation of the HCP/NCCP, the Authority will consult with CDFW, USFWS, and the KWBA in advance of project implementation to ensure compliance with CESA and ESA.

Chapter 3, Section 3.7 Geology and Soils

Page 3.7-22:

Operation

Rosedale conducts subsidence monitoring in the project area (Rosedale 2019) and will continue subsidence monitoring in the future in accordance with requirements of the Kern Groundwater Authority GSP of which Rosedale is a member (see Chapter 2, Project Description, page 2-4; and Section 3.10 Hydrology and Water Quality, page 3.10-23 to 3.10-24). The Kern Groundwater Authority GSP includes requirements for subsidence monitoring for critical infrastructure, which includes the California Aqueduct. Subsidence has occurred historically north and south of Rosedale but not within its boundaries. Subsidence has been continuously monitored by DWR since June 1994 with an extensometer located about two miles south of the Phase 1 area within the Kern Water Bank Authority (see Figure 3.10-1 for district location and Figure 3.10-2 for extensometer location). The results of the monitoring indicate that both upward and downward changes of at most 0.1 foot per year have occurred within an overall upward trend of inflation. As of June 2018, the land surface was 0.27 feet higher than the land surface in June 1994. The data indicates subsidence has not resulted from KWB recovery operations during extended droughts. DWR has developed, as part of their SGMA technical assistance a statewide InSAR subsidence dataset. InSAR is a satellite-based remote sensing technique that measures vertical surface displacement changes at high degrees of measurement resolution and spatial detail. Subsidence for 2016 and 2017 in the Rosedale area was upward by about 0.01 foot per year. This increase denotes swelling rather than subsidence in the project area.

Chapter 3, Section 3.10 Hydrology and Water Quality

Page 3.10-36 to 3.10-37

Once recovered, the groundwater would be introduced into the new proposed conveyance facilities, California Aqueduct, Goose Lake Channel, or the CVC through the Rosedale West Intake Canal and would be subject to applicable pump-in water quality requirements. The Authority will enter into an agreement with DWR for a new turnout into the California Aqueduct ~~that will include water quality requirements for discharging non-SWP water into the California Aqueduct~~. Prior to pumping extracted groundwater into the CVC and California Aqueduct, it would be the Authority's responsibility to ensure that the water quality was sufficient to meet applicable water quality requirements of KCWA and DWR, and submit a Pump-In Proposal that identifies the water sources, planned operation, inflow water quality, and any anticipated impacts to water quality and/or operations. The operational agreement with DWR will specify that any introduction of water into the California Aqueduct must comply with DWR water quality requirements. Any water that did not meet water quality requirements or could not be blended to meet such requirements, as imposed by the conveyance facility operators, would not be conveyed within the canals.

Page 3.10-37

The proposed recharge water does not have elevated concentrations of arsenic and its addition would be expected to reduce the concentrations of arsenic in the ~~deeper portions of the~~ aquifer. Therefore, the addition of the recharge water would be a beneficial impact to groundwater quality.

Appendix D

Page 47:

The recharge basins that would be created as a result of the proposed will be designed to establish intermittent wetland habitat through intermittent recharge events. This is a WSIP ecosystem public benefit.