APPENDIX L
Friant-Kern Canal Middle Reach Capacity Correction Project

Responses to Comments on the Draft EIS/R

BUREAU OF RECLAMATION

Bureau of Reclamation
Interior Region 10 California-Great Basin
California*, Nevada*, Oregon*
***Partial**

September 2020

Introduction

In accordance with Council on Environmental Quality regulations in 40 Code of Federal Regulations (CFR) 1503.4 and Section 15088 of the State California Environmental Quality Act Guidelines, the Bureau of Reclamation (Reclamation) and Friant Water Authority (FWA), as the lead agencies, have reviewed comments received on the Draft Environmental Impact Statement/Environmental Impact Report (EIS/R) for the Friant-Kern Canal Middle Reach Capacity Correction Project (Project) and have prepared written responses. This section contains each letter or email comment on the Draft EIS/R received during the 45-day public comment period beginning May 7, 2020, and ending June 22, 2020, and includes responses to each comment.

Reclamation and FWA held a public meeting on June 8, 2020 from 5:30 p.m. to 7:30 p.m. to provide an overview of the Project and environmental review process, as well as receive verbal comments on the Draft EIS/R. The meeting was open for public comments from approximately 6:30 p.m. to 7:30 p.m. No comments on the Draft EIS/R were received during the public comment period.

Reclamation and FWA received five comment letters from federal, state, and local agencies; one comment letter from a non-governmental organization; and eight emails from individuals. Each comment letter and email that was received, as well as each individual comment within the letters and emails, has been given an individual number for purposes of cross-referencing. Table L-1 lists all parties who submitted comments on the Draft EIS/R during the public review period. Copies of the comment letters are included below and are followed by their respective responses.

Table L-1. List of Commenters on the Draft EIS/R

Commenter	Agency/Group	Date	Comment Letter ID
Federal Agencies			
Jean Prijatel	United States Environmental Protection Agency Region IX	June 19, 2020	FA01
State Agencies			
Julie Vance	California Department of Fish and Wildlife	June 19, 2020	SA01
David Deel	California Department of Transportation	June 22, 2020	SA02
Local Agencies			
Arnaud Marjollet	San Joaquin Valley Air Pollution Control District	June 22, 2020	LA01
Eric Quinley	Delano-Earlimart Irrigation District	June 22, 2020	LA02
Non-Governmental Organizations			
Justin Frederickson	California Farm Bureau Federation	June 22, 2020	NGO01
Individuals			
Karin Campbell		June 17, 2020	I01
Scott Steward		June 17, 2020	I02
Steve (no last name provided)		June 17, 2020	I03

Commenter	Agency/Group	Date	Comment Letter ID
Stacy Cardoso		June 17, 2020	I04
JC Creighton		June 18, 2020	I05
Russ Patras		June 18, 2020	I06
Bryan Doran		June 19, 2020	I07
Nick and Estrella Cabuco		June 22, 2020	I08

Comment Letters and Responses to Comments

Federal Agency

Letter FA01: United States Environmental Protection Agency, June 19, 2020

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

June 19, 2020

Rain Emerson
Environmental Compliance Branch Chief
Bureau of Reclamation
South Central California Area Office
1243 N Street
Fresno, California 93721

Subject: Draft Environmental Impact Statement for the Friant-Kern Canal Middle Reach Capacity Correction Project, Tulare and Kern Counties, California (EIS No. 20200098)

Dear Ms. Emerson:

The U.S. Environmental Protection Agency has reviewed the Bureau of Reclamation's Draft Environmental Impact Statement for the Friant-Kern Canal Middle Reach Capacity Correction Project. Our review and comments are provided pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

Reclamation, in partnership with the Friant Water Authority, proposes to restore the capacity of 33 miles of the middle reach of the Friant-Kern canal. Reclamation has not identified a preferred alternative but considers the canal realignment and canal enlargement action alternatives in the Draft EIS as the ways of restoring capacity. The EPA has reviewed the Draft EIS and offers the enclosed detailed comments to Reclamation to consider when preparing the Final EIS, including recommendations for wetlands and air quality.

Effective October 22, 2018, the EPA no longer includes ratings in our comment letters. Information about this change and the EPA's continued roles and responsibilities in the review of federal actions can be found on our website: https://www.epa.gov/nepa/epa-review-process-under-section-309-clean-air-act. The EPA appreciates the opportunity to review this Draft EIS. If you have any questions, please contact me at (415) 947-4167, or contact Stephanie Gordon, the lead reviewer for this project, at 415-972-3098 or gordon.stephanies@epa.gov

Sincerely,

JEAN PRIJATEL

Digitally signed by JEAN PRIJATEL
Date: 2020.06.19 10:54:00 -07'00'

Jean Prijatel
Manager, Environmental Review Branch

Enclosures: Detailed Comments

U.S. EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE FRIANT- KERN CANAL MIDDLE REACH CAPACITY CORRECTION PROJECT, TULARE AND KERN COUNTIES, CALIFORNIA- JUNE 19, 2020

Air Quality

The EPA's regulations at 40 CFR 93.150-165 provide a method for federal agencies to demonstrate general conformity with the National Ambient Air Quality Standards. Estimated annual emissions from a federal action are compared to the de minimis thresholds through an applicability assessment. If the emissions exceed the de minimis threshold, general conformity is applicable to the federal action and the EPA's regulations offer methods to demonstrate conformity as well as other requirements for the conformity demonstration, such as public involvement.

The Plan Area is located within the San Joaquin Valley Air Basin, which the EPA currently designates as extreme nonattainment for ozone and nonattainment for particulate matter of less than 2.5 microns ($PM_{2.5}$). The Draft EIS indicates there would be degradation of air quality during project construction for both action Alternatives. It also appears that general conformity de minimus thresholds may be exceeded, thus requiring a demonstration of conformity (p. 57). The Draft EIS does not appear to address general conformity beyond this brief sentence and does not include a comparison of annual emissions to the de minimis thresholds for all Alternatives. Providing comparisons of air quality impacts across alternatives helps the public understand the alternatives and the decision-makers make informed decisions amongst alternatives. FA01-1

> ***Recommendation:*** Provide a clear description of the project elements included in each category of emissions sources and provide a summary table for all project emissions to more clearly disclose and compare total impacts from each alternative. We recommend including a draft general conformity determination in the Final EIS to fulfill the public participation requirements of 40 CFR 93.156.

Construction Emissions

Mitigation for air quality impacts, as detailed in Appendix B2, is to enter into a Voluntary Emissions Reduction Agreement with the San Joaquin Valley Air Pollution Control District. The EPA recommends that Reclamation coordinate closely with the SJVAPCD to ensure that the project moves forward in a manner that reduces air quality impacts to the greatest extent possible. In addition, there are a number of actions that can reduce construction-related emissions of NAAQS.

> ***Recommendation***: In addition to measures necessary to meet all applicable local, state, and federal requirements, the EPA recommends the following mitigation measures be included in the construction emissions mitigation plan:
>
> Fugitive Dust Source Controls: FA01-2
>
> - Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both active and inactive sites during workdays, weekends, holidays, and windy conditions.
> - Install wind fencing and phase grading operations where appropriate and operate water trucks for stabilization of surfaces under windy conditions.
> - When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Mobile and Stationary Source Controls:

- Reduce unnecessary idling from heavy equipment.
- Prohibit engine tampering to increase horsepower, except when meeting manufacturer's recommendations.
- Lease or buy newer, cleaner equipment using the best available emissions control technologies.
    - Use lower-emitting engines and fuels, including electric, liquified gas, hydrogen fuel cells, and/or alternative diesel formulations, if feasible.
    - *On-Highway Vehicles* - On-highway vehicles should meet, or exceed, the U.S. EPA exhaust emissions standards for model year 2010 and newer heavy-duty on-highway compression-ignition engines (e.g., drayage trucks, long haul trucks, refuse haulers, shuttle buses, etc.).[1]
    - *Nonroad Vehicles & Equipment* - Nonroad vehicles and equipment should meet, or exceed, the U.S. EPA Tier 4 exhaust emissions standards for heavy-duty nonroad compression-ignition engines (e.g., nonroad trucks, construction equipment, cargo handlers, etc.).[2]

Administrative Controls:

- Coordinate with appropriate air quality agencies to identify a construction schedule that minimizes cumulative impacts from other planned projects in the region, if feasible.
- Locate diesel engines, motors, and equipment staging areas as far as possible from residential areas and other sensitive receptors (e.g., schools, daycare centers, hospitals, senior centers, etc.). FA01-2
- Avoid routing truck traffic near sensitive land uses to the fullest extent feasible.
- Use cement blended with the maximum feasible amount of fly ash or other materials that reduce GHG emissions from cement production.
- Use lighter-colored pavement where feasible.
- Recycle construction debris to the maximum extent feasible.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking.[3]
- Reduce construction-related trips of workers and equipment, including trucks.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify all commitments to reduce construction emissions and quantify air quality improvements that would result from adopting specific air quality measures.
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.

CWA Section 404 Permitting

The purpose of the Clean Water Act is to restore and maintain the chemical, physical and biological integrity of waters of the United States. These goals are achieved, in part, by controlling discharges of FA01-3

[1] See https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100O9ZZ.pdf
[2] See https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100OA05.pdf
[3] Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.

dredged or fill material pursuant to EPA's Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the CWA (Guidelines). Fundamental to the Guidelines is the principle that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that there is no less environmentally damaging practicable alternative that achieves the Applicant's project purpose. In addition, no discharge can be permitted if it will cause or contribute to significant degradation of waters. FA01-3

The Draft EIS does not address whether CWA Section 404 would apply to the project. The Draft EIS does acknowledge that elements of the Canal Enlargement and Realignment Alternative would impact aquatic resources at Deer Creek and White River, but it does not state whether they would meet the definition of fill and require CWA Section 404 permits (p. 68).

> ***Recommendation***: Include in the Final EIS a discussion of the applicability of CWA Section 404 to project construction, operations, and maintenance activities. If applicable, discuss the permit requirements under this statute and identify the role of the Army Corps of Engineers in implementing these programs. Describe the results of the CWA Section 404 impacts analysis, as well as proposed mitigation, if applicable.

Alternatives Analysis

EPA understands that Reclamation is striving to complete NEPA requirements in a concise manner. The current Draft EIS has incorporated by reference several appendices that describe the Alternatives, impacts to water quality, construction emissions and impacts to air quality, mitigation to offset impacts, and others. This method of providing relevant information creates challenges for reading and understanding the NEPA document. FA01-4

> ***Recommendation:*** EPA recommends that brief summaries be included in the main body of the EIS document, in addition to the incorporation by reference; for example, include a description of the proposed project in the Alternatives chapter. Readability is important for the public and decision-makers to understand and compare amongst Alternatives.

Response to Comment FA01-1

Tables L-2 and L-3 provide the summaries of the Project elements that were used to estimate air emissions for both Project alternatives, and determinations on whether each Project Alternative exceeds the emission thresholds set by the San Joaquin Valley Pollution Control District (SJVAPCD) and the General Conformity Rule (GCR) *de minimis* thresholds pursuant to the Clean Air Act (CAA). The assumptions that were used to estimate these emissions are shown in Tables E-1 through E-6 in Appendix E of the EIS/R.

Table L-2: Unmitigated Construction Emissions compared to SJVAPCD thresholds and GCR *de minimis* thresholds – Canal Enlargement and Realignment (CER) Alternative

Source	Tons per Year					
	ROG	**NO_X**	**CO**	**SO_X**	**Total PM_{10}**	**Total $PM_{2.5}$**
2021						
Off-road	2.92	29.22	23.2265	0.05	1.32	1.26
Truck Loading	0.00	0.00	0.0000	0.00	0.04	0.01
Bulldozing	0.00	0.00	0.0000	0.00	0.72	0.39
Grading	0.00	0.00	0.0000	0.00	0.47	0.05
LD Support	0.10	0.13	1.7665	0.00	0.34	0.09
HHDT Support	0.24	5.69	0.9715	0.02	0.29	0.10
Offsite LD	0.09	0.10	1.1300	0.00	0.33	0.09
Haul	0.12	2.63	1.1287	0.01	3.43	0.39
Batch Plant	0.00	0.00	0.00	0.00	1.37	1.37
Total	3.47	37.78	28.22	0.08	8.31	3.76
SJVAPCD threshold	10	10	100	27	15	15
Exceed threshold	No	Yes	No	No	No	No
GCR *de minimis* threshold	10	10	100	100	100	70
Exceed GCR *de minimis* threshold?	No	Yes	No	No	No	No
2022						
Off-road	3.59	35.53	29.21	0.06	1.62	1.56
Truck Loading	0.00	0.00	0.00	0.00	0.04	0.01
Bulldozing	0.00	0.00	0.00	0.00	0.83	0.45
Grading	0.00	0.00	0.00	0.00	0.52	0.06
LD Support	0.13	0.16	2.10	0.01	0.41	0.11
HHDT Support	0.32	8.09	1.36	0.02	0.42	0.14
Offsite LD	0.10	0.11	1.18	0.00	0.36	0.10
Haul	0.12	2.63	1.13	0.01	3.43	0.39
Batch Plant	0.00	0.00	0.00	0.00	1.37	1.37
Total	4.26	46.52	34.98	0.10	8.99	4.18
SJVAPCD threshold	10	10	100	27	15	15
Exceed threshold	No	Yes	No	No	No	No
GCR *de minimis* threshold	10	10	100	100	100	70
Exceed GCR *de minimis* threshold?	No	Yes	No	No	No	No
2023						
Off-road	0.14	1.33	0.74	0.00	0.05	0.04
Truck Loading	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00
LD Support	0.02	0.03	0.46	0.00	0.09	0.03
HHDT Support	0.09	2.81	0.43	0.01	0.15	0.05

Source	Tons per Year					
	ROG	**NO_X**	**CO**	**SO_X**	**Total PM_{10}**	**Total $PM_{2.5}$**
Offsite LD	0.05	0.05	0.55	0.00	0.17	0.05
Haul	0.00	0.00	0.00	0.00	0.00	0.00
Batch Plant	0.00	0.00	0.00	0.00	1.37	1.37
Total	0.30	4.22	2.18	0.01	1.82	1.53
SJVAPCD threshold	10	10	100	27	15	15
Exceed threshold	No	No	No	No	No	No
GCR *de minimis* threshold	10	10	100	100	100	70
Exceed GCR *de minimis* threshold?	No	No	No	No	No	No
2024						
Off-road	0.06	0.59	0.35	0.00	0.02	0.02
Truck Loading	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00
LD Support	0.01	0.01	0.20	0.00	0.04	0.01
HHDT Support	0.04	1.29	0.18	0.00	0.07	0.02
Offsite LD	0.02	0.02	0.25	0.00	0.08	0.02
Haul	0.00	0.00	0.00	0.00	0.00	0.00
Batch Plant	0.00	0.00	0.00	0.00	0.57	0.57
Total	0.13	1.91	0.98	0.01	0.78	0.64
SJVAPCD threshold	10	10	100	27	15	15
Exceed threshold	No	No	No	No	No	No
GCR *de minimis* threshold	10	10	100	100	100	70
Exceed GCR *de minimis* threshold?	No	No	No	No	No	No

Notes:
GCR = General Conformity Rule
HHDT = Heavy Heavy Duty Truck
LD = Light Duty
PM_{10} = particulate matter 10 microns or less in diameter
ROG = reactive organic gas
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_X = sulfur oxide

Table L-3: Unmitigated Construction Emissions compared to SJVAPCD thresholds and GCR *de minimis* thresholds – Canal Enlargement (CE) Alternative

Source	**ROG** Tons per year	**NOX** Tons per year	**CO** Tons per year	**SOX** Tons per year	**Total PM10** Tons per year	**Total PM2.5** Tons per year
2021						
Off-road	0.76	7.76	5.89	0.01	0.34	0.33
Truck Loading	0.00	0.00	0.00	0.00	0.01	0.00
Bulldozing	0.00	0.00	0.00	0.00	0.17	0.09
Grading	0.00	0.00	0.00	0.00	0.12	0.01
LD Support	0.04	0.06	0.76	0.00	0.15	0.04
HHDT Support	0.15	3.44	0.56	0.01	0.18	0.06
Offsite LD	0.06	0.07	0.74	0.00	0.22	0.06
Haul	0.05	1.31	0.45	0.00	1.66	0.20
Batch Plant	0.00	0.00	0.00	0.00	0.66	0.66

Source	**ROG** Tons per year	**NOX** Tons per year	**CO** Tons per year	**SOX** Tons per year	**Total PM10** Tons per year	**Total PM2.5** Tons per year
Total	1.06	12.64	8.40	0.03	3.51	1.45
SJVAPCD threshold	10	10	100	27	15	15
Exceed threshold	No	Yes	No	No	No	No
GCR *de minimis* threshold	10	10	100	100	100	70
Exceed GCR *de minimis* threshold?	No	Yes	No	No	No	No
			2022			
Off-road	0.92	9.30	7.48	0.02	0.40	0.37
Truck Loading	0.00	0.00	0.00	0.00	0.02	0.00
Bulldozing	0.00	0.00	0.00	0.00	0.27	0.15
Grading	0.00	0.00	0.00	0.00	0.22	0.02
LD Support	0.04	0.06	0.78	0.00	0.17	0.05
HHDT Support	0.11	3.96	0.56	0.01	0.21	0.07
Offsite LD	0.06	0.07	0.77	0.00	0.25	0.07
Haul	0.08	2.18	0.80	0.01	3.30	0.37
Batch Plant	0.00	0.00	0.00	0.00	0.66	0.66
Total	**1.22**	**15.57**	**10.39**	**0.04**	**5.49**	**1.76**
SJVAPCD threshold	10	10	100	27	15	15
Exceed threshold	No	Yes	No	No	No	No
GCR *de minimis* threshold	10	10	100	100	100	70
Exceed GCR *de minimis* threshold?	No	Yes	No	No	No	No
			2023			
Off-road	0.69	6.92	5.82	0.01	0.29	0.27
Truck Loading	0.00	0.00	0.00	0.00	0.02	0.00
Bulldozing	0.00	0.00	0.00	0.00	0.25	0.14
Grading	0.00	0.00	0.00	0.00	0.22	0.02
LD Support	0.02	0.02	0.32	0.00	0.07	0.02
HHDT Support	0.02	2.70	0.28	0.01	0.15	0.04
Offsite LD	0.03	0.03	0.34	0.00	0.12	0.03
Haul	0.06	1.78	0.77	0.01	3.28	0.37
Batch Plant	0.00	0.00	0.00	0.00	0.16	0.16
Total	0.82	11.45	7.52	0.03	4.57	1.06
SJVAPCD threshold	10	10	100	27	15	15
Exceed threshold	No	Yes	No	No	No	No
GCR *de minimis* threshold	10	10	100	100	100	70
Exceed GCR *de minimis* threshold?	No	Yes	No	No	No	No
			2024			
Off-road	0.67	6.47	5.74	0.01	0.26	0.25
Truck Loading	0.00	0.00	0.00	0.00	0.02	0.00
Bulldozing	0.00	0.00	0.00	0.00	0.25	0.14
Grading	0.00	0.00	0.00	0.00	0.22	0.02
LD Support	0.02	0.02	0.29	0.00	0.07	0.02
HHDT Support	0.02	2.72	0.29	0.01	0.15	0.04
Offsite LD	0.03	0.02	0.31	0.00	0.12	0.03
Haul	0.06	1.78	0.76	0.01	3.28	0.37
Batch Plant	0.00	0.00	0.00	0.00	0.16	0.16
Total	0.78	11.01	7.39	0.03	4.54	1.04

Source	**ROG** Tons per year	**NOX** Tons per year	**CO** Tons per year	**SOX** Tons per year	**Total PM10** Tons per year	**Total PM2.5** Tons per year
SJVAPCD threshold	10	10	100	27	15	15
Exceed threshold	No	Yes	No	No	No	No
GCR *de minimis* threshold	10	10	100	100	100	70
Exceed GCR *de minimis* threshold?	No	Yes	No	No	No	No
			2025			
Off-road	0.60	5.61	5.45	0.01	0.22	0.21
Truck Loading	0.00	0.00	0.00	0.00	0.02	0.00
Bulldozing	0.00	0.00	0.00	0.00	0.25	0.14
Grading	0.00	0.00	0.00	0.00	0.22	0.02
LD Support	0.02	0.02	0.27	0.00	0.07	0.02
HHDT Support	0.02	2.72	0.29	0.01	0.15	0.04
Offsite LD	0.02	0.02	0.29	0.00	0.12	0.03
Haul	0.05	1.77	0.76	0.01	3.28	0.37
Batch Plant	0.00	0.00	0.00	0.00	0.16	0.16
Total	0.72	10.14	7.05	0.03	4.50	1.00
SJVAPCD threshold	10	10	100	27	15	15
Exceed threshold	No	Yes	No	No	No	No
GCR *de minimis* threshold	10	10	100	100	100	70
Exceed GCR *de minimis* threshold?	No	Yes	No	No	No	No
			2026			
Off-road	0.60	5.61	5.45	0.01	0.22	0.21
Truck Loading	0.00	0.00	0.00	0.00	0.02	0.00
Bulldozing	0.00	0.00	0.00	0.00	0.25	0.14
Grading	0.00	0.00	0.00	0.00	0.22	0.02
LD Support	0.02	0.02	0.25	0.00	0.07	0.02
HHDT Support	0.02	2.72	0.28	0.01	0.15	0.04
Offsite LD	0.02	0.02	0.27	0.00	0.12	0.03
Haul	0.05	1.75	0.75	0.01	3.28	0.37
Batch Plant	0.00	0.00	0.00	0.00	0.16	0.16
Total	0.71	10.11	7.01	0.03	4.50	1.00
SJVAPCD threshold	10	10	100	27	15	15
Exceed threshold	No	Yes	No	No	No	No
GCR *de minimis* threshold	10	10	100	100	100	70
Exceed GCR *de minimis* threshold?	No	Yes	No	No	No	No
			2027			
Off-road	0.60	5.61	5.45	0.01	0.22	0.21
Truck Loading	0.00	0.00	0.00	0.00	0.02	0.00
Bulldozing	0.00	0.00	0.00	0.00	0.25	0.14
Grading	0.00	0.00	0.00	0.00	0.22	0.02
LD Support	0.01	0.01	0.23	0.00	0.07	0.02
HHDT Support	0.02	2.71	0.28	0.01	0.15	0.04
Offsite LD	0.02	0.02	0.26	0.00	0.12	0.03
Haul	0.05	1.74	0.75	0.01	3.28	0.37
Batch Plant	0.00	0.00	0.00	0.00	0.16	0.16
Total	0.71	10.09	6.97	0.03	4.50	1.00

Source	**ROG** Tons per year	**NOX** Tons per year	**CO** Tons per year	**SOX** Tons per year	**Total PM10** Tons per year	**Total PM2.5** Tons per year
SJVAPCD threshold	10	10	100	27	15	15
Exceed threshold	No	Yes	No	No	No	No
GCR *de minimis* threshold	10	10	100	100	100	70
Exceed GCR *de minimis* threshold?	No	Yes	No	No	No	No
			2028			
Off-road	0.60	5.61	5.45	0.01	0.22	0.21
Truck Loading	0.00	0.00	0.00	0.00	0.02	0.00
Bulldozing	0.00	0.00	0.00	0.00	0.25	0.14
Grading	0.00	0.00	0.00	0.00	0.22	0.02
LD Support	0.01	0.01	0.22	0.00	0.07	0.02
HHDT Support	0.02	2.69	0.28	0.01	0.15	0.04
Offsite LD	0.02	0.02	0.24	0.00	0.12	0.03
Haul	0.05	1.72	0.75	0.01	3.28	0.37
Batch Plant	0.00	0.00	0.00	0.00	0.16	0.16
Total	0.71	10.06	6.94	0.03	4.50	1.00
SJVAPCD threshold	10	10	100	27	15	15
Exceed threshold	No	Yes	No	No	No	No
GCR *de minimis* threshold	10	10	100	100	100	70
Exceed GCR *de minimis* threshold?	No	Yes	No	No	No	No
			2029			
Off-road	0.68	6.15	7.08	0.02	0.24	0.23
Truck Loading	0.00	0.00	0.00	0.00	0.01	0.00
Bulldozing	0.00	0.00	0.00	0.00	0.21	0.12
Grading	0.00	0.00	0.00	0.00	0.13	0.01
LD Support	0.02	0.02	0.40	0.00	0.14	0.04
HHDT Support	0.03	4.88	0.51	0.01	0.27	0.08
Offsite LD	0.04	0.03	0.48	0.00	0.25	0.07
Haul	0.03	1.14	0.48	0.00	1.67	0.19
Batch Plant	0.00	0.00	0.00	0.00	0.55	0.55
Total	0.80	12.22	8.95	0.04	3.47	1.29
SJVAPCD threshold	10	10	100	27	15	15
Exceed threshold	No	Yes	No	No	No	No
GCR *de minimis* threshold	10	10	100	100	100	70
Exceed GCR *de minimis* threshold?	No	Yes	No	No	No	No
			2030			
Off-road	0.24	2.04	2.66	0.01	0.08	0.08
Truck Loading	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing	0.00	0.00	0.00	0.00	0.05	0.03
Grading	0.00	0.00	0.00	0.00	0.01	0.00
LD Support	0.01	0.01	0.23	0.00	0.08	0.02
HHDT Support	0.02	2.57	0.27	0.01	0.14	0.04
Offsite LD	0.02	0.02	0.30	0.00	0.16	0.04
Haul	0.01	0.21	0.08	0.00	0.03	0.01
Batch Plant	0.00	0.00	0.00	0.00	0.44	0.44

Source	ROG Tons per year	NOX Tons per year	CO Tons per year	SOX Tons per year	Total PM10 Tons per year	Total PM2.5 Tons per year
Total	0.29	4.85	3.53	0.01	0.99	0.66
SJVAPCD threshold	10	10	100	27	15	15
Exceed threshold	No	No	No	No	No	No
GCR *de minimis* threshold	10	10	100	100	100	70
Exceed GCR *de minimis* threshold?	No	No	No	No	No	No

Notes:
GCR = General Conformity Rule
HHDT = Heavy Duty Truck
LD = Light Duty
PM_{10} = particulate matter 10 microns or less in diameter
ROG = reactive organic gas
SJVAPCD = San Joaquin Valley Air Pollution Control District
SO_X = sulfur oxide

As shown in the tables above, and in Tables E-7 and E-9 in Appendix E in the Final EIS/R, carbon monoxide (CO), reactive organic gas (ROG), sulfur oxide (SO_X), particulate matter 10 microns or less in diameter (PM_{10}), and particulate matter 2.5 microns in diameter or less ($PM_{2.5}$) did not exceed the SJVAPCD or GCR *de minimis* thresholds. Accordingly, both Project alternatives are in conformity with the CAA for those pollutants. For nitrogen oxides (NO_X) both Project alternatives exceed both the SJVAPVD threshold and GCR *de minimis* threshold. However, as shown in Tables E-8a, E-8b, E-10a and E-10b in Appendix E of the Final EIS/R, with the incorporation of mitigation, NO_X emissions were reduced to less than 10 tons per year (below the SJVAPCD and GCR *de minimis* thresholds), therefore Reclamation has determined that the Project is in conformance with the CAA.

A conformity determination is included in the Final EIS/R to fulfill the public participation requirements of 40 CFR 93.156. Tables E-7 through E-10 in the Final EIS/R (Appendix E) were revised to include the GCR *de minimis* thresholds which show that the mitigated emissions for both Project alternatives do not exceed the thresholds for NO_X.

Response to Comment FA01-2

As noted in mitigation measure (MM) AQ-1 (see Appendix B2 of the Final EIS/R), the Project will comply with SJVAPCD's Regulation VIII Fugitive Dust Prohibitions. Compliance with Regulation VIII will require preparation of a Dust Control Plan and the following requirements will apply:

- Visible Dust Emissions (VDE) may not exceed 20 percent opacity during periods when soil is being disturbed by equipment or by wind at any time. Visible Dust Emissions opacity of 20 percent means dust that would obstruct an observer's view of an object by 20 percent. SJVAPCD inspectors are state-certified to evaluate visible emissions. Dust control may be achieved by applying water before and during earthwork and onto unpaved traffic areas, phasing work to limit dust, and setting up wind fences to limit windblown dust.

- Soil stabilization is required at regulated construction sites after normal working hours and on weekends and holidays. This requirement also applies to inactive construction areas such as phased projects where disturbed land is left unattended. Applying water to form a visible crust on the soil and restricting vehicle access are often effective for short-term stabilization of disturbed surface areas. Long-term methods including applying dust suppressants and establishing vegetative cover.
- Carry-out and track-out occur when materials from emptied or loaded vehicles falls onto a paved surface or shoulder of a public road or when materials adhere to vehicle tires and are deposited onto a paved surface or shoulder of a public road. Should either occur, the material must be cleaned up at least daily, and immediately if it extends more than 50 feet from the exit point onto a paved road. The appropriate clean-up methods require the complete removal and cleanup of mud and dirt from the paved surface and shoulder. Using a blower device or dry sweeping with any mechanical device other than a PM_{10}-efficient street sweeper is a violation. Larger construction sites or sites with a high amount of traffic on one or more days must prevent carry-out and track-out from occurring by installing gravel pads, grizzlies, wheel washers, paved interior roads, or a combination thereof at each exit point from the site. In many cases, cleaning up track-out with water is also prohibited as it may lead to plugged storm drains. Prevention is the best method.
- Unpaved access and haul roads, as well as unpaved vehicle and equipment traffic areas at construction sites must have dust control. Speed limit signs limiting vehicle speed to 15 miles per hour or less at construction sites must be posted every 500 feet on uncontrolled and unpaved roads.
- Storage piles and bulk materials have handling, storage, and transportation requirements that include applying water when handling materials, wetting or covering stored materials, and installing wind barriers to limit VDE. Also, limiting vehicle speeds, loading haul trucks with a freeboard of 6 inches or greater along with applying water to the top of the load, and covering the cargo compartments are effective measures for reducing VDE and carry-out from vehicles transporting bulk materials.
- Demolition activities require the application of water to the exterior of the buildings and to unpaved surfaces where materials may fall. A Dust Control Plan will be required for large demolition projects. Consider all structures slated for demolition as possibly being regulated due to potential asbestos, per District Rule 4002 — National Emission Standards for Hazardous Air Pollutants. Contact SJVAPCD well before starting because a 10-working-day notice will likely be required before a demolition can begin.
- Record keeping is required to document compliance with the rules and must be kept for each day any dust control measure is used. SJVAPCD has developed record forms for water application, street sweeping, and “permanent” controls such as applying long term dust palliatives, vegetation, ground cover materials, paving, or other durable materials. Records must be kept for 1 year after the end of dust generating activities.

Compliance with the SJVAPCD’s Regulation VIII will result in implementation of the same measures proposed by the U.S. Environmental Protection Agency (EPA) for fugitive dust

control. As such, additional measures proposed by EPA have not been included as mitigation since adherence to this existing regulation would be sufficient to address fugitive dust impacts.

MM AQ-1, which requires the preparation of a construction exhaust emissions minimization plan was revised to include EPA's recommendation for mobile and stationary source controls, including the unnecessary idling and prohibition on engine tampering have been added to the mitigation measure. However, because Tier 4 equipment is in great demand in the San Joaquin Valley, the recommendation to require Tier 4 equipment for on-highway vehicles was not included. MM AQ-1 includes a requirement to use Tier 4 equipment for the largest pieces of equipment that are used more extensively during Project construction (generator sets, scrapers, motor graders, dozers and wheel loaders). This helps to promote the feasibility and enforceability of the measure and provides the greatest amount of reductions. Additionally, the majority of the construction emissions were not associated with on-road mobile sources, thus this measure was not included because implementation of the recommended measure may not be enforceable and would not achieve a significant reduction in emissions.

EPA's recommendations for administrative controls include many measures that are considered standard best management practices for construction and as such were not specifically listed as mitigation but have been added to MM AQ-1 for clarification. Certain measures that address greenhouse gas emissions, such as the cement blend, were not included because greenhouse gases were determined not to result in a significant impact that would require mitigation.

In response to the final two bullet points under recommended administrative controls, the commitments to reduce construction emissions are included in MMs AQ-1 and AQ-2. Tables E-8a, E-8b, E-10a and E-10b in the EIS/R (Appendix E) provide the mitigated emissions. Finally, no measures were rejected based on economic infeasibility, but instead were rejected due to enforceability and availability of equipment.

Response to Comment FA01-3

A discussion of the CWA and the role of the U.S. Army Corps of Engineers (USACE) in implementing Section 404 of the CWA is provided in Appendix C (Regulatory Setting) of the Draft EIS/R. Chapter 1 (page 4) of the EIS/R states that Reclamation and FWA are coordinating with USACE for compliance with Section 404 of the CWA and that USACE has accepted the role of a cooperating agency for the EIS/R (page 5). The Final EIS/R was revised to include the USACE's potential permitting action as a component of the Project (see Chapter 1, NEPA Cooperating Agencies in the Final EIS/R).

Page 68 of the Draft EIS/R was revised to state that the temporary and permanent impacts on the aquatic resources at Deer Creek and White River include the discharge of dredged or fill material. Appendix C (Regulatory Setting) of the EIS/R was revised to provide more information of the applicability of CWA Section 404 permitting requirements for the Project and the coordination that is ongoing between Reclamation and the USACE.

It is currently unknown if a CWA Section 404(b)(1) Alternatives Analysis will be required for the Project because it has not been determined whether the aquatic resources at Deer Creek and White River qualify as waters of the United States and what CWA Section 404 permitting

requirements are applicable to the Project. Reclamation is coordinating with the USACE to determine the appropriate permitting requirements for the Project in compliance with the CWA.

Response to Comment FA01-4

Page 8 through 16 of the Draft EIS/R included summaries of both Project alternative as well as features common to both alternatives, supported by information tables and figures to help the reader understand the Project alternatives in relation to the No Action Alternative. More in-depth details of the Project alternatives were provided in Appendix B1 as noted in the main body of the Draft EIS/R. In addition, page 18–20 of the Draft EIS/R identified the specific mitigation measures that address impacts on air quality, water quality, and other potentially impacted resources. These mitigation measures are fully described in Appendix B2 of the EIS/R as noted in the main body of the document.

State Agencies

Letter SA01: California Department of Fish and Wildlife, June 22, 2020

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

Letter SA01

June 19, 2020

Doug DeFlitch
Chief Operating Officer
Friant Water Authority
854 North Harvard Avenue
Lindsey, California 93277
FKCProjectComments@stantec.com

Subject: Friant-Kern Canal Middle Reach Capacity Correction Project (Project)
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)
State Clearinghouse No.: 2019120007

Dear Mr. DeFlitch:

The California Department of Fish and Wildlife (CDFW) received an Notice of Availability of a DEIR for a joint Environmental Impact Statement / Environmental Impact Report (EIS/EIR) from Friant Water Authority, which is the Lead Agency for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1] The United States Bureau of Reclamation is Lead Agency for the Project pursuant to the National Environmental Policy Act (NEPA).

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 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

[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.

agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources. 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 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.

PROJECT DESCRIPTION SUMMARY

Proponent: Friant Water Authority (Authority) and United States Bureau of Reclamation (Bureau).

Objective: The Friant-Kern Canal (FKC) Middle Reach, an approximately 33-mile section of the FKC beginning near Strathmore, has lost over 50 percent of its original design capacity due in large part to regional land subsidence. The primary goal for the Project is to restore the original design capacity of the Middle Reach of the FKC.

The Project objectives are as follows:

- Restore capacity to original design levels that meet the water supply delivery requirements of the Central Valley Project contracts of long-term contractors
- Restore capacity to convey water for the short-term conveyance of flood flows or non-Central Valley Project water as well as provide potential surface water supplies for other users through exchanges and transfers
- Facilitate accommodation of potential future reductions in conveyance capacity caused by continued subsidence following Project implementation
- Restore capacity to the maximum extent using the original gravity conveyance design that avoids reliance on additional mechanical facilities and increased energy demands

Proposed Project: The proposed Project consists of components that would both enlarge and replace the existing canal within an approximate 33-mile reach of the FKC. Enlargements to about 10 miles of the existing canal would occur at the northernmost and southernmost portions of the Project area by raising and widening the banks. Enlarging the canal would be accomplished by removing the uppermost extent of the

existing concrete lining and, at the level of the demolished lining, excavating a horizontal bench approximately 14 feet wide on each embankment for a total of 28 feet wide into the existing grade and constructing new and wider upper embankments that would receive new concrete linings. Existing delivery turnouts would be maintained, to accommodate continued use of existing water conveyance facilities.

The proposed Project also includes an approximate 23-mile realigned canal that would be constructed east of the existing canal from Mile Post (MP) 95.7 to MP 119. The realigned canal would accommodate a conveyance capacity of between 3,500 and 4,000 cubic feet per second (cfs). Once the realigned canal is constructed, most of the existing canal in that location would be abandoned in place. New turnouts, consisting of new cast-in-place concrete structures and delivery piping, would be constructed as needed along the realigned canal. Small portions of the existing canal (approximately 100 to 200 feet) would be left in place to create a pool upstream of existing pump stations, allowing water to be delivered from the realigned canal to a controlled water level in the pool, thereby minimizing or avoiding impacts to existing pumps and distribution systems. Approximately 530 acres of new right-of-way would be required to accommodate the proposed Project.

The proposed Project would also require removal and replacement of the existing check structures, wasteways, and siphons at Deer Creek and White River. Control buildings and associated electrical, mechanical, and controls equipment at the Deer Creek and White River facilities would also be replaced with new equipment, as required. Where the realigned canal crosses roads that currently cross the FKC via existing bridges, the road crossing over the realigned canal would be provided in the form of a new concrete box siphon. Once the realigned canal is built and put into service at each road crossing, the existing bridge would be removed and replaced with embankment material constructed to grade through the abandoned FKC. Borrow material would be obtained from excavated material from the FKC embankments and from borrow sites at predetermined locations. A concrete batch plant would be located along the Project alignment for construction of the concrete lining in the enlarged and realigned canal. In addition to the road crossing, existing utility crossings would be removed, modified, or replaced to accommodate the needs of the utilities and the realigned canal system. The proposed Project would require modification, relocation, abandonment, and/or removal of existing privately held facilities on lands adjacent to the canal and within the new alignment. Impacted privately held facilities may include, but are not limited to, wells, irrigation systems, farm roads, miscellaneous structures, power lines, and other structures.

Location: The proposed Project alignment is located within 2,600 acres along the FKC (from MP 88.2 to MP 121.5) and adjacent lands, between the communities of Lindsey and Porterville in Tulare and Kern Counties.

Timeframe: The construction of the Project would take up to three years and would be continuous.

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 document.

The DEIR prepared for the Project indicates that the Project area has the potential to support several sensitive biological resources. The Project therefore has the potential to impact these resources. CDFW recognizes that the DEIR outlines mitigation measures to reduce impacts to biological resources; however, CDFW is concerned that, as currently drafted, these measures may not be adequate to reduce impacts to a level that is less than significant. CDFW is concerned regarding adequacy of mitigation measures for the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*), the State threatened Swainson's hawk (*Buteo swainsoni*), the federally endangered Kern mallow (*Eremalche parryi kernensis*) and San Joaquin woollythreads (*Monolopia congdonii*), the State threatened and fully protected Bald eagle (*Haliaeetus leucocephalus*), the State fully protected golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*), the California rare plant rank 1B.2 recurved larkspur (*Delphinium recurvatum*), and the State species of special concern American badger (*Taxidea taxus*), burrowing owl (*Athene cunicularia*), and western spadefoot (*Spea hammondii*) (CDFW 2020). SA01-1

Vegetation communities and habitats observed in the Project vicinity during reconnaissance surveys for EA/IS-18-057 includes non-native annual grassland, California buckwheat scrub, allscale saltbush scrub, Fremont cottonwood forest, mulefat thickets, red willow thickets, shining willow groves, smartweed-cocklebur patches, valley oak woodland, irrigated row crops, vineyards, orchards and field crops, ruderal disturbed areas, and barren unvegetated areas including levee roads. Aquatic features in and near the Project area include the FKC, Lake Woollomes, intermittent streams (i.e., Tule River, Deer Creek, Porter Slough, and White River) and associated riparian habitat and freshwater emergent wetlands, groundwater recharge basins, detention basins, agricultural ditches and canals, and agricultural ponds.

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. In order to adequately assess any potential Project related impacts to

biological resources, surveys conducted by a qualified wildlife biologist/botanist during the appropriate survey period(s) and using the appropriate protocol survey methodology are warranted in order to determine whether or not any special-status species are present at or near the Project area.

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

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)

Appendix B2 Environmental Commitments BIO-1l.5 (page B2-1) / Mitigation Measures Bio-1l.1 through Bio-1l.5 (pages B2-11 – B2-13)

Issue: SJKF occurrences have been historically documented within the Project area (CDFW 2020). The DEIR acknowledges the potential to temporarily disturb and permanently alter suitable habitat for special status species including SJKF, and directly impact individuals if present during construction activities.

SJKF den in rights-of-way, agricultural and fallow/ruderal habitat, dry stream channels, canal levees, etc., 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.

BIO-1l.1 discusses the use of pedestrian inventories and preconstruction monitoring for potential and active SJKF dens. The protocol methodology for these surveys is not cited by the DEIR. SA01-2

BIO-1l.2 through BIO-1l.4 and BIO-1l.5 discuss SJKF den excavation and artificial den construction, with artificial den construction coordinated among USFWS, Bureau, and Authority. Such activity may warrant obtaining an Incidental Take Permit (ITP) pursuant to Fish and Game Code section 2081(b); the DEIR does not specify consultation with CDFW regarding these activities. SA01-3

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.

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). Tulare and Kern Counties support 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 and bordered by this remaining highly suitable habitat, which is otherwise intensively managed for agriculture. Therefore, subsequent ground-disturbing activities have the potential to significantly impact local SJKF populations.

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential impacts to SJKF associated with subsequent land conversion, ground disturbance and construction, CDFW recommends conducting the following evaluation of project areas and implementing the following mitigation measures.

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. SA01-4

Recommended Mitigation Measure 2: SJKF Surveys, Avoidance, and Minimization

CDFW recommends assessing presence/absence of SJKF by having qualified biologists conducting surveys of Project areas and a 500-foot buffer of Project areas to detect SJKF and their sign. CDFW also recommends following the USFWS "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (2011), including no-disturbance buffers maintained around burrows suitable for SJKF use that are found during surveys. SA01-5

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). SA01-6

COMMENT 2: Swainson's Hawk (SWHA) and White-Tailed Kite (WTKI)

Appendix B2 Environmental Considerations / Mitigation Measures Bio-1e.1 through Bio-1e.4 (Pages B2-8 – B2-9)

Issue: Mitigation Measure BIO-1e.1 specifies that if construction occurs between February 1 and August 31, surveys for SWHA and WTKI shall be conducted within a minimum ¼-mile radius around the construction area. Minimum 500-foot no-disturbance buffers will be established and monitored by a qualified biologist until the young have fledged and are no longer reliant on the nest or parental care.

Mitigation Measure BIO-1e.2 specifies that if a minimum 500-foot no-disturbance buffer around active SWHA nests is not practicable then CDFW will be contacted to determine alternative measures to minimize nest abandonment or other forms of take including continuous biological monitoring and work stoppage if the nesting pair shows signs of distress resulting from Project-related activities.

The DEIR analysis does not provide a biological basis of a ¼-mile survey radius for SWHA nests or how a no-disturbance buffer of 500 feet was determined adequate to avoid significant impacts, including but not limited to take ("take" defined pursuant to Fish & G. Code section 86) of individuals through nest failure or other means, as a result of Project implementation. SA01-7

Issue: Mitigation Measures BIO-1e.2 and BIO-1e.3 specify that if trees suitable for nesting by SWHA are scheduled for removal during the non-nesting season, a qualified biologist will conduct a pre-construction survey during the nesting season prior to tree removal to determine if SWHA are using the trees for nesting. If trees scheduled for removal are being used by nesting SWHA, consultation with CDFW will occur to determine if take cannot be avoided. If take cannot be avoided, then an ITP will be obtained from CDFW prior to initiation of any activities likely to result in such take.

BIO-1e.3 states if an active WTKI nest is present, then all activities that are likely to result in take will be delayed until a qualified biologist has determined that the young have fledged and are no longer reliant on the nest or parental care for survival.

Specific impact: The DEIR states SWHA and WTKI are known to the Project area and have the potential to nest in riparian habitat and other mature trees located within the Project site and within ½ mile of the Project. In addition, suitable foraging habitat for these species exists within the vicinity of the Project site; annual grassland, alfalfa or grain fields, and livestock pasture that may be used for foraging is present in the Project vicinity. Without appropriate avoidance and minimization measures for SWHA and WTKI, potential significant impacts include nest

abandonment and reduced reproductive success that includes mortality of young, and reduced health and vigor of eggs and/or young.

Evidence impact is potentially significant: The trees and riparian habitat within the Project area 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. For example, 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).

In the San Joaquin Valley, suitable nest trees may be a limiting factor for SWHA occupation and reproduction. As a result, loss of suitable nest trees, particularly in proximity to foraging habitat, has the potential to significantly impact local SWHA (CDFW 2016). CDFW considers removal of known bird-of-prey nest trees, even outside of the nesting season, a potentially significant impact under CEQA, and, in the case of SWHA, it could also result in take under CESA. Project activities near the nest that differ from baseline disturbance regimes in type, timing, and/or magnitude can affect adults caring for eggs and young in the nest, and can affect nestling behavior. Project activities including noise, vibration, odors, visual disturbance, and movement of workers or equipment could affect nesting individuals and have the potential to result in nest abandonment or reduced nesting success, significantly impacting local nesting SWHA and WTKI.

Recommended Potentially Feasible Mitigation Measures:
To evaluate potential Project-related impacts to SWHA, CDFW recommends conducting the following evaluation of the Project site and including the following measures in the DEIR.

Recommended Mitigation Measure 4: SWHA and WTKI Avoidance

In addition to avoiding occupied nest trees, CDFW recommends that impacts to known nest trees be avoided at all times of year. The removal of mature trees is a potentially significant impact to nesting birds of prey and CDFW advises mitigation of these impacts. As described above, removal of known nest trees is a potentially significant impact under CEQA and could also result in take under CESA. This is especially true with species such as SWHA, which exhibit high nest-site fidelity year after year. Regardless of nesting status, if potential or known SWHA and WTKI nesting trees are removed, CDFW recommends they be replaced with an appropriate native tree species, planted at a ratio of 3:1 (replaced to removed), in an

SA01-8

area that will be protected in perpetuity. This mitigation will offset potential impacts of the loss of potential nesting habitat. SA01-8

Recommended Mitigation Measure 5: Focused SWHA and WTKI Surveys

To reduce potential Project-related impacts to SWHA and WTKI, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting birds of prey, including SWHA and WTKI, following the survey methodology developed by the SWHA Technical Advisory Committee (SWHA TAC 2000) prior to Project initiation, within the Project area and a ½-mile buffer around the Project area. In addition, if Project activities will take place during the typical breeding season (February 1 through September 15), CDFW recommends that additional preconstruction surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of construction. SA01-9

Recommended Mitigation Measure 6: SWHA and WTKI Buffers

If an active SWHA or WTKI nest is found during preconstruction surveys, CDFW recommends implementing a minimum ½-mile no-disturbance buffer 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 site or parental care for survival. SA01-10

Recommended Mitigation Measure 7: SWHA Take Authorization

If a ½-mile no-disturbance nest buffer is not feasible, consultation with CDFW is warranted, and acquisition of a State ITP for SWHA may be necessary prior to project implementation, to avoid unauthorized take, pursuant to Fish and Game Code section 2081 subdivision (b). SA01-11

Pursuant to Fish and Game Code section 3511, CDFW cannot authorize incidental take of WTKI. Therefore, CDFW recommends implementation of a minimum ½-mile no-disturbance buffer around identified WTKI nest(s) 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.

COMMENT 3: Special-Status Plants

Appendix B2 Environmental Considerations / Mitigation Measures Bio-1a.1 through Bio-1a.4 (Pages B2-3 – B2-4)

Appendix F of the DEIR, Biological Resource Assessment, Botanical Survey Report

Issue: Special-status plants meeting the definition of rare or endangered under CEQA § 15380 are known to occur in the vicinity of the Project. The San Joaquin woollythreads, and recurved larkspur have been documented within the Project area.

Mitigation Measure BIO-1a.1 requires one late-season botanical survey prior to construction to coincide with special status late blooming species. Mitigation Measure BIO-1a.2 requires two botanical surveys (early and late season) to be conducted if more than five years lapse after the March 2020 botanical survey before ground disturbance takes place.

Botanical surveys were conducted in March 2020. Except for Kern mallow, special status plant species were not observed or not identifiable to species level at reference sites, to ensure that the timing of botanical field surveys was appropriate. Drought, predation, and other adverse conditions may preclude the presence or identification of special status plants in any given year, and additional botanical field surveys may be necessary on an annual basis to substantiate negative findings. Grassland communities that are composed of mainly annual and short-lived perennial plants may also require yearly surveys to accurately document baseline conditions for the purpose of impact assessment (CDFW 2018). SA01-12

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

Evidence impact would be significant: Kern mallow, San Joaquin woollythreads, and recurved larkspur are threatened by grazing and agricultural, urban, and energy development. Many historical occurrences of these species are presumed extirpated (California Native Plant Society 2020). Though new populations have recently been discovered, impacts to existing populations have the potential to significantly impact populations of plant species.

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential impacts to special-status plants associated with subsequent development, CDFW recommends conducting the following evaluation of Project areas and implementing the following mitigation measures.

Recommended Mitigation Measure 8: 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” SA01-13

(CDFW 2018). 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. SA01-13

Recommended Mitigation Measure 9: 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. SA01-14

Recommended Mitigation Measure 10: Special-Status Plant Take Authorization

If a State-listed plant species is identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, take authorization would be warranted. Take authorization would occur through issuance of an ITP by CDFW, pursuant to Fish and Game Code section 2081 subdivision (b). SA01-15

COMMENT 4: <u>Golden Eagle (GOEA) and Bald Eagle (BAEA)</u>

Appendix B2 Environmental Considerations / Mitigation Measures Bio-1e.1 through Bio-1e.4 (Pages B2-8 – B2-9)

Issue: Nesting GOEA and overwintering BAEA have the potential to occur in the Project area and its vicinity, including the Tule River and Deer Creek corridors.

Mitigation Measure BIO-1e.1 specifies that if construction occurs between February 1 and August 31, surveys for GOEA shall be conducted within a minimum 0.25-mile radius around the construction area. The measure also states that minimum 500-foot no-disturbance buffers will be established and monitored by a qualified biologist until the young have fledged and are no longer reliant on the nest or parental care.

Mitigation Measure BIO-1e.2 states that if a minimum 500-foot no-disturbance buffer around active GOEA nests is not practicable then CDFW will be contacted to determine alternative measures to minimize nest abandonment or other forms of take including continuous biological monitoring and work stoppage if the nesting pair shows signs of distress resulting from Project-related activities.

The DEIR analysis does provide the basis of the proposed survey radius of 0.25 mile and no-disturbance buffer size of 500-feet as being adequate to avoid significant impacts, including but not limited to take (Fish & G. Code § 86), as a result of Project implementation. SA01-16

Appendix F of the DEIR, Biological Resource Assessment, Table 4, page 29

Issue: Table 4 lists BAEA as not potential for nesting but that the project area is within the wintering range for the species. Table 4 states that BAEA breeds and winters in riparian woodland with large trees, often old growth or open canopy, and typically nests near large bodies of permanent water or perennially flowing rivers with abundant fish. Suitable overwintering habitat exists for BAEA within the Project area. The DEIR does not include survey methodology or mitigation measures to avoid impacts to overwintering or roosting BAEA. SA01-17

Specific impact: Without appropriate avoidance and minimization measures, potentially significant impacts associated with the Project's construction include loss of foraging and/or nesting habitat, nest abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

Evidence impact would be significant: Without appropriate survey methods, eagles nesting in the vicinity of a project can remain undetected resulting in avoidance and minimization measures not being effectively implemented (American Eagle Research Institute 2010). In addition, human activity near nest sites can cause reduced provisioning rates of GOEA chicks by adults (Steidl et al. 1993 *in* Kochert et al. 2002). Depending on the timing of construction, Project activities including noise, vibration, odors, and movement of workers or equipment could affect nests and also have the potential to result in nest abandonment, significantly impacting local nesting raptors.

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential impacts to overwintering or nesting eagles associated with Project construction, CDFW recommends conducting the following evaluation of the Project area and including the following mitigation measures as conditions of approval.

Recommended Mitigation Measure 11: Focused Surveys for Nesting and Overwintering Eagles

CDFW recommends that a qualified wildlife biologist conduct surveys for nesting and overwintering eagles following the Protocol for Golden Eagle Occupancy, Reproduction, and Prey Population Assessment (Driscoll 2010), and the Protocol for Evaluating Bald Eagle Habitat and Populations in California (Jackman and Jenkins SA01-18

2004). If ground-disturbing activities take place during the typical bird breeding season (i.e., February 1 through September 15), CDFW recommends that additional pre-construction surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of construction. SA01-18

Recommended Mitigation Measure 12: GOEA and BAEA Avoidance

If an active raptor nest is found, CDFW recommends implementation of a minimum ½-mile no-disturbance buffer 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. If nesting raptors are detected and the ½-mile no-disturbance nest buffer is not feasible, consultation with CDFW is warranted to determine if the Project can avoid take. SA01-19

If overwintering eagles are observed, CDFW recommends implementation of a minimum ½-mile no-disturbance buffer while the birds are present.

Please note that pursuant to Fish and Game Code section 3511, BAEA and GOEA are State fully protected species and no take, incidental or otherwise, of those species can be authorized by CDFW.

COMMENT 5: Burrowing Owl (BUOW)

Appendix B2 Environmental Considerations / Mitigation Measures Bio-1d.1 through Bio-1d.3 (Pages B2-7 – B2-8)

Issue: These mitigation measures describe focused BUOW surveys within 15 days prior to construction and within 300 feet of the project area; however, CDFW is concerned that this survey effort may not be sufficient in detecting BUOW occupying the Project area or its vicinity. This mitigation measure also describes avoidance for occupied BUOW burrows through implementation of a 150-foot no-disturbance buffer during the non-breeding season (September 1 to January 31) and a 250-foot buffer during the nesting season (February 1 to August 31), unless maintaining these buffer areas are not feasible. For ground-disturbing activities involved in the Project, these buffers may not be sufficient to avoid impacts. If maintaining a 150-foot buffer is not feasible during the non-breeding season, Mitigation Measure Bio-1d.2 describes passive relocation of BUOW detected on the Project site; however, according to CDFW's "*Staff Report on Burrowing Owl Mitigation*" (CDFG 2012), passively relocating and excluding BUOW in and of itself is not a take avoidance, minimization, or mitigation method. Mitigation Measure Bio-1d.3 states if maintaining a 250-foot no-disturbance buffer is not feasible during the breeding season, then CDFW will be consulted to determine alternative measures to minimize potential disturbance to occupied burrows and nesting activities. SA01-20

Specific impact: BUOW rely on burrow habitat year-round for their survival and reproduction. BUOW forage in areas with relatively short vegetation and only sparse shrub cover (Gervais et al. 2008). As described in the DEIR, the Project area and its vicinity is suitable for BUOW. Without appropriate avoidance and minimization measures for BUOW, potential significant impacts include nest abandonment, which may result in reduced nesting success such as reduced health or vigor of eggs or young, in addition to direct mortality at any time of the year as a result of encroachment and increased potential of vehicle strikes, impacts to foraging success, and potentially increased predation. Potentially significant direct impacts associated with eviction and passive relocation of BUOW include inadvertent entrapment, nest abandonment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals. Indirect impacts associated with temporary or permanent closure of burrows include increased stress and competition.

Evidence impact is potentially significant: The Project site is within the range of BUOW and, as described in the DEIR, supports potentially suitable burrow and foraging habitat. The Project has the potential to result in loss of burrow habitat for local populations. Habitat loss and degradation are considered the greatest threats to BUOW in California's Central Valley (Gervais et al. 2008). In addition, and as described in CDFW's "*Staff Report on Burrowing Owl Mitigation*" (CDFG 2012), passively relocating and excluding BUOW is considered a potentially significant impact under CEQA. SA01-21

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential Project-related impacts to BUOW, CDFW recommends conducting the following evaluation of the Project site and including the following measures in the DEIR.

Recommended Mitigation Measure 13: 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. SA01-22

Recommended Mitigation Measure 14: 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 following the California Burrowing Owl Consortium's "*Burrowing Owl Survey Protocol and Mitigation Guidelines*" (1993) and the CDFW (2012) *Staff Report on Burrowing Owl Mitigation*". Specifically, these documents suggest three or more surveillance surveys conducted during daylight with each visit occurring at SA01-23

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 buffer around the Project area. SA01-23

Recommended Mitigation Measure 15: BUOW Avoidance

CDFW recommends that no-disturbance buffers, as outlined in the "*Staff Report on Burrowing Owl Mitigation*" (CDFG 2012), be implemented prior to and during any ground-disturbing activities. Specifically, this document recommends 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. SA01-24

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 16: BUOW Passive Relocation and Mitigation

If BUOW are found within these recommended buffers and avoidance is not possible, it is important to note that according to the Staff Report (CDFG 2012), excluding owls from burrows is not a take avoidance, minimization, or mitigation method and is instead considered a potentially significant impact under CEQA. 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. SA01-25

COMMENT 6: Other State Species of Special Concern

Issue: Western spadefoot and American badger can inhabit grassland and upland scrub habitats (Thomson et al. 2016, Williams 1986). These special status species have been documented to occur in the vicinity of the Project boundary, which supports requisite habitat elements for these species (CDFW 2019).

Specific impact: Without appropriate avoidance and minimization measures for these species, potentially significant impacts associated with ground disturbance include habitat loss or nest/den/burrow abandonment, which may result in reduced health or vigor of individuals and direct mortality.

Evidence impact is potentially significant: Habitat loss threatens of the species mentioned above (Thomson et al. 2016, Williams 1986). Habitat within and adjacent to the Project represents some of the only remaining undeveloped land in the vicinity, which is otherwise intensively managed for agriculture. As a result, ground- and vegetation-disturbing activities associated with development of the Project have the potential to significantly impact local populations of these species.

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential impacts to special-status species associated with subsequent development, CDFW recommends conducting the following evaluation of project areas and implementing the following mitigation measures.

Recommended Mitigation Measure 17: 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 Western spadefoot or American badger. SA01-26

Recommended Mitigation Measure 18: Species 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. SA01-27

Recommended Mitigation Measure 19: Species Avoidance or Minimization

Avoidance whenever possible is encouraged via delineation and observance of 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. SA01-28

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 7: Wetland and Riparian Habitats

Issue: The Project area contains numerous waterways and wetland areas. Development within the Project alignment has the potential to involve temporary and permanent impacts to these features.

Specific impact: Work within stream channels has the potential to result in the diversion or obstruction of natural stream flows, to change or use of material from the streams, or to deposit of debris, waste, sediment, toxic runoff or other materials into waters causing water pollution and degradation of water quality. Project activities also 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.

Evidence impact is potentially significant: The Project area includes stream and wetland features within an agricultural landscape that also maintains undeveloped habitats. 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 a net loss of wetland acreage or habitat value. Construction activities within these features has the potential to impact downstream waters. In addition, 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. Riparian vegetation in the Project area provides potential habitat for many species, potentially including those with special status.

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential impacts to waterways, CDFW recommends conducting the following evaluation of the subject parcel and implementing the following mitigation measures.

Recommended Mitigation Measure 20: Wetland Delineation and Lake and Stream Mapping

SA01-29

CDFW recommends a formal delineation of stream and wetland areas in advance of any Project development activity. CDFW recommends that individuals qualified in wetland delineation as well as determining the extent of stream hydrology determine the location and extent of wetlands and streams on parcels slated for construction or land conversion. Please note that, while there is overlap, State and Federal definitions of wetlands differ. In addition, the full extent of a stream commonly extends beyond the determination of Ordinary High Water for the U.S. Army Corps of Engineers authority pursuant to the Clean Water Act, and can include areas that have flowing water with low frequency and also include floodplain areas, if present. Therefore, it is advised that the delineation and mapping identify both State and Federal wetlands and complete stream boundaries on the Project site. SA01-29

Recommended Mitigation Measure 21: Avoidance, Minimization, and Mitigation of Wetland and Riparian Habitat Impacts

CDFW recommends that the wetland and riparian habitats potentially impacted by the Project be described to establish the baseline condition. CDFW also recommends that the potential direct and indirect impacts to wetland and riparian habitat be analyzed according to each Project activity. Based on those potential impacts, CDFW recommends that the EIS/EIR include measures to avoid, minimize, and/or mitigate those impacts. CDFW recommends that impacts to wetland and riparian vegetation take into account the effects to function and hydrology from habitat loss or damage, as well as potential effects from the loss of habitat to special status species identified herein. SA01-30

II. Editorial Comments and/or Recommendations

Federally Listed Species: CDFW recommends consulting with the USFWS regarding potential impacts to federally listed species including, but not limited to, SJKF, Kern mallow, 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. SA01-31

Lake and Streambed Alteration: Project activities have the potential to substantially change the bed, bank, and channel of wetlands and waterways onsite. Jurisdictional Project activities are subject to the notification requirement of Fish and Game Code section 1602, which 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 SA01-32

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 is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement (Agreement); therefore, if the CEQA document approved for the Project does not adequately describe the Project and its impacts, a subsequent CEQA analysis may be necessary for Agreement issuance. For additional information on notification requirements, please contact staff in the Central Region Lake and Streambed Alteration Program at (559) 243-4593. SA01-32

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 §§ 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). SA01-33

CDFW encourages Project implementation to occur during the bird non-nesting season; however, if Project activities must occur during the breeding season (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.

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 each Project activity 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. SA01-34

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 SA01-35

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. SA01-35

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. SA01-36

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). SA01-37

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist the Authority in identifying and mitigating Project impacts on biological resources. Questions regarding this letter or further coordination should be directed to Annette Tenneboe, Senior Environmental Scientist (Specialist), at (559) 243-4014 extension 231 or by email at annette.tenneboe@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Julie Vance
FA83F09FE08945A...

Julie A. Vance
Regional Manager

Attachment 1

cc: Office of Planning and Research, State Clearinghouse, Sacramento

Rain Emerson
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Attachment 1

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

PROJECT: Friant-Kern Canal Middle Reach Capacity Correction Project
State Clearinghouse Number.: 2019120007

RECOMMENDED MITIGATION MEASURES	STATUS/DATE/INITIALS
Before Disturbing Soil or Vegetation	
Recommended Mitigation Measure 1: SJKF Habitat Assessment	
Recommended Mitigation Measure 2: SJKF Surveys, Avoidance, and Minimization	
Recommended Mitigation Measure 3: SJKF Take Authorization	
Recommended Mitigation Measure 5: Focused SWHA and WTKI Surveys	
Recommended Mitigation Measure 6: SWHA and WTKI Buffers	
Recommended Mitigation Measure 7: SWHA Take Authorization	
Recommended Mitigation Measure 8: Special-Status Plant Surveys	
Recommended Mitigation Measure 10: Special-Status Plant Take Authorization	
Recommended Mitigation Measure 11: Focused Surveys for Nesting and Overwintering Eagles	
Recommended Mitigation Measure 13: BUOW Habitat Assessment	
Recommended Mitigation Measure 14: BUOW Surveys	
Recommended Mitigation Measure 16: BUOW Passive Relocation and Mitigation	
Recommended Mitigation Measure 17: Habitat Assessment (Other Species of Special Concern)	
Recommended Mitigation Measure 18: Species Surveys (Other Species of Special Concern)	
Recommended Mitigation Measure 20: Wetland Delineation and Lake and Stream Mapping	
Recommended Mitigation Measure 21: Avoidance, Minimization, and Mitigation of Wetland and Riparian Habitat Impacts	
During Construction	
Recommended Mitigation Measure 2: SJKF Surveys, Avoidance, and Minimization	
Recommended Mitigation Measure 4: SWHA and WTKI Avoidance	

RECOMMENDED MITIGATION MEASURES	STATUS/DATE/INITIALS
Recommended Mitigation Measure 9: Special-Status Plant Avoidance	
Recommended Mitigation Measure 12: GOEA and BAEA Avoidance	
Recommended Mitigation Measure 15: BUOW Avoidance	
Recommended Mitigation Measure 19: Species Avoidance or Minimization (Other Species of Special Concern)	

Response to Comment SA01-1

This comment relates to California Department of Fish and Wildlife's (CDFW's) overall comments on the biological resources analysis provided in the Draft EIS/R. Responses to specific comments concerning species of concern and other sensitive biological resources are provided below.

Response to Comment SA01-2

MM BIO-11.1 was revised to provide additional information for the methods for pedestrian inventories and preconstruction monitoring.

Response to Comment SA01-3

MM BIO-11.1 was revised to require coordination with CDFW to discuss how to avoid take if any San Joaquin Kit Fox (SJKF) are detected. If it is determined that take may not be avoidable, an Incidental Take Permit (ITP) pursuant to the California Endangered Species Act will be obtained from CDFW prior to initiation of any activities that are likely to result in such take.

Response to Comment SA01-4

This comment is consistent with MM BIO-11.1which requires pre-construction surveys for potential SJKF dens within 30 days prior to construction.

Response to Comment SA01-5

MM BIO-11.1 was revised to require that pedestrian inventories of potential and occupied dens be completed within the Project area and up to a 500-foot buffer, as determined appropriate by a qualified biologist and where accessible. The mitigation measures for SJKF in the EIS/R are based on conservation measures developed by Reclamation in coordination with the U.S. Fish and Wildlife Service (USFWS) during Endangered Species Act Section (ESA) section 7 consultation, and includes some of the measures presented in the USFWS "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (2011). MM BIO-11.4 was revised to clarify the guidelines to be followed if it is determined that a natural den or burrow cannot be avoided per the no-disturbance buffers recommended in the USFWS "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (2011).

Response to Comment SA01-6

MM BIO-11.1 was revised to require coordination with CDFW if SJKF are detected to discuss how to avoid take. If it is determined that take may not be avoidable, an ITP pursuant to the California Endangered Species Act will be obtained from CDFW prior to initiation of any activities that are likely to result in such take.

Response to Comment SA01-7

MM BIO-1e.1 was revised to require pre-construction surveys within a 0.50-mile radius where access is permitted within 10 days before ground disturbance in a given area; and to require a minimum 0.50-mile no-disturbance buffer as recommended by CDFW (see also responses to comments SA01-9 and -10). MM BIO-1e.2 requires consultation with CDFW if maintaining the minimum no-disturbance buffer is not practicable.

Response to Comment SA01-8

MM BIO-2a minimizes tree removal associated with the Project. This measure requires that trees and other vegetation not be removed if it can otherwise be reasonably avoided. In addition, the measure states, "*In determining areas where vegetation must be removed to provide adequate access for construction or staging, consideration will be given to selecting areas that require the least amount of removal of mature trees and canopy cover in coordination with a qualified biologist.*" MM BIO-2c requires that a Post-Construction Revegetation and Monitoring Plan be implemented to restore temporarily impacted riparian habitats. It is anticipated that areas to be restored would be located on lands owned by Reclamation that are acquired as part of the Project. MM BIO-2c was revised to require that the plan provide for replacement of any trees removed by the Project at a 3:1 ratio (replaced to removed) with appropriate native tree species.

Response to Comment SA01-9

As described in Impact BIO-1c in the EIS/R, "*Construction activities (e.g., vegetation removal, bridge removal, and equipment operation) may be scheduled during the avian breeding season (generally February 1 through August 31, depending on the species) and could disturb nesting birds in or adjacent to the Project area.*' MM BIO-1e.1 was revised to require pre-construction surveys within a 0.50-mile radius where access is permitted within 10 days before ground disturbance in a given area, as recommended by CDFW.

Response to Comment SA01-10

MM BIO-1e.1 was revised to require a minimum 0.50-mile no-disturbance buffer, as recommended by CDFW. MM BIO-1e.2 requires consultation with CDFW if maintaining the minimum no-disturbance buffer is not practicable.

Response to Comment SA01-11

MM BIO-1e.1 was revised to require a minimum 0.50-mile no-disturbance buffer for Swainson's hawk, golden eagle, and white-tailed kite. MM BIO-1e.2 requires consultation with CDFW if maintaining the minimum no-disturbance buffer is not practicable MM BIO-1e.3 requires that if consultation with CDFW results in a determination that take of an active Swainson's hawk nest cannot be avoided, then an ITP will be obtained from CDFW prior to initiation of any activities that are likely to result in such take. Additionally, MM BIO-1e.3 states the following: "*If an active golden eagle or white-tailed kite nest may not be avoidable, then all activities that are likely to result in take will be delayed until a qualified biologist has determined that the young have fledged and are no longer reliant on the nest or parental care for survival.*"

Response to Comment SA01-12

As discussed in the Biological Resources Assessment (Appendix F of the EIS/R), the Project area provides potentially suitable habitat for 10 special-status plants species, none of which are listed under the federal ESA or the California Endangered Species Act. All of these species have a low potential to occur in the Project area because of the generally poor habitat conditions (e.g., habitat is isolated, limited, and of marginal ecological quality). A protocol-level botanical survey was conducted in March 2020 and was timed to coincide with the identifiable period for the early blooming special-status plant species period. No special-status plant species were observed in the Project area during the March 2020 botanical survey (see Appendix F of the EIS/R).

Four reference sites known to support several of the potentially occurring special-status plant species were visited as part of the botanical survey. Kern mallow was positively identified during the visits to the reference sites, and other plants in the genus *Atriplex* and *Delphinium* were observed but could not be identified to the species level. The visits to the reference sites also provided opportunities to view habitat conditions at locations known to support special-status plant species. A late-season botanical survey will be conducted in August 2020 during the identifiable period for the late-blooming special-status plant species (e.g., August–September) in accordance with MM BIO-1a.1. Additionally, MM BIO-1a.2 requires that the botanical surveys be repeated if more than 5 years lapse from the time the botanical surveys were completed and the beginning of project construction.

Given the absence of suitable habitat for federal- or state-listed species within the Project area, the generally poor habitat conditions in the Project area for non-listed special-status plant species, the lack of observation of special-status plants during the March 2020 botanical survey, and the requirement under MM BIO-1a.1 to conduct a late-season botanical survey, conducting botanical surveys within the Project area on an annual basis is not warranted..

Response to Comment SA01-13

MM BIO-1a.1 requires that botanical surveys be conducted in general accordance with *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities* (CDFW 2018). See also Response to Comment SA01-12.

Response to Comment SA01-14

MM BIO-1a.3 requires avoidance of special-status plants where practicable, and was revised to include a 50-foot buffer in the avoidance area. MM BIO-1a.4 was revised to require coordination with CDFW in the event that state-listed plants are identified during botanical surveys and complete avoidance is not practicable.

Response to Comment SA01-15

MM BIO-1a.4 was revised to require coordination with CDFW in the event that state-listed plants are identified during botanical surveys and complete avoidance is not practicable, and to identify that an ITP from CDFW is required for take of any state-listed species.

Response to Comment SA01-16

See Response to Comment SA01-07 and SA01-11.

Response to Comment SA01-17

Although the Project is within the overall wintering range for bald eagle, the Project area and nearby areas do not have the habitat attributes (e.g. riparian woodland with large trees, often old growth or open canopy) associated with wintering bald eagles and wintering bald eagles are not likely to occur in these areas. According to the eBird database, there are no records of bald eagles nesting or overwintering near the Project area. The nearest occurrences of overwintering bald eagles in the eBird database are located at the Pixley National Wildlife Refuge (11 miles west of the Project) and the Tulare Wastewater Treatment Plant (18 miles west of the Project). These are both areas where a large prey base of wintering waterfowl are present. The Project area including the Friant-Kern Canal (FKC), intermittent streams, and surrounding agricultural land do not provide habitat for large populations of waterfowl. Although there are no reported

occurrences, the nearest location where overwintering bald eagles would be most likely to occur is Lake Woollomes, which is approximately 3.5 miles south of -Project-related activities. Therefore, the Project is not anticipated to have the potential to significantly impact overwintering or roosting bald eagles.

Response to Comment SA01-18

See Response to Comment SA01-17. As discussed in the Biological Resources Assessment (Appendix F of the EIS/R), during biological field surveys of the Project area it was determined that the Project area and surrounding vicinity do not provide suitable nesting or wintering habitat for bald eagle and that the potential for golden eagles to nest in these areas is low. According to the eBird database, the nearest bald eagle and golden eagle nests are located to the east and northeast of the Project area in the mountains. No observations of overwintering bald eagles or golden eagles near the Project area have been recorded in the eBird database. The closest occurrences of both species are at the Pixley National Wildlife Refuge (approximately 11 miles west of the Project). Given the absence of documented occurrences, poor roosting habitat, and low prey base in the Project area and surrounding habitats for both bald eagles and golden eagles, conducting surveys using the protocols outlined in the *Protocol for Golden Eagle Occupancy, Reproduction, and Prey Population Assessment* (Driscoll 2010) and the *Protocol for Evaluating Bald Eagle Habitat and Populations in California* (Jackman and Jenkins 2004) do not appear to be warranted.

MM BIO-1e.1 was revised to require pre-construction nesting surveys within a 0.50-mile radius where access is permitted within 10 days before ground disturbance in a given area; and to require a minimum 0.50-mile, no-disturbance buffer from active nests.

Response to Comment SA01-19

MM BIO-1e.1 was revised to require a minimum 0.50-mile no-disturbance buffer for Swainson's hawk, golden eagle, and white-tailed kite. MM BIO-1e.1 has also been revised to require a minimum 0.50-mile, no-disturbance buffer from any overwintering eagles if they are detected in the Project area or surrounding areas; and that the buffer be maintained for the duration that the bird(s) are present. MM BIO-1e.2 requires consultation with CDFW if maintaining the minimum no-disturbance buffer is not practicable. MM BIO-1e.3 requires that if an active golden eagle nest may not be avoidable, then all activities that are likely to result in take will be delayed until a qualified biologist has determined that the young have fledged and are no longer reliant on the nest or parental care for survival.

Response to Comment SA01-20

As stated in MM BIO-1d.2, "*exclusion of burrowing owls from occupied burrows, if needed, will be conducted by qualified biologists and may only take place during the non-breeding season (September 1 to January 31).*" MM BIO-1d.2 has also been revised to include a requirement that the exclusion and passive relocation plan provide detailed plans to replace collapsed burrows with artificial burrows at a minimum 1:1 ratio or describe why artificial burrows are not needed (e.g., numerous natural burrows are available in nearby areas that will not be disturbed) and to require monitoring of collapsed burrows as needed so that burrowing owls do not recolonize the area prior to construction disturbance.

Response to Comment SA01-21

See Response to Comment SA01-20.

Response to Comment SA01-22

Qualified biologists conducted a habitat assessment to determine if the Project area or its vicinity contains suitable habitat for burrowing owl. As described on page 8 of the Biological Resources Assessment (Appendix F of the EIS/R), biological field surveys of the study area were conducted from September 30 to October 3, 2019, and from December 10 to 11, 2019. Surveys were completed by walking meandering transects on both sides of the FKC, and all adjacent agricultural and other lands were viewed to the degree necessary to characterize habitat types present. The Biological Resources Assessment states that potential nesting and foraging habitat for burrowing owl is present along the canal embankments, barren/ruderal, and grassland habitats (page 63 of Appendix F). Although no burrowing owls were observed during any of the field visits or biological surveys, it was determined that there is a potential for burrowing owls to be present given the abundant small mammal burrows present in the Project area. Additionally, as described in MM BIO-1d.1, "*A minimum of one pre-construction survey for burrowing owls within a minimum of 500 feet of the Project area (where accessible) will be conducted by a qualified biologist within 15 days prior to the initiation of construction activities in a given area, regardless of the timing of construction.*"

Response to Comment SA01-23

MM BIO-1d.1 requires a minimum of one pre-construction survey for burrowing owls within 15 days prior to initiation of construction activities in a given area regardless of the timing of construction. This is intended to avoid disturbance to any burrows occupied by burrowing owls during both the breeding and non-breeding season. Given the extent of the Project area (33 miles), the multi-year construction schedule, and that specific construction activities would be occurring at multiple locations at varying times throughout the construction period, it is not practicable to conduct three or more surveillance surveys for burrowing owl with each visit occurring at least 3 weeks apart during the peak breeding season from April 15 to July 15. Although a single pre-construction survey is anticipated to have a high likelihood of detecting the presence of burrowing owls or their sign (e.g., whitewash, pellets, feathers), it is important to note that although MM BIO-1d.1 requires a minimum of one pre-construction survey, it does not preclude additional pre-construction survey efforts.

MM BIO-1b.1 (Biological Resources Management and Monitoring Plan) was developed to address the complexities of coordinating, scheduling, and implementing the biological mitigation measures, including pre-construction surveys, due to the nature of the Project and the construction schedule (e.g., 33 miles, multi-year construction, construction activities at varying locations and at varying times). MM BIO-1b.1 was also developed to provide for adaptive management in implementation of the overall biological mitigation measures to proactively avoid biological constraints or conflicts with protective measures, and to provide for coordination and consultation with resource or permitting agencies as necessary to avoid significant impacts on sensitive biological resources including burrowing owls.

MM BIO-1d.1 was revised to increase the pre-construction survey buffer for burrowing owls from 300 feet to a minimum of 500 feet from the Project area.

Response to Comment SA01-24

Nearly all of the potentially suitable habitat for burrowing owls in the Project area is located along the FKC embankments, barren and ruderal habitats, and annual grassland habitats within the existing Reclamation right-of-way. Although no burrowing owls or burrowing owl sign were observed in these areas during any of the field visits or biological surveys, there is some potential that burrowing owls could be present in these areas prior to Project construction. Although most of the areas outside of the Project area are intensively farmed for agricultural activities (e.g., grapes, citrus, kiwis, almonds, pistachios), there are also potentially suitable habitats for burrowing owls within 500 feet of the Project area (e.g., landfill, annual grasslands, barren areas).

The no-disturbance buffers specified for occupied burrowing owl burrows in MM BIO-1d.1 (i.e., 150 feet during the non-breeding season and 250 feet during the breeding season) are consistent with the recommendations provided in the California Burrowing Owl Consortium's "*Burrowing Owl Survey Protocol and Mitigation Guidelines*" (1993) and are also consistent with the CDFW "*Staff Report on Burrowing Owl Mitigation*" (1995). The no-disturbance buffers recommended in the CDFW comment letter and as presented in the "*Staff Report on Burrowing Owl Mitigation*" (CDFG 2012) as an example of buffer guidelines that were developed by Scobie and Faminow (2000) for mitigating impacts by petroleum industry activities in the prairie and northern region of Canada are not practicable for the proposed Project. For example, most of these recommended buffers exceed the 500-foot pre-construction survey area for burrowing owls recommended by CDFW, and maintaining buffers up to 500 meters (approximately 1,640 feet) from any occupied burrowing owl burrow throughout the entire calendar year could preclude constructability of the Project.

MM BIO-1b.1 (Biological Resources Management and Monitoring Plan) was developed to address the complexities of coordinating, scheduling, and implementing the biological mitigation measures, including pre-construction surveys and no-disturbance buffers, due to the nature of the Project and the construction schedule (e.g., 33 miles, multi-year construction, construction activities at varying locations and at varying times). MM BIO-1b.1 was also developed to provide for adaptive management in implementation of the overall biological mitigation measures to proactively avoid biological constraints or conflicts with protective measures, and to provide for coordination/consultation with resource or permitting agencies as necessary to avoid significant impacts on sensitive biological resources including burrowing owls.

For example, during each construction year, early and ongoing monitoring for presence of burrowing owls throughout the Project alignment and areas within 500 feet may be needed to preserve opportunities to avoid the potential for burrowing owls to initiate egg laying and incubation within the avoidance buffers specified in MM BIO-1b.1 and to coordinate with the CDFW as necessary to avoid potentially significant impacts on burrowing owls if they are observed to be using these areas.

Additionally, MM BIO-1b.1 provides for identification of the procedures needed to modify the Environmental Commitments and Mitigation Measures, if needed, to resolve conflicts with constructability requirements or other measures required by agency permits and authorizations or to provide for equivalent avoidance and minimization of adverse effects on sensitive biological resources under changing conditions over the life of Project construction. For example, and as

consistent with the recommendations provided in the "*Staff Report on Burrowing Owl Mitigation*" (CDFG 2012), any burrowing owls detected during biological surveys may be monitored under MM BIO-1b.1 to assess their behavior and sensitivity to human disturbance prior to providing recommendations for minimum no-disturbance buffers. This evaluation will likely include an evaluation the type and extent of planned disturbance, duration and timing of the disturbance, the visibility of the disturbance, and influence of other non-Project-related factors.

Response to Comment SA01-25

See Response to Comment SA01-20.

Response to Comment SA01-26

A summary of biological resources that could be impacted by the Project was included in the Draft EIS/R (pages 23 and 24). In addition, the Biological Resources Assessment (Appendix F of the EIS/R) further documents the biological resources (including habitats) that were assessed for the Project. After numerous surveys of the Project footprint, it was determined that the Project area provides potential habitat for western spadefoot (*Spea hammondii*) and American badger (*Taxidea taxus*). The document states for western spadefoot, "*The study area is within the current known range of the species. There are two CNDDB [California Natural Diversity Database] occurrences from 2005 located adjacent to the FKC embankment. The seasonal wetlands and ponds within the study area provide breeding and adjacent upland habitat for the species. Therefore, given the breeding and upland habitat present in the study area and the distance from other documented occurrences, there is high potential for this species to occur.*" The document also states for American Badger, *"There is one CNDDB-reported occurrence approximately two miles to the east of the study area from 1986. Given the distance to the recorded occurrence and the presence of low-quality habitat for the species, there is a low potential for the species to occur.*" For additional information regarding the potential for these species to occur in the Project area, see Section 5.3 in Appendix F of the EIS/R.

Response to Comment SA01-27

MM BIO-1b.1 requires the development of a Biological Resources Management and Monitoring Plan. Item No. 3 of the MM states the following, "*Adaptive management in scheduling worker environmental awareness training (WEAT) and conducting pre-construction surveys for special-status species. In some cases, additional biological surveys beyond those identified in the ECs/MMs may be warranted to proactively avoid biological constraints or conflicts with protective measures. For example, early monitoring for nesting birds or occupied mammal burrows may be needed to preserve opportunities for vegetation removal, removal of nesting starts before egg laying, and burrow monitoring and closure prior to the initiation of breeding or nesting activities.*" Therefore, if suitable habitat is present for western spadefoot or American badger, focused surveys will be conducted to evaluate potential impacts from ground- and vegetation-disturbance. See also Response to Comment SA01-26.

Response to Comment SA01-28

MMMMs BIO-1h.1 and BIO-1h.2 provide mitigation to reduce potential impacts on western spadefoot and MM BIO-1k provides mitigation to reduce potential impacts on American badger, and includes a 50-foot no-disturbance buffer if an American badger is denning on or within 50

feet of the Project work areas. See Appendix B1 of the EIS/R for a complete description of these measures.

Response to Comment SA01-29

Pages 23 and 24 of the EIS/R includes a summary of wetland features in the Project area. In addition, Appendix F of the EIS/R contains a complete wetland delineation of the Project area (see Attachment C in Appendix F).

Response to Comment SA01-30

Chapter 3 of the EIS/R provides detailed descriptions of the physical environment and existing conditions that could be affected by the Project alternatives, including the identification of aquatic habitats such as wetlands and riparian habitats. Appendix F of the EIS/R provides detailed maps of all habitats that were mapped within the Project area, including wetlands and riparian habitats (see Figure 3 in Appendix F).

Chapter 4 of the EIS/R, specifically in the discussions concerning Impacts BIO-2 and BIO-3, provide descriptions of the potential impacts on these habitats. As noted in the EIS/R, MMs BIO-2a through 2c and BIO-3a through 3d will be implemented to avoid, minimize, and/or mitigate impacts on those habitats. Appendix F of the EIS/R, specifically Section 5.1, provides further details regarding potential impacts on those habitats.

Response to Comment SA01-31

Reclamation and FWA coordinated with the USFWS early in the planning process. Reclamation prepared a Biological Assessment (BA) to analyze the potential effects of the Project on federally listed species, which concluded that the Project may adversely affect the endangered Buena-Vista Lake shrew (BVLS) and SJKF. Reclamation submitted the BA to the USFWS on December 23, 2019. On July 23, 2020, Reclamation received a biological opinion from the USFWS that concluded the Project is not likely to jeopardize the continued existence of the SJKF and BVLS.

Response to Comment SA01-32

As noted in MM BIO-3b in Appendix B1 of the EIS/R, prior to Project implementation, FWA will notify CDFW prior to commencing any activity that may do the following: (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.

Response to Comment SA01-33

This comment is consistent with MM BIO-1c.1, which requires, to the extent practicable, vegetation removal to be scheduled to avoid the breeding season for nesting raptors and other special-status birds, and BIO-1c.2, which requires pre-construction surveys for nesting birds and raptors and implementation of conservation measures to avoid disturbance to active nests.

Response to Comment SA01-34

MM BIO-1c.2 was revised to require that pre-construction nesting bird surveys would be conducted no more than 10 days prior to the initiation of construction in a given area. Surveys

for nesting migratory birds will include the Project area and a 250-foot buffer; surveys for nesting raptors will include the Project area and a 500-foot buffer. If an active nest is found, a construction-free buffer zone (250 feet for migratory birds, 500 feet for raptors) will be established around the active nest site. If establishment of the construction-free buffer zone is not practicable, appropriate conservation measures (as determined by a qualified biologist) will be implemented. These measures may include but are not limited to consultation with CDFW and USFWS to establish a different construction-free buffer zone around the active nest site, daily biological monitoring of the active nest site, and delaying construction activities in the vicinity of the active nest site until the young have fledged.

Response to Comment SA01-35

See Response to Comment SA01-34.

Response to Comment SA01-36

Detection of special-status species and natural communities will be reported to CDFW's CNDDB as requested.

Response to Comment SA01-37

The appropriate CEQA filing fee will be paid upon FWA's filing of the Notice of Determination following a decision to approve the Project.

Letter SA02: California Department of Transportation, June 22, 2020

DEPARTMENT OF TRANSPORTATION
DISTRICT 6 OFFICE
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Making Conservation a California Way of Life

Letter SA02

June 22, 2020

06-TUL-65-23.43
06-TUL-190-11.96
06-KER-155-4.05
JOINT EIS-EIR
FRIANT-KERN CANAL MIDDLE REACH
CAPACITY CORRECTION PROJECT
SCH # 2019120007

SENT VIA EMAIL: FKCProjectComments@stantec.com

Mr. Douglas DeFlitch
Friant Water Authority
854 N. Harvard Avenue
Lindsay, CA 93277

Dear Mr. DeFlitch:

Thank you for the opportunity to review the Joint Draft Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) to restore the capacity of a 33-mile segment of the Friant-Kern Canal (FKC) starting east of Strathmore and ending east of Delano. The Project would impact State Route (SR) 65 - south of Strathmore, SR 190 - west of Porterville, and SR 155 - east of Delano.

The Project would restore the capacity of the FKC by both enlarging (raising) and realigning segments of the canal to restore its conveyance capacity to 4,500 cubic feet per second (cfs) in the upstream segment of the Middle Reach and 3,500 cfs in the downstream segment.

The Project would also include construction of a new 23-mile canal realigned to the east of the existing canal. Construction of the Project would take up to 3 years and would be continuous. A concrete batch plant that would primarily be used for construction of the canal lining would be built onsite.

The construction of major facilities is expected to be as follows:

- Existing utility relocation and well abandonment: 4 months,
- Deer Creek and White River check structures: 7 months each (14 months total),
- Siphons: four siphons constructed simultaneously over an approximately 3-month period (19 months total for all 25 siphons),
- Realigned canal: 16 months,
- Canal enlargement: 16 months.

The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network. Caltrans provides the following comments consistent with the State's smart mobility goals that support a vibrant economy and sustainable communities:

1. The proposed canal improvements are located on Caltrans bridges along State Route (SR) 65 and SR 190 in Tulare County and SR 155 in Kern County. SA02-1

2. Caltrans estimates the Project will have a minimal impact on the existing bridges structures on SR 65 (Br. #46-182 L/R, Tul-65-PM 23.42) and on SR 155 (Br. #50-368, Ker-155-PM R4.063), resulting from the 12"-13" of additional canal lining raising underneath the structure. SA02-2

3. Caltrans anticipates the Project will have impacts to the bridge structure on SR 190 (Br. #46-156, Tul-190-PM 11.98). SA02-3

4. The Project proposed a new canal crossing for SR 190 immediately east of the existing canal and the existing bridge will be abandoned or demolished. SA02-4

5. The preferred SR 190 road crossing is a cast in place concrete box siphon to divert flow below existing road grade. SA02-5

6. Caltrans is working with the Friant-Kern Canal Authority, the Bureau of Reclamation and the County of Tulare regarding the design standards for the Siphon design, a maintenance-inspection agreement and a detour plan. SA02-6

7. The Bureau of Reclamation will work with Caltrans to develop an agreement document that will define roles and responsibilities and commitments to safety and operation to the parties and ensure we are able to achieve policy, regulatory, and legal expectations by all parties. SA02-7

8. Upon selecting the preferred canal crossing structure and detour plan for the impacted segment of SR 190, it is recommended the Tulare County Area Transit be contacted for modifications to bus route during construction. The "Woodville-Poplar-Porterville" route (#90) runs through this segment of SR 190. SA02-8

9. Caltrans must be identified and actively coordinated with as a CEQA responsible agency. SA02-9

10. Caltrans will rely on the CEQA document in our decision-making process. In order to avoid delays, it is imperative that the CEQA document be prepared to Caltrans standards and address all potential work occurring within the State Highway System. SA02-10

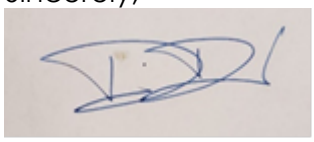
11. Caltrans will require a Traffic Control Plan for SR 190 during the demolition and construction of the new canal realignment and the new canal bridge crossing SR 190. Specifics of the traffic control plan will be identified during the encroachment permit process. SA02-11

12. An encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the State highway rights-of-way. Activity and work planned in the State right-of-way shall be performed to State standards and specifications, at no cost to the State. Engineering plans, calculations, specifications, and reports (documents) shall be stamped and signed by a licensed Engineer or Architect. Engineering documents for encroachment permit activity and work in the State right-of-way may be submitted using English Units. The Permit Department and the Environmental Planning Branch will review and approve the activity and work in the State right-of-way before an encroachment permit is issued. The Streets and Highways Code Section 670 provides Caltrans discretionary approval authority for projects that encroach on the State Highway System. Encroachment permits will be issued in accordance with Streets and Highway Codes, Section 671.5, "Time Limitations." Encroachment permits do not run with the land. A change of ownership requires a new permit application. Only the legal property owner or his/her authorized agent can pursue obtaining an encroachment permit. **Please call the Caltrans Encroachment Permit Office - District 6: 1352 W. Olive, Fresno, CA 93778, at (559) 488-4058. Please review the permit application checklist at:** https://forms.dot.ca.gov/v2Forms/servlet/FormRenderer?frmid=TR0402&distpath=MAOTO&brapath=PERM SA02-12

13. Due to the complexity of the project, prior to an encroachment permit application submittal, the project proponent is required to schedule a "Pre-Submittal" meeting with District 6 Encroachment Permit Office. **Please contact District 6 Encroachment Permit Office at (559) 488-4058 to schedule this meeting.** Please review the permit application checklist at: https://forms.dot.ca.gov/v2Forms/servlet/FormRenderer?frmid=TR0402&distpath=MAOTO&brapath=PERM SA02-13

If you have any other questions, please call me at (559) 488-7396.

Sincerely,



DAVID DEEL
Associate Transportation Planner
Transportation Planning – North

Response to Comment SA02-1

The transportation analysis in the EIS/R includes roads and bridges along State Route (SR) 65 and 190 in Tulare County and SR 155 in Kern County (see the Transportation section in Chapter 4). The comment does not raise any significant environmental issues or address the adequacy of the EIS/R; therefore, no further response is required.

Response to Comment SA02-2

The comment does not raise any significant environmental issues or address the adequacy of the EIS/R; therefore, no further response is required.

Response to Comment SA02-3

The bridge structure on SR 190 is included as part of the Project (see Appendix B1 in the EIS/R) and is therefore included as part of the analysis. See the Hazards and Hazardous Materials/Wildfire, and Transportation impact analyses sections in Chapter 4 of the EIS/R for discussions specific to SR 190. The comment does not raise any significant environmental issues or address the adequacy of the EIS/R; therefore, no further response is required.

Response to Comment SA02-4

See response to comment SA02-2.

Response to Comment SA02-5

Reclamation and FWA are actively working with the California Department of Transportation (Caltrans) to determine the appropriate bridge crossing for SR 190. The comment does not raise any significant environmental issues or address the adequacy of the EIS/R; therefore, no further response is required.

Response to Comment SA02-6

See response to comment SA02-2.

Response to Comment SA02-7

See response to comment SA02-2.

Response to Comment SA02-8

MM TRAN-1-2 requires the construction contractor to prepare a traffic control plan. The plan must be approved by Caltrans and the two counties' public works departments, as appropriate. As part of approval by Tulare County, the Tulare County Area Transit will be notified of planned SR 190 detours during construction, as recommended.

Response to Comment SA02-9

Chapter 1 of the EIS/R states the following, "*Reclamation and FWA are or will be consulting/coordinating with the following agencies regarding the Project:*

- *California Department of Transportation (Caltrans) – encroachment within a state highway right-of-way (ROW)"*

Response to Comment SA02-10

The EIS/R provides an evaluation of potential impacts within all areas that would be subject to work within the State Highway System. Attachments A and B in Appendix B1 of the EIS/R

show the Project area limits that were used for all resources' analyses and evaluations. See response to comment SA02-2.

Response to Comment SA02-11

The EIS/R includes MM TRAN-1-2, which requires the contractor to prepare a traffic control plan. For a full description of this measure, see Appendix B1 of the EIS/R.

Response to Comment SA02-12

Prior to construction of any activity that may occur within, under, or over a state highway right-of-way, Reclamation and/or FWA will obtain an encroachment permit from Caltrans.

Response to Comment SA02-13

Reclamation and/or FWA will conduct a pre-submittal meeting with Caltrans prior to submitting an encroachment permit application.

Local Agencies

Letter LA01: San Joaquin Valley Air Pollution Control District, June 22, 2020

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

June 22, 2020

Letter LA01

Rain Emerson
Bureau of Reclamation
1243 N Street
Fresno, CA 93721

Project: Draft Environmental Impact Report/Environmental Impact Statement for the Friant-Kern Canal Middle Reach Capacity Correction Project

District CEQA Reference No: 20200391

Dear Ms. Emerson:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) for the Friant-Kern Canal Middle Reach Capacity Correction Project. The proposed project consists of restoring an approximately 33-mile reach of the Friant-Kern Canal (FKC) from milepost 88 at Avenue 208 in Tulare County to milepost 121.5 at the Lake Woollomes check in Kern County (Project). The Draft EIR/EIS analyzed two project alternatives, the Canal Enlargement and Realignment Alternative (CER Alternative) and the Canal Enlargement Alternative (CE Alternative) and has identified the CER Alternative as the preferred alternative. The CER Alternative consists of raising the lining up to four feet for an approximately 13 mile stretch and constructing a new realigned canal immediately to the east of the existing canal in for an approximately 20 mile stretch. The District offers the following comments:

1. Construction Emission Reductions

The District recommends Tables E-6 and E-8 in the Draft EIR/EIS, independently identify the NOx emission reductions to be achieved from District Rule 9510 and VERA.

LA01-1

Based on Tables E-5 and E-7 in the Draft EIR/EIS, the Project unmitigated construction emissions are expected to exceed the District's NOx significance threshold of 10 tons per year. The Draft EIR/EIS identifies mitigation to reduce construction related NOx emissions through compliance with District Rule 9510. However, the NOx emission reductions to be achieved by compliance with District

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Rule 9510 are not sufficient to reduce NOx emissions to below the District's significance threshold. As a result, the Draft EIR/EIS included Mitigation Measure (MM) AQ-2, which requires implementation of a Voluntary Emission Reduction Agreement (VERA) to further reduce NOx construction emissions to below the District's NOx significance threshold. To ensure the above is accurately presented in the Draft EIR/EIS, the District recommends identifying the NOx emission reductions from District Rule 9510 and VERA independently. As such, Tables E-6 and E-8 should be revised to include separate columns identifying the emission reductions to be achieved for District Rule 9510 and the VERA. LA01-1

2. <u>Voluntary Emissions Reduction Agreement (VERA), Mitigation Measure AQ-2</u>

Mitigation Measure (MM) AQ-2 of the Draft EIR/EIS indicates that if construction-related emissions cannot be reduced to less than 10 tons per year for SJVAPCD regional significance thresholds, the Project proponents (US Bureau of Reclamation and Friant Water Authority) will enter into a Voluntary Emission Reduction Agreement (VERA) with the District.

The District recommends MM AQ-2 be revised to address the following comments:

- Identify that a VERA is required:

  MM AQ-2 states, *"If construction-related emissions cannot be reduced to less than 10 tons per year for SJVAPCD regional significance thresholds…Reclamation and FWA will enter into a Voluntary Emission Reduction Agreement (VERA) with the SJVAPCD."* Based on Tables E-5 and E-7 in the Draft EIR/EIS, the Project unmitigated emissions are expected to exceed the District's NOx significance threshold of 10 tons per year. Tables E-6 and E-8 in the Draft EIR/EIS indicate implementation of a VERA as mitigation will further reduce NOx construction emissions to below the District's significance threshold. Therefore, the District recommends that MM AQ-2 be revised to clarify that a VERA is required for the Project. LA01-2

- Identify the VERA targeted emission reduction strategy:

  As stated above, NOx construction emissions are expected to exceed the District's NOx significance threshold, however, implementation of a VERA will reduce NOx construction emissions to below the District's significance threshold. The District recommends the Draft EIR/EIS, specifically MM AQ-2, be revised to include language that NOx construction emissions will be mitigated to below the District's NOx significance threshold.

- Clarify the timing of the VERA:

  The District recommends MM AQ-2 be clarified to indicate that a VERA must be adopted <u>prior to the start</u> of the first activity generating emissions, including but not limited to demolition, grading, etc., whichever occurs first. This will ensure that the targeted emissions reductions and the Project emissions occur contemporaneously. LA01-2

Based on the comments above, the District offers the following proposed revised language to MM AQ-2, to read as follows:

~~If construction-related emissions cannot be reduced to less than 10 tons per year for SJVAPCD regional significance thresholds by implementation of EC/MM AQ-1,~~ Reclamation and FWA will enter into a Voluntary Emission Reduction Agreement (VERA) with the SJVAPCD <u>to mitigate project NOx construction emissions to below the SJVAPCD NOx significance threshold</u>. Under the VERA, Reclamation and FWA ~~would~~ <u>will</u> enter into a contractual agreement with the SJVAPCD to provide mitigation of air emission exceedances through a process that funds and implements emission reduction projects with the SJVAPCD consistent with the SJVAPCD's Rule 9510 fee structure. <u>The VERA shall be adopted prior to the first activity generating emissions.</u>

3. <u>Voluntary Emissions Reduction Agreement (VERA), Mitigation to "Net Zero"</u>

The District recommends the Lead Agencies consider the feasibility of reducing Project construction emissions to "net zero".

The mitigation of project emissions impacts to "net zero" means that the sum of NOx, VOC, and PM10 combined project emissions will be fully mitigated by the sum of NOx, VOC, and PM10 combined emission reductions achieved under the VERA. The "net zero" concept is limited to the three pollutants NOx, VOC, and PM10, due to their strong interrelatedness. NOx is the driving pollutant for both the wintertime PM challenge and the summertime ozone challenge (in combination with VOC). The District considers "net zero" mitigation to result in a less than significant air quality impact for these three pollutants combined. Therefore, the District recommends the Lead Agencies consider the feasibility of reducing Project construction emissions to "net zero". LA01-3

4. <u>Ambient Air Quality Analysis (AAQA)</u>

The District recommends the Ambient Air Quality Analysis (AAQA) be revised and/or clarification be provided based on the below comments.

- According to District Policy when an AAQA is triggered for any one pollutant, to ensure that no California Ambient Air Quality Standards (CAAQS) or National Ambient Air Quality Standards (NAAQS) is exceeded, all criteria pollutant emissions for which an ambient air quality standard exists shall be evaluated LA01-4

for the category or categories it is triggered, construction and/or operational emissions. Therefore, only performing AAQA modeling for carbon monoxide (CO) is not appropriate. The District recommends that the AAQA be performed for all criteria pollutants.

- Using location of sensitive receptors is suitable for a health risk analysis but not for an AAQA. To determine the impact to ambient air, consistent with District Policy, the District recommends using a telescoping grid (a variable resolution Cartesian grid deployed over the entire domain) of receptors around the facility boundary such that the maximum concentration would be expected to be contained within the grid system. LA01-4

- To streamline the AAQA analysis, the District will accept a worst-case scenario modeling in place of a whole project analysis. While it appears the segment of the canal chosen is the worst case, it may be that the impact to ambient air is greater in another segment. The District recommends the revised AAQA provide justification based on emissions and distance to the property line/ambient air.

5. Health Risk Assessment

The District recommends a Health Risk Screening/Assessment be performed for the Project.

The Draft EIR/EIS did not include a Health Risk Screening/Assessment. A Health Risk Screening/Assessment identifies potential Toxic Air Contaminants (TAC's) impact on surrounding sensitive receptors such as hospitals, daycare centers, schools, work-sites, and residences. TAC's are air pollutants identified by the Office of Environmental Health Hazard Assessment/California Air Resources Board (OEHHA/CARB) (https://www.arb.ca.gov/toxics/healthval/healthval.htm) that pose a present or potential hazard to human health. A common source of TACs can be attributed to diesel exhaust emitted from both mobile and stationary sources.

The District recommends the Project be evaluated for potential health impacts to surrounding receptors (on-site and off-site) resulting from operational and multi-year construction TAC emissions. LA01-5

i) The District recommends conducting a screening analysis that includes all sources of emissions. A screening analysis is used to identify projects which may have a significant health impact. A prioritization, using CAPCOA's updated methodology, is the recommended screening method. A prioritization score of 10 or greater is considered to be significant and a refined Health Risk Assessment (HRA) should be performed.

For your convenience, the District's prioritization calculator can be found at:

http:www.valleyair.org/busind/pto/emission_factors/Criteria/Toxics/Utilities/PRIORITIZATION%20RMR%202016.XLS.

ii) The District recommends a refined HRA for projects that result in a prioritization score of 10 or greater. Prior to performing an HRA, it is recommended that the Project proponent contact the District to review the proposed modeling protocol. The Project would be considered to have a significant health risk if the HRA demonstrates that the Project related health impacts would exceed the Districts significance threshold of 20 in a million for carcinogenic risk and 1.0 for the Acute and Chronic Hazard Indices, and would trigger all feasible mitigation measures. The District recommends that Projects that result in a significant health risk not be approved.

LA01-5

For HRA submittals, please provide the following information electronically to the District for review:

- HRA AERMOD model files
- HARP2 files
- Summary of emissions source locations, emissions rates, and emission factor calculations and methodology.

More information on toxic emission factors, prioritizations and HRAs can be obtained by:

- E-Mailing inquiries to: hramodeler@valleyair.org; or
- The District can be contacted at (559) 230-6000 for assistance; or
- Visiting the Districts website (Modeling Guidance) at: http://www.valleyair.org/busind/pto/Tox_Resources/AirQualityMonitoring.htm.

6. Nuisance odor

The Draft EIR/EIS did not include a discussion on odor impact. Therefore, the District recommends that the Draft EIR/EIS be revised to include a discussion on the Project's potential odor impact.

The Project would require mass excavation of the realigned canal and may result in storing or piling of sludge materials. The storing or piling of sludge materials to dry on the Project during construction activities may result in intense odors. While offensive odors rarely cause any physical harm, they can be unpleasant, leading to considerable distress among the public and often resulting in citizen complaints.

LA01-6

The Lead Agencies should consider all available pertinent information to determine if the Project could have a significant impact related to nuisance odors. Nuisance odors may be assessed qualitatively taking into consideration of project design elements and proximity to off-site receptors that potentially would be exposed to objectionable odors. The intensity of an odor source's operations and its proximity to sensitive

receptors influences the potential significance of odor emissions. Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact. According to the District Guidance for Assessing and Mitigating air Quality Impacts (GAMAQI), a significant odor problems are defined as more than one confirmed complaint per year averaged over a three-year period, or three unconfirmed complaints per year averaged over a three-year period. An unconfirmed complaint means that either the odor/air contaminant release could not be detected, or the source/facility cannot be determined. LA01-6

The District is available to assist the Lead Agencies with information regarding specific facilities and categories of facilities, and associated odor complaint records.

7. <u>District Rule 9510 (Indirect Source Review)</u>

As stated in the Draft EIR/EIS, the Project is subject to District Rule 9510. The Lead Agencies should consider the below comment.

The purpose of District Rule 9510 is to reduce the growth in both NOx and PM10 emissions associated with development and transportation projects from mobile and area sources associated with construction and operation of development projects. The rule encourages clean air design elements to be incorporated into development projects. In case the proposed development project clean air design elements are insufficient to meet the targeted emission reductions, the rule requires developers to pay a fee used to fund projects to achieve off-site emissions reductions.

The proposed Project is subject to District Rule 9510 because it will receive a project-level discretionary approval from a public agency and will equal or exceed 9,000 square feet of other space. When subject to the rule, an Air Impact Assessment (AIA) application is required prior to applying for project-level approval from a public agency. In this case, if not already done, please inform the project proponent to immediately submit an AIA application to the District to comply with District Rule 9510.

An AIA application is required and the District recommends that demonstration of compliance with District Rule 9510, before issuance of the first building permit, be made a condition of Project approval. Note, the AIA must be approved by the District prior to the Project generating any emissions, such as starting ground disturbance for construction. LA01-7

Information about how to comply with District Rule 9510 can be found online at: http://www.valleyair.org/ISR/ISRHome.htm.

The AIA application form can be found online at: http://www.valleyair.org/ISR/ISRFormsAndApplications.htm.

8. District Rules and Regulations

This Project may also be subject to other District rules and regulations.

- This Project will be subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) and will require District permits. Prior to construction, the Project proponent should submit to the District an application for an Authority to Construct (ATC). For further information or assistance, the project proponent may contact the District's Small Business Assistance (SBA) Office at (559) 230-5888.

- The Project may also be subject to District rules and regulations, including: Regulation VIII (Fugitive PM10 Prohibitions), Rule 2280 Portable Equipment Registration, Rule 4102 (Nuisance), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In the event an existing building will be renovated, partially demolished or removed, the Project may be subject to District Rule 4002 (National Emission Standards for Hazardous Air Pollutants). LA01-8

- The above list of rules is neither exhaustive nor exclusive. To identify other District rules or regulations that apply to this Project or to obtain information about District permit requirements, the applicant is strongly encouraged to contact the District's Small Business Assistance (SBA) Office at (559) 230-5888.

Current District rules can be found online at: www.valleyair.org/rules/1ruleslist.htm.

If you have any questions or require further information, please contact Sharla Yang by e-mail at Sharla.Yang@valleyair.org or by phone at (559) 230-5934.

Sincerely,

For: Arnaud Marjollet
Director of Permit Services

AM: sy

Response to Comment LA01-1

As discussed in the EIS/R, compliance with SJVAPCD regulations through Rule 9510 Indirect Source Review would not achieve sufficient reductions in NO_X to reduce the regional criteria impact to below the SJVAPCD's threshold of significance. As such, MM AQ-2 requires Reclamation and/or FWA to enter into a Voluntary Emission Reduction Agreement (VERA) with the SJVAPCD to mitigate NO_X construction emissions to below the SJVAPCD NO_X significance threshold. Tables E-8 and E-10 in Appendix E of the EIS/R were revised to show the reductions in NO_X attributable to compliance with Rule 9510 and the additional reductions that will be secured through the VERA.

Response to Comment LA01-2

SJVAPCD's comment regarding MM AQ-2 is acknowledged by FWA and Reclamation. MM AQ-2 was revised to address this comment.

Response to Comment LA01-3

The FWA and Reclamation acknowledge SJVAPCD's recommendation to reduce Project construction emissions to "net zero". SJVAPCD explains that "net zero" means that the sum of NO_X, VOC, and PM_{10} combined Project emissions will be reduced to zero through emission reductions achieved by the VERA. SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) (SJVAPCD 2015) was used as the basis for evaluating the Project's air impacts, including SJVAPCD's suggested thresholds of significance. The thresholds of significance that are included in the EIR, as recommended by the GAMAQI are shown below in Table L-4.

Table L-4: SJVAPCD's Air Quality Thresholds of Significance – Criteria Pollutants

Pollutant/Precursor	Construction Emissions	Operational Emissions	
	Emissions (tpy)	Emissions (tpy)	Emissions (tpy)
CO	100	100	100
NOX	10	10	10
ROG	10	10	10
SO_X	27	27	27
PM_{10}	15	15	15
$PM_{2.5}$	15	15	15

Note:
tpy = tons per year

SJVAPCD has determined that use of District Rule 2201 (New Source Review [NSR]) Offset thresholds as the District thresholds of significance for criteria pollutants under California Code of Regulations (CCR) Section 15064.7 is an appropriate and effective means of promoting consistency in significance determinations within the environmental review process and is applicable to both stationary and non-stationary emissions sources.

At the federal level, Tulare and Kern Counties are designated as extreme nonattainment and nonattainment for the 8-hour ozone standard and are designated nonattainment for federal $PM_{2.5}$ standards. Consistent with CAA requirements, SJVAPCD has adopted attainment plans that demonstrate how SJVAPCD will attain and maintain the National Ambient Air Quality Standards (NAAQS). These plans are developed through a public process, formally adopted by

the state, and submitted by the Governor's designee to EPA. The CAA requires EPA to review each plan and any plan revisions and to approve the plan or plan revisions if consistent with the CAA.

NSR is a major component of SJVAPCD's attainment strategy as it relates to growth. It applies to new and modified stationary sources of air pollution. NSR provides mechanisms, including emission trade-offs, by which authorities to construct such sources may be granted, without interfering with the attainment or maintenance of ambient air quality standards. SJVAPCD implementation of NSR ensures that there is no net increase in emissions above specified thresholds from new and modified stationary sources for all nonattainment pollutants and their precursors.

Under NSR, all new permitted sources (emission units) with emission increases exceeding two pounds per day, for any criteria pollutant are required to implement best available control technology. Furthermore, all permitted sources emitting more than the NSR offset thresholds for any criteria pollutant must offset all emission increases in excess of the thresholds.

SJVAPCD's thresholds of significance for criteria pollutants are applied to evaluate regional impacts of project-specific emissions of air pollutants. Regional impacts of a project can be characterized in terms of total annual emissions of criteria pollutants and their impact on SJVAPCD's ability to reach attainment.

The SJVAPCD's attainment plans demonstrate that project specific emissions below the SJVAPCD's offset thresholds will have a less than significant impact on air quality. Thus, the SJVAPCD concludes that use of SJVAPCD NSR offset thresholds as the SJVAPCD thresholds of significance for criteria pollutants under CEQA Guidelines Section 15064.7 is an appropriate and effective means of promoting consistency in significance determinations within the environmental review process and are applicable to both stationary and non-stationary emissions sources. Board-adopted revisions to criteria pollutant offset thresholds in the SJVAPCD NSR Rule serve as board-adopted revisions to the SJVAPCD's CEQA thresholds of significance for criteria pollutants.

As shown in Tables E-7 and E-9 in Appendix E of the EIS/R, the only pollutant that exceeds the SJVAPCD's thresholds of significance is NO_X. As per CEQA guidelines, Section 15126.4 (a)(1), "An EIR shall describe feasible measures which could minimize significant adverse impacts, including where relevant…". Additionally, when imposing mitigation, lead agencies must ensure there is a "nexus" and "rough proportionality" between the measure and the significant impacts of the project. (CEQA Guidelines Section 15126.4, subd. (a)(4)(A)–(B), citing *Nollan v. Ca. Coastal Commission* (1987) 483 U.S. 825, Dolan v. City of Tigard (1994) 512 U.S. 374.) Because the remaining pollutants do not exceed the SJVAPCD's thresholds of significance mitigation is not required, there is no nexus to mitigate to "net zero".

Response to Comment LA01-4

The SJVAPCD recommended that the Ambient Air Quality Analysis (AAQA) be revised for the following reasons:

- According to SJVAPCD Policy, when an AAQA is triggered for any one pollutant, to ensure that no California Ambient Air Quality Standards or NAAQS is exceeded, all criteria pollutant emissions for which an ambient air quality standard exists shall be evaluated for the category or categories it is triggered, construction and/or operational emissions.
- Using location of sensitive receptors is suitable for health risk analysis but not for an AAQA. To determine the impact to ambient air, consistent with SJVAPCD Policy, the SJVAPCD recommends using a telescoping grid (a variable resolution Cartesian grid deployed over the entire domain) of receptors around the facility boundary such that the maximum concentration would be expected to be contained within the grid system.
- To streamline the AAQA analysis, the SJVAPCD will accept a worst-case scenario modeling in place of a whole project analysis. While it appears the segment of the canal chosen is the worst case, it may be that the impact to ambient air is greater in another segment. The SJVAPCD recommends the revised AAQA provide justification based on emissions and distance to the property line/ambient air.

The Policy the SJVAPCD is referring to is Policy APR-2030 (SJVAPCD 2018) and is applicable only to stationary-source projects. APR-2030 recommends that an AAQA be performed for all criteria air pollutants emissions for which an ambient air quality standard exists when a stationary source project would result in an increase of 100 pounds per day screening level of any criteria pollutant for any of the following categories: construction emission activities, operational permitted source activities, or operational non-permitted source activities.

The Project is not a stationary source project, and as such, the SJVAPCD's APR-2030 Policy is not applicable. The AAQA was prepared consistent with the guidance in the SJVAPCD's GAMAQI, which recommends that an AAQA be performed when the increase in onsite emissions from construction activities exceeds the 100 pounds per day screening level of any criteria pollutant, after implementation of all enforceable mitigation measures. The GAMAQI does not state that all criteria air pollutants be evaluated. Because only CO exceeded the screening level, the AAQA focused only on CO. Based on the SJVAPCD's GAMAQI and AAQA guidance for non-stationary source projects the remaining criteria air pollutants that do not exceed the screening level would presumably not trigger an exceedance of an air quality standard.

Regarding the location of sensitive receptors in the AAQA, the SJVAPCD again pointed to its stationary source Policy APR-2030, which is not applicable to the project. The AAQA prepared for the Project presented the worst-case analysis, where an ambient air quality standard has the potential to cause an exceedance that would impact sensitive receptors. The primary purpose of an air quality standard is to be protective of human health, which would occur where actual receptors reside. As such, the AAQA prepared for the Project addressed this primary concern and is adequate for purposes of disclosing potential environmental air quality impacts.

Response to Comment LA01-5

Construction of the Project would occur in a linear fashion and would not be concentrated in any one location for an extensive period of time (see EIS/R Chapter 2, General Construction Practices and Appendix B1), which would limit exposure of a sensitive receptor in a specific

location to a short period of time (less than two months). As discussed in Impact AQ-3 in the Final EIS/R, "*In the portions of the CER Alternative that would occur near higher densities of sensitive receptors (i.e., Strathmore or Porterville), construction in any one location would only last for a few weeks; therefore, sensitive receptors would not continually be exposed to a substantial amount of [toxic air contaminants]*." Notably, the Office of Environmental Health Hazard Assessment (OEHHA) provided recommendations in its 2015 Hotspot Program Guidance against modelling construction health risks for construction lasting less than two months. Based on the OEHHA Guidance and the rural and dispersed nature of the construction work in relation to the receptors, a qualitative health risk assessment was prepared and adequately disclosed potential health risk impacts. In addition, MM AQ-1 requires the incorporation of construction emissions minimization measures to implement the use of cleaner (less polluting) equipment. SJVAPCD recommended the use of its Prioritization Calculator, however, this calculator is designed to address stationary sources of emissions or large development projects where the location remains fixed, as such, its use for this linear construction project is not applicable as the number of assumptions required to properly allocate the construction emissions along the construction segments would render the results speculative.

The EIS/R provides an adequate qualitative assessment of the proposed health risks associated with construction. Due to the short duration of construction activities near sensitive receptors and the lack of sensitive receptors near areas with longer-term construction, impacts related to toxic air contaminants from the Project would be less than significant.

Response to Comment LA01-6

According to CEQA Guidelines Section 15128, effects determined not to be significant do not need to be discussed in detail in an EIR. Additionally, 40 CFR Section 1502.15 requires that the EIS succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. Pursuant to the Environmental Assessment/Initial Study (EA/IS) that was prepared by Reclamation and FWA, the Project was determined to have a less than significant odor impact and further analysis was therefore not included in the EIS/R. For a description of the expected impact from odor, see the EA/IS that is contained in Appendix D of the EIS/R.

The SJVAPCD expressed concerns with potential storage of sludge materials that could result in offensive odors resulting in citizen complaints. As discussed in the Geotechnical Report prepared for the Project (Geotechnical Data Report, Stantec, May 2020) subsurface conditions that may be encountered during excavation of the Project include fill and alluvium soils. The fill soils consist of a wide range of soil types ranging from clean sands to clayey soils with the predominant material being clayey sand. The alluvium ranged from clean sands to clayey soils. These soil types do not contain odorous compounds that would cause nuisance complaints if they were stored onsite and the Project does not otherwise include activities that will use, create or store sludge materials. As disclosed in the EA/IS, the potential odor impact is less than significant.

Response to Comment LA01-7

The EIS/R states that the Project is subject to SJVAPCD Rule 9510. FWA and Reclamation acknowledge the SJVAPCD's summary of Rule 9510 and the need to submit the Air Impact Assessment Application (AIA) prior to final discretionary approval. Compliance with Rule 9510 will be made a condition of approval before issuance of the first grading permits. The FWA and

Reclamation also acknowledge that the AIA must be approved by the SJVAPCD prior to ground disturbance for construction.

Response to Comment LA01-8

FWA and Reclamation acknowledge SJVAPCD's comment that the Project may be subject to additional SJVAPCD rules and regulations including but not limited to Rule 2010 Permits Required, Rule 2201 New and Modified Stationary Source Review, Regulation VIII Fugitive PM10 Prohibitions, Rule 2280 Portable Equipment Registration, Rule 4102 (Nuisance), and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In addition, the Project would be subject to Rule 4002 National Emission Standards for Hazardous Air Pollutants for demolition of structures. Additionally, implementation of MM HAZ-1-2 would minimize the potential for exposure to asbestos.

Letter LA02: Delano-Earlimart Irrigation District, June 22, 2020

DELANO-EARLIMART IRRIGATION DISTRICT

Letter LA02

June 22, 2020

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Environmental Compliance
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Douglas A. DeFlitch
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Friant Water Authority
854 N. Harvard Avenue
Lindsay, CA 93247

Via email: remerson@usbr.gov and ddeflitch@friantwater.org

Re: Friant-Kern Canal Middle Reach Capacity Correction Project DEIS/EIR

Dear Ms. Emerson and Mr. DeFlitch:

The following comment letter is a summary of Delano-Earlimart Irrigation District's (DEID or District) observations and professional opinions concerning general comments and preliminary technical design aspects of the Friant Water Authority (FWA) Friant-Kern Canal Middle Reach Capacity Correction Project (Project) Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR) dated May 2020. Comments provided are also related to the proposed Project current design plans and specifications (P&S) provided by Stantec to the District. While this comment letter is directly related to DEID operations and facilities, other Friant-Kern Canal (FKC) contractors within the proposed Project area may also have similar impacts and comments.

DEID is the largest water user on the FKC and is geographically situated downstream of the most extreme areas of FKC subsidence. The District is supportive of the Project and commends both the United State Bureau of Reclamation (USBR) and FWA for their efforts to undertake restoration of the FKC system. It is the District's understanding that the USBR and FWA recently revised the proposed Project directive and design philosophy to both restore the FKC capacity within the proposed Project area and to restore delivery head and delivery capacity to effected FKC contractor turnouts within the proposed Project area to the original design criteria in order to restore the FKC system on a holistic basis. With the revised proposed Project directive and design philosophy, some of the following comments will be addressed.

Mitigation Measure Comments

- The proposed Project current design plans show existing District delivery facilities will be relocated due to the proposed FKC alignment and the DEIS/EIR impact summary table ES-1 lists Utilities and Services Systems as a less than significant impact. Mitigation measures should be incorporated into the proposed Project that will replace all pipelines and facilities impacted by the proposed FKC alignment with suitable pipeline material so that DEID will not be required replace

LA02-1

any portions of facilities within the proposed Project right-of-way to a structurally suitable point of connection. Many of the facilities the proposed FKC alignment is impacting are original and should be replaced to a structurally suitable point of connection to mitigate future rehabilitation and/or construction of replacement facilities within the proposed Project right-of-way. The DEIS/EIR should address the mitigation measures accordingly. LA02-1

- To accommodate for future subsidence in the proposed Project area, the FKC liner is to be constructed higher than currently required to provide for the proposed Project capacity. It is the District's understanding that the proposed Project check structures have mitigation measures incorporated (i.e. wing walls) to ensure that the operating water level in the proposed FKC cannot be raised to the top of liner to place excessive head on DEID's delivery systems that they cannot handle and/or put at risk of failure (i.e. pipeline pressure class). This is an acceptable design mitigation measure that should be listed in the DEIS/EIR. LA02-2
- The proposed Project should include mitigation measures to allow DEID's continued access to its surface water supplied via the FKC during construction of the required proposed Project facilities. Due to the implementation of the Sustainable Groundwater Management Act (SGMA), DEID is heavily reliant on being able to access and convey contracted and other surface water supplies to its service area. The District facilities are not designed to be cross-redundant and outages of any turnout for any extent of time is extremely detrimental to the District. The District believes this mitigation measure should be listed in the DEIS/EIR. LA02-3
- Within Appendix B-2 (Env commitments and Mitigation Measures) all "will's" should be revised to "shall's". LA02-4

General Design Related Comments

- It is the District's understanding with the new proposed Project directive and design philosophy the following comment will be addressed. The proposed Project does not appear to be looking at its scope holistically by taking a full look at DEID's delivery systems and the effect the proposed Project will have on the delivery systems. FWA should assess how the proposed Project will affect DEID's delivery systems and provide retrofits to DEID's delivery systems if required to provide for a fully functioning delivery system at the completion of the proposed Project. LA02-5
- It is the District's understanding with the new proposed Project directive and design philosophy the following comment will be addressed. DEID's western turnouts from the FKC are both pumped and gravity turnouts. The current proposed Project current design implements a weir box to control the water level from the proposed FKC alignment to the delivery point (i.e. turnout) to provide the same water surface elevation at the delivery point as provided pre-Project. This current design is not acceptable for gravity turnouts that require the water surface elevation in the proposed FKC alignment to be able to deliver the original design turnout capacity. LA02-6

- Although DEID's eastern and initial western turnouts are "pumped" systems, they are not pressurized systems. These delivery systems are open to gravity either on the upstream side by way of a standpipe, or on the downstream side by a terminal reservoir. The DEID eastern delivery system relies on static head to provide deliveries. Therefore, DEID is largely susceptible to both localized and regional subsidence. FWA should provide topographic survey information to DEID on their delivery systems in relation to the proposed Project to allow for DEID to identify and mitigate both localized and regional subsidence issues within their service area. LA02-7

- It is the District's understanding with the new proposed Project directive and design philosophy the following comment will be addressed. The proposed Project should account for both increasing the capacity of the FKC and retrofitting DEID's delivery systems to restore delivery capacity to original design. It does not appear that the proposed Project is considering DEID's capacity/delivery reductions due to localized and regional subsidence in the proposed Project area. At a minimum, the proposed Project should restore the originally design water surface elevation and capacity LA02-8

- It is the District's understanding with the new proposed Project directive and design philosophy the following comment will be addressed. Any DEID pumping plant or gravity turnout modifications that are required to continue to provide deliveries from the proposed FKC alignment should be included in the Project. LA02-9

- The current proposed Project current design plans implement trash racks at the new delivery turnout locations. This is not acceptable design criteria. The USBR originally constructed travelling screens for District turnouts and the District replaced the original traveling screens with upgraded ones. The proposed Project should include replacing travelling screens to mitigate for the loss of existing screens as a result of the Project. LA02-10

- The proposed Project current design plans depict a 2-foot pipe invert clearance from the turnout floor. This design does not seem to account for the potential future subsidence mitigation measures being implemented in the proposed Project design. The proposed Project is accounting for 5-feet of potential future subsidence within the Project area in the proposed canal design. If this occurs, there is potential for the pipelines to be located in or nearer to sediment sources allowing for sediment transport to the DEID facilities. FWA should review accordingly and account for the potential future subsidence mitigation measures related to the pipeline inverts. LA02-11

- The proposed Project design should not increase the entrance velocities into the DEID turnouts from the original design criteria. Increasing the entrance velocities will negatively affect the pump operations and potentially damage the pumps. If the proposed Project design cannot maintain the same entrance velocities into the DEID turnouts, suitable mitigation measures to protect the DEID pumps should be implemented in the proposed Project design. LA02-12

The District apricates the opportunity to review and comment on the Project. DEID remains committed to working with the USBR and FWA in order to see the Project to

fruition while protecting DEID facilities. As subsequent Project design revisions are available, the District looks forward to with the USBR and FWA to ensure that the above items are incorporated.

Should you have any questions or wish to engage on any of the items noted above, please feel to reach out directly.

Sincerely,

Jeffrey M. Mastaler
FOR

Eric R. Quinley
General Manager

Response to Comment LA02-1
The commenter notes that, as indicated in Table ES-1, the impact conclusion [prior to mitigation being incorporated] on Utilities and Service Systems is "less than significant." As per CEQA guidelines, Section 15126.4 (a)(1), "An EIR shall describe feasible measures which could minimize significant adverse impacts, including where relevant…" Because the impact under Utilities and Service Systems is not a significant impact, no mitigation is required.

Additionally, as described in Appendix B1, Project Alternatives, it is recognized that there are existing utility crossing and facilities that are connected to the FKC, including turnouts and culverts (pipeline crossings). The Project would include provisions to modify or replace these facilities as necessary using materials and installation techniques commonly used in the industry.

Response to Comment LA02-2
As per CEQA guidelines, Section 15126.4 (a)(1), "An EIR shall describe feasible measures which could minimize significant adverse impacts, including where relevant…" The design feature that is described in this comment (wing walls at check structures) was not listed as a mitigation measure, intending on mitigating a significant environmental impact, because there are no significant environmental impacts that were identified in the EIS/R that would require such mitigation. Further, the commenter did not identify a significant environmental impact that this design feature would "mitigate" and will therefore not be included as mitigation in the EIS/R.

Response to Comment LA02-3
See response to comment LA02-2.

Response to Comment LA02-4
Under state and federal drafting guidelines (see for example the federal Plain Writing Act of 2010 and associated guidelines: https://plainlanguage.gov/media/FederalPLGuidelines.pdf), the use of "will" in lieu of "shall" is preferable in demonstrating FWA's and Reclamation's intent to implement environmental commitments and mitigation as part of the Project. As per CEQA guidelines, Section 15097(a), FWA will adopt a Mitigation Monitoring and Reporting Plan (MMRP) (included as Appendix M of the Final EIS/R), which will be made a condition of Project approval and, as per 40 CFR Section 1505.2, Reclamation will adopt all Environmental Commitments and Mitigation Measures, as well as requirements pursuant to section 7 ESA consultation, as part of their Record of Decision when identifying their selected Alternative.

Response to Comment LA02-5
See response to comment SA02-2.

Response to Comment LA02-6
See response to comment SA02-2.

Response to Comment LA02-7
See response to comment SA02-2.

Response to Comment LA02-8
See response to comment SA02-2.

Response to Comment LA02-9
See response to comment SA02-2.

Response to Comment LA02-10
See response to comment SA02-2.

Response to Comment LA02-11
See response to comment SA02-2.

Response to Comment LA02-12
See response to comment SA02-2.

Non-Governmental Agencies

Letter NGO01: California Farm Bureau Federation, June 22, 2020

CALIFORNIA FARM BUREAU FEDERATION
LEGAL SERVICES DIVISION
2600 RIVER PLAZA DRIVE, SACRAMENTO, CA 95833 • PHONE (916) 561-5665

Letter NGO01

June 22th, 2020

Via electronic mail: remerson@usbr.gov / FKCProjectComments@stantec.com

Rain Emerson, Environmental Compliance Branch Chief
Bureau of Reclamation
1243 N Street
Fresno, CA 93721
Phone: (559) 262-0335
Email: remerson@usbr.gov

Doug DeFlitch, Chief Operating Officer
Friant Water Authority
854 N. Harvard Ave
Lindsay, CA 93277
Phone: (559) 562-6305 31
Email: FKCProjectComments@stantec.com

Re: **EIS No. 20200098, Draft, BR, CA, Friant-Kern Canal Middle Reach Capacity Correction Project**

Dear Ms. Emerson and Mr. DeFlitch:

The California Farm Bureau Federation ("CFBF") is a non-governmental, nonprofit, voluntary membership California corporation whose purpose is to protect and promote agricultural interests throughout the state of California and to find solutions to the problems of the farm, the farm home, and the rural community. CFBF is California's largest farm organization, comprised of 53 county Farm Bureaus currently representing approximately 34,000 agricultural, associate, and collegiate members in 56 counties. CFBF strives to protect and improve the ability of farmers and ranchers engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of California's resources.

CFBF appreciates the opportunity to provide comments on the Bureau of Reclamation ("Reclamation")'s and the Friant Water Authority ("Authority")'s Draft Environmental Impacts Statements for the Friant-Kern Canal Middle Reach Capacity Correction Project (EIS/EIR-18-057 5 / State Clearinghouse No. 2019120007).

CFBF is, first of all, an unequivocal supporter of this critical important project to restore original design conveyance capacity in an area of the San Joaquin Valley that will be, or already *is* being severely impacted growing surface water restrictions, possible changing hydrology, and the Sustainability Groundwater Management Act ("SGMA"). NGO01-1

With regard to the proposed engineering solution for the project, CFBF defers to the judgment and expertise of Reclamation and Authority, as project co-leads, on matters including the agencies' "environmentally superior alternative" determination with respect to Alternative CER (the Enlarge and Partial Realign version of the project) versus CE (the Enlargement Only version of the project). NGO01-2

CFBF commends the Bureau and Authority, overall, for the approach to future subsidence—specifically, where potential future subsidence through 2070 is built into the analysis of the various alternatives, including the "No Action" alternative. The goal to rebuild Middle Reach Friant-Kern Canal to its original design capacity, while at the same time making allowance for probable continued subsidence under various scenarios, is very important. It is important to ensure long-term durability of the proposed fix with respect to various uncertainties including future hydrology, local implementation of SGMA, and the exact, location-specific severity and pace of future subsidence. NGO01-3

Given the cost and regional importance of the proposed fix, planning and designing for a robust "long-term design solution" is also very important. In this regard, detailed geotechnical and cost considerations should be an area of focus in the lead agencies' continued refinements to the proposed project, including the agencies' responses to comments and potential revisions or supplemental analysis for the Final EIS. NGO01-4

The lead agencies may also wish to consider additional sensitivity analyses with respect to future hydrology and potential implications for project operations, including potential shifts in runoff beyond the historic range and possible related implications with respect to San Joaquin River Restoration flows, flood operations at Millerton, rescheduling, canal operations, and potential future groundwater recharge capacity. NGO01-5

In terms of the potential "significant and unavoidable" impacts of the project on important farmland and Williamson Act lands, CFBF appreciates mitigation measures AG-1 (1:1 farmland preservation) and AG-2 (nonrenewal or cancellation). Assuming all feasible attempts at avoidance, minimization, mitigation to insignificance have been fully exhausted, the characteritization of such impacts as "significant and unavoidable" is ultimately correct—as permanent farmland losses, of course, can be partially off-set, but never truly undone. At the same time, it is important to view such losses from perspective of the much larger losses that *could* occur without the project. NGO01-6

In the case of the proposed Friant-Kern Canal Middle Reach Capacity Correction Project, this same 'big picture' perspective is important in the larger context as well. In this regard, the most striking aspect of the proposed project is perhaps not any particular impact of the project itself, but rather the enormous impact of a future *without* the project.

To a limited extent, glimpses of this possible future *are* part of the Draft EIS/R. The Draft EIS/R, for example, includes findings or general analysis with respect to the significance of potential water supply (surface and groundwater) impacts, large-scale farmland conversion impacts, air quality (dust) and associated health impacts, and water quality or drinking water implications of a "No Action" future. While these impacts are mentioned generally, however, in relation to the project alternatives, there is little quantitative analysis in terms of the baseline difference between the "No Action" Alternative and Alternative CE and proposed, environmentally superior alternative CER.

For example, the difference in potential surface water supply impacts between the project alternatives and the "No Action" alternative *is* quantified (amounting to an additional loss of as much as 150,000 additional acre-feet in supply a year under the "No Action" project by 2040). However, the Draft EIS/R's analysis of several other potentially significant impacts are limited to just the project alternatives, with no comparable quantitative contextualization in relation to the "No Action" alternative. NGO01-7

What, for example, is the potential farmland conversion impact in the water service areas specifically impacted by on-going Middle Reach subsidence (in Tulare and Kern Counties, specifically)? What are the related air quality impacts? How would lost recharge impact local driking water, and how would the related farmland conversion impact the human environmental in terms of potential economic impacts, job impacts, impacts to disadvantaged impacts, etc.?

Quantification of such "No Action" impacts for comparison to the project alternatives themselves is potentially important, not only for a project planning perspective, but also to inform related policy and financial choices, and to better inform the affected public.

In closing, CFBF thanks the Reclamation for this opportunity to comment on the Public Draft EIS/R for the proposed Friant-Kern Canal Middle Reach Capacity Correction Project. On the whole, CFBF is strongly agreement with the need for the project, including expeditious movement through necessary permitting and funding steps to actual implementation.

Questions on these staff-level comments may be directed to the undersigned at jfredrickson@cfbf.com.

Sincerely,

Justin Fredrickson
Environmental Policy Analyst

Response to Comment NGO01-1
Comment and support for the project noted. See response to comment SA02-2.

Response to Comment NGO01-2
See response to comment SA02-2.

Response to Comment NGO01-3
See response to comment SA02-2.

Response to Comment NGO01-4
See response to comment SA02-2.

Response to Comment NGO01-5
See response to comment SA02-2.

Response to Comment NGO01-6
Comment noted. As the commenter notes, the loss of important farmland will be mitigated (see impact description AG-1 in the Final EIS/R), albeit not to a level of insignificance.

Response to Comment NGO01-7
As indicated in the EIS/R, the No Action Alternative would result in potentially significant impacts on the following resources: air quality due to fugitive dust from fallowed land, Swainson's hawk due to removal of foraging habitat from land fallowing, geology and soils from erosion from land fallowing, conversions of agricultural lands from land fallowing, and groundwater due to reductions in deliveries that would impede sustainable groundwater management in the Tule and Kern Subbasins.

While reductions in surface water deliveries are estimated (quantified) in the EIS/R for the No Action Alternative, this data is based on several measurable factors, including implementation of the San Joaquin River Restoration Program, a projection of future subsidence (see Attachment C in Appendix B1 of the EIS/R) and a known (measurable) capacity in the FKC. However, it is speculative to estimate which lands would specifically be directly impacted (fallowed) or how lands would be managed solely as a result of continued capacity reductions in the FKC in comparison to lands that would be impacted due to implementation of the Sustainable Groundwater Management Act and other factors that affect future water availability for the region.

Individuals

Email I01: Karin Campbell, June 17, 2020

[EXTERNAL] Re: Fix for the Friant-Kern Canal

Letter I01

Karin Campbell <kacycamp@sbcglobal.net>

Wed 6/17/2020 6:39 PM

To: Emerson, Rain L <remerson@usbr.gov>

To: Bureau of Reclamation, c/o Rain Emerson, remerson@usbr.gov
From: Karin Campbell, kacycamp@sbcglobal.net
Subject: Fix for the Friant-Kern Canal
Date: June 17, 2020

Dear Mr. Emerson,

The Friant-Kern Canal delivers crucial water supply to farmers to grow our food. The Friant-Kern Canal is forfeiting up to 300,000 acre feet (97,755,300,000 gallons) annually because it can no longer convey the water. We HAVE to be able to move water, which is why a fix for the Friant-Kern Canal is so critical. It has sunk because too much water is allowed to flow to the ocean, and not enough is delivered in the region to keep aquifers plumped up and healthy. Diminished surface water allocations from our water projects have caused man-made subsidence, and the lack of supply compounds the problem as replacement water must be pumped from the ground. Unless this fix for the Friant-Kern Canal is completed, even the small amounts of surface water allowed for farmers cannot reach them. I urge this fix to go forward to provided much needed conveyance for water so aquifers can be replenished and stop subsidence. I01-1

Thank you for your consideration,

Karin Campbell

Response to Comment I01-1

Comment and support for the Project noted. See response to comment SA02-2.

Email I02: Scott Steward, June 17, 2020

[EXTERNAL] Friant-Kern Canal

Letter I02

Scott Steward <scottmsteward@yahoo.com>

Wed 6/17/2020 7:31 PM

To: Emerson, Rain L <remerson@usbr.gov>

The Friant-Kern Canal delivers crucial water supply to farmers to grow our food. The Friant-Kern Canal is forfeiting up to 300,000 acre feet (97,755,300,000 gallons) annually because it can no longer convey the water. We HAVE to be able to move water, which is why a fix for the Friant-Kern Canal is so critical. It has sunk because too much water is allowed to flow to the ocean, and not enough is delivered in the region to keep aquifers plumped up and healthy. Diminished surface water allocations from our water projects have caused man-made subsidence, and the lack of supply compounds the problem as replacement water must be pumped from the ground. Unless this fix for the Friant-Kern Canal is completed, even the small amounts of surface water allowed for farmers cannot reach them. I urge this fix to go forward to provided much needed conveyance for water so aquifers can be replenished and stop subsidence.

I02-1

Scott M Steward
Bookkeeping / Accounting Solutions
Intuit QuickBooks ProAdvisor
Enrolled Agent / Tax Preparation
Ph 949-726-2103
Fax 714-979-1207

Response to Comment I02-1

Comment and support for the Project noted. See response to comment SA02-2.

Email I03: Steve (no last name provided), June 17, 2020

Letter I03

[EXTERNAL] Stop the water blockade

smilensteve <smilensteve@comcast.net>

Wed 6/17/2020 9:20 PM

To: Emerson, Rain L <remerson@usbr.gov>

Failed policies have not saved any fish for decades.
We send all our water out to the ocean to flush the giant toilet, the Delta.
We're are destroying jobs, food production, and our infrastructure.

Stop the pollution of the Delta.
Give the people there water.

Stop this criminal water blockade.

I03-1

Steve
559 572 8286

Sent from my Samsung Galaxy smartphone.

Response to Comment I03-1

See response to comment SA02-2.

Email I04: Stacy Cardoso, June 17, 2020

[EXTERNAL] Water Rights!

Letter I04

Stacy Cardoso <stacyshouse367@gmail.com>

Wed 6/17/2020 10:12 PM

To: Emerson, Rain L <remerson@usbr.gov>

Please read,

The Friant-Kern Canal delivers crucial water supply to farmers to grow our food. The Friant-Kern Canal is forfeiting up to 300,000 acre feet (97,755,300,000 gallons) annually because it can no longer convey the water. We HAVE to be able to move water, which is why a fix for the Friant-Kern Canal is so critical. It has sunk because too much water is allowed to flow to the ocean, and not enough is delivered in the region to keep aquifers plumped up and healthy. Diminished surface water allocations from our water projects have caused man-made subsidence, and the lack of supply compounds the problem as replacement water must be pumped from the ground. Unless this fix for the Friant-Kern Canal is completed, even the small amounts of surface water allowed for farmers cannot reach them. I urge this fix to go forward to provided much needed conveyance for water so aquifers can be replenished and stop subsidence. I04-1

We HAVE to be able to move water, which is why a fix for the Friant-Kern Canal is so critical. It has sunk because too much water is allowed to flow to the ocean, and not enough is delivered in the region to keep aquifers plumped up and healthy. Diminished surface water allocations from our water projects have caused man-made subsidence, and the lack of supply compounds the problem as replacement water must be pumped from the ground. The Friant-Kern Canal is forfeiting up to 300,000 acre feet (97,755,300,000 gallons) annually because it can no longer convey the water.

Stacy Cardoso
Almond Grower
ParaProfessional
Concerned Citizen

Response to Comment I04-1

Comment and support for the Project noted. See response to comment SA02-2.

Email I05: JC Creighton, June 18, 2020

[EXTERNAL] Water

Letter I05

JC Creighton <JC3THATSME@hotmail.com>

Thu 6/18/2020 12:22 AM

To: Emerson, Rain L <remerson@usbr.gov>

I have 2 issues that California is a direct Negative cause of to Farming and Ranching.
First: Ocean levels rising because of a waste of captured fresh water.
In California fresh water that was captured in dams in the Eastern mountain ranges is wasted daily. The volume of water rushing out to sea from being released in the rivers is staggering. If California would stop this fresh water from being released, the ocean levels would stop rising, and possibly begin to decrease levels. I05-1

Second: Climate Change causing Global temps and CO2 levels to rise because Farming and Ranching have been cut down.
Global Warming is caused by higher levels of CO2. Farming can lower that rising rate of CO2 and clean the precious air that we breathe. California has been waging a quiet war on the Farmers throughout the State. Farming has suffered because the Farmers and Ranchers water allotment has been taken away, and sent into the Ocean on a daily basis. If the Farmers can return to their normal practices with their lands of farming the lands of this wonderful State the Global CO2 levels will decrease. It will lower CO2 levels because plants absorb CO2, and in doing that process levels will decrease. There-by reduce Global Warming. California is causing Global Warming. I05-2

Attached is a link regarding photosynthesis and CO2.
https://scienceline.ucsb.edu/getkey.php?key=2860

Attached is a link regarding Ocean levels rising: https://oceanservice.noaa.gov/facts/sealevel.html

Response to Comment I05-1

See response to comment SA02-2.

Response to Comment I05-2

See response to comment SA02-2.

Email I06: Russ Patras, June 18, 2020

[EXTERNAL] Friant Kern Canal fixes

Letter I06

Patras,Russ <rpatras@mwdh2o.com>

Thu 6/18/2020 10:21 AM

To: Emerson, Rain L <remerson@usbr.gov>

Sir,

I strongly suggest that the farmers/farming corporations that over-pumped the ground water causing the subsidence and damage to the canals and other infrastructure pay the full cost of repairs.

This is not the responsibility of the taxpayers, who were not involved and profiting from the over extraction of water.

I06-1

Russ Patras
951-294-4438

Response to Comment I06-1

See response to comment SA02-2.

Email I07: Bryan Doran, June 19, 2020

[EXTERNAL] Comments on Friant-Kern Canal

Letter I07

Bryan Doran <bpdoran@comcast.net>

Fri 6/19/2020 2:21 PM

To: Emerson, Rain L <remerson@usbr.gov>

The Friant-Kern Canal is crucial for getting an adequate water supply to farmers to grow our food. The Friant-Kern Canal is should be supplying up to 300,000 acre feet annually. It currently is not because it can no longer convey the water due to the subsidence. We HAVE to be able to move water, which is why a fix for the Friant-Kern Canal is so critical. I07-1

We must also stop the cause of the subsidence. The canal has sunk because too much water is allowed to flow to the ocean, and not enough is delivered in the region to keep aquifers plumped up and healthy. Diminished surface water allocations from our water projects have caused man-made subsidence, and the lack of supply compounds the problem as replacement water must be pumped from the ground. Unless this fix for the Friant-Kern Canal is completed, even the small amounts of surface water allowed for farmers cannot reach them. I urge this fix to go forward to provide much needed conveyance for water so aquifers can be replenished and stop subsidence. I07-2

Thank you,

Bryan Doran

Response to Comment I07-1

See response to comment SA02-2.

Response to Comment I07-2

Comment and support for the Project noted. See response to comment SA02-2.

Email I08: Nick and Estrella Cabuco, June 22, 2020

[EXTERNAL] Friary-Kern Canal's IMPORTANCE

Letter I08

Leling Cabuco <leling_uac@icloud.com>

Mon 6/22/2020 12:11 PM

To: Emerson, Rain L <remerson@usbr.gov>

Please consider the maintenance and repairs necessary to the canal conveyor of water to our valley and the South. We all need an adequate supply of water, and the canal is in sad repair. I08-1

We've shown that diminished surface water allocations from the various water projects compounds the Valley's problems in maximizing produce. If we are to survive, the State has to recognize a change in their stringent water policies is necessary. I08-2

Thank you.

Nick and Estrella Cabuco

Sent from my iPhone

Response to Comment I08-1

See response to comment SA02-2.

Response to Comment I08-2

See response to comment SA02-2.