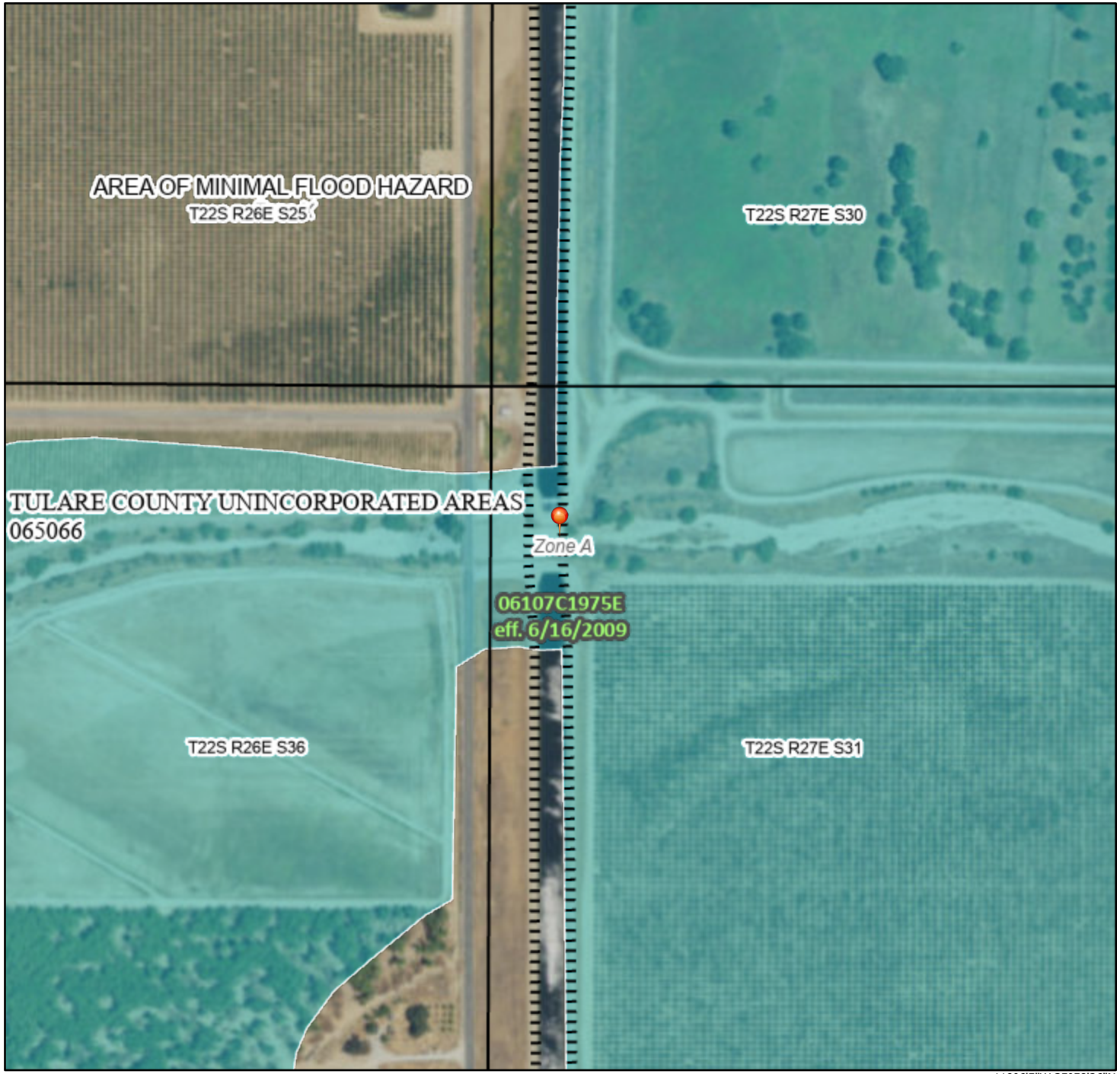
Friant-Kern Canal Pump-Back Project Environmental Impact Report

Appendix I: FEMA Flood Insurance Rate Maps

National Flood Hazard Layer FIRMette

FEMA

119°6'42"W 35°58'55"N



119°6'5"W 35°58'26"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

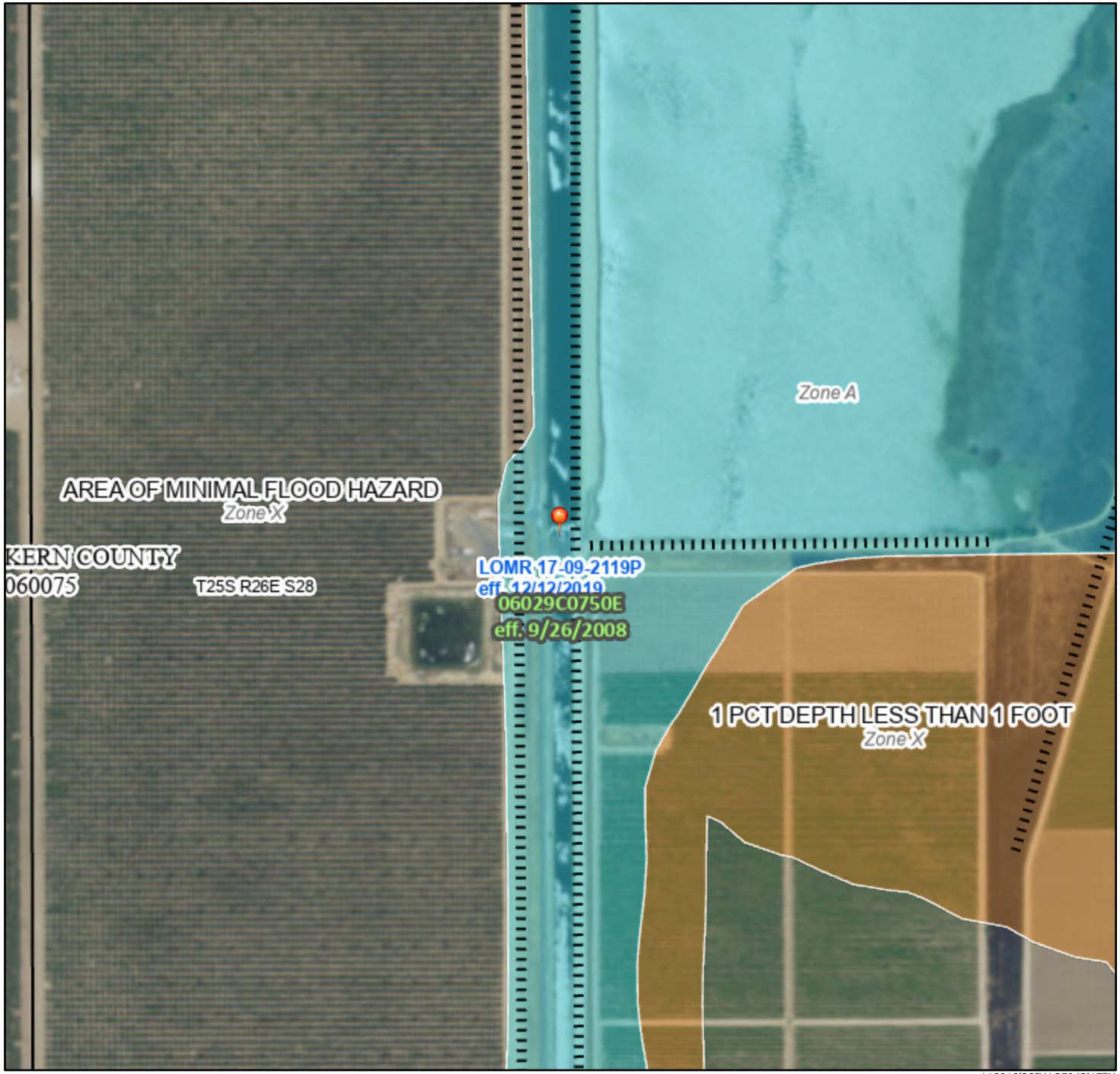
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/22/2022 at 1:01 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

National Flood Hazard Layer FIRMette

FEMA

119°11'15"W 35°43'46"N



119°10'38"W 35°43'17"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/22/2022 at 12:59 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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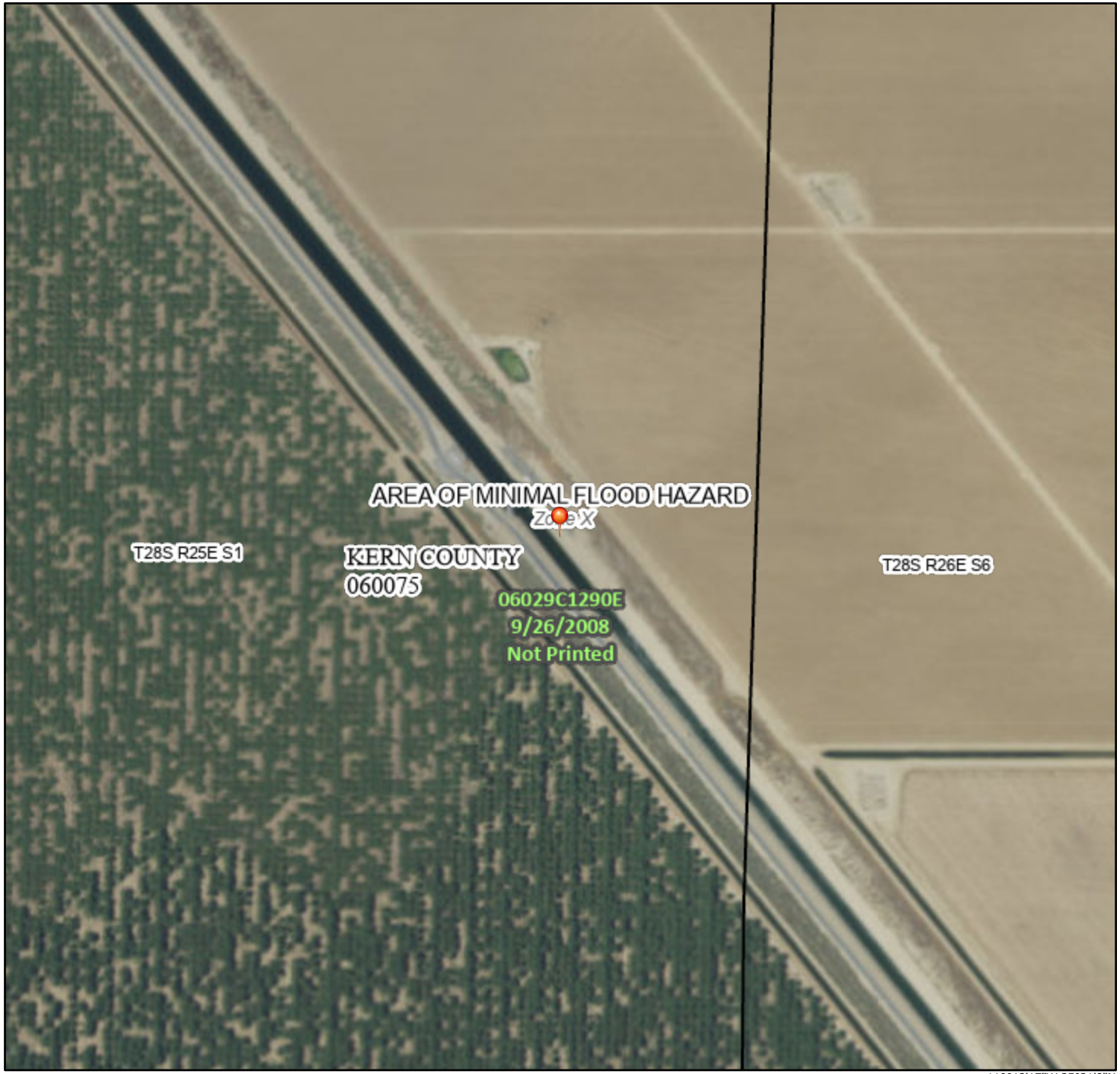
National Flood Hazard Layer FIRMette

FEMA

119°13'55"W 35°31'37"N



119°13'17"W 35°31'8"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
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- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 12/22/2022 at 12:58 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Friant-Kern Canal Pump-Back Project Environmental Impact Report

Appendix J: Traffic and Transportation

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Appendix J Traffic and Transportation

This appendix documents the traffic and transportation technical analysis to support the impact analysis in the Environmental Impact Report (EIR) and describes the traffic and transportation operations that could be potentially affected by the implementation of the proposed project, Low Flow Alternative, and Seasonal Alternative considered by the EIR. Effects on traffic and transportation operations resulting from the construction and operation associated with the proposed project, Low Flow Alternative, and Seasonal Alternative may occur in the study roadway segments near the project sites and landfills. The appendix provides detailed information about traffic flow assessment methods, trip generation, and roadway operations under the proposed project, Low Flow Alternative, and Seasonal Alternative.

A performance measure called "Level of Service" (LOS) is used to characterize traffic operating conditions of a circulation element. Progressively worsening traffic operating conditions are given the letter grades "A" through "F". Table J-1 summarizes the traffic operating conditions associated with each LOS designation. It is important to note that this LOS analysis supports the evaluation of whether the construction activities would generate traffic that would conflict with any goals or objectives of a program, plan, ordinance or policy addressing the circulation system. It is not meant to replace the VMT analysis as a means to determine the significance of transportation impacts under the CEQA Guidelines brought by SB 743.

Table J-1. Level of Service Characteristics

LOS	Traffic Condition
A	Free flow conditions; Low volumes; high operating speeds; uninterrupted flow; no restriction on maneuverability; drivers maintain desired speeds; little or no delays.
B	Stable flow conditions; operating speeds beginning to be restricted.
C	Stable flow but speed and maneuverability restricted by higher traffic volumes; satisfactory operating speed for urban conditions; delays at signals.
D	Approaching unstable flow; low speeds; major delays at signals; little freedom to maneuver.
E	Lower operating speeds; volume at or near capacity; unstable flow; major delays and stoppages.
F	Forced flow conditions; low speeds; volumes below capacity, may be zero; stoppages for long periods because of downstream congestion.

Source: Transportation Research Board 2016.

Traffic analysis in the state of California is guided by standards set at the state level by the California Department of Transportation (Caltrans), and by local jurisdictions. State highways fall under the jurisdiction of Caltrans. Other roadways fall under the local jurisdiction, either city or county, in which they are located.

The locations selected for analysis include state routes and county roads. Therefore, Caltrans' standard regarding the desired performance level of traffic conditions on roadways is referenced.

Caltrans' *Guide for the Preparation of Traffic Impact Studies* (Caltrans 2002) mentions that Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities. However, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. Therefore, LOS D is considered to be the applicable standard in this analysis, and a change in LOS from D to E would be considered a project impact. It is also stated in Caltrans' *Highway Design Manual* (Caltrans 2020) that the target LOS is E for urban areas and D for rural areas. Since the study roadway segments are in a rural area, LOS D is identified as the appropriate significance threshold for the state routes for this analysis. In both the Tulare County General Plan 2030 (Tulare County 2012) and Kern County General Plan (Kern County 2009), it is mentioned that LOS D is the standard for the county roadways.

The generalized LOS volumes from *Highway Capacity Manual* (HCM), Sixth Edition and Seventh Edition were used for identifying daily LOS. Table J-2 through Table J-5 show the LOS criteria for relevant roadway types.

Table J-2. Daily Service Volume Table for Rural Basic Freeway Segments

		Four-Lane Freeways				Six-Lane Freeways				Eight-Lane Freeways			
		LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS	LOS
K	*D*	B	C	D	E	B	C	D	E	B	C	D	E
Level Terrain													
0.08	0.50	52.9	72.6	88.5	100.7	79.3	108.9	132.8	151.1	105.8	145.2	177.1	201.4
	0.55	48.1	66.0	80.5	91.6	72.1	99.0	120.7	137.3	96.1	132.0	161.0	183.1
	0.60	44.1	60.5	73.8	83.9	66.1	90.7	110.7	125.9	88.1	121.0	147.6	167.9
	0.65	40.7	55.8	68.1	77.5	61.0	83.8	102.2	116.2	81.3	111.7	136.2	154.9
0.09	0.50	47.0	64.5	78.7	89.5	70.5	96.8	118.1	134.3	94.0	129.1	157.4	179.0
	0.55	42.7	58.7	71.6	81.4	64.1	88.0	107.3	122.1	85.5	117.3	143.1	162.8
	0.60	39.2	53.8	65.6	74.6	58.8	80.7	98.4	111.9	78.3	107.6	131.2	149.2
	0.65	36.2	49.6	60.5	68.9	54.2	74.5	90.8	103.3	72.3	99.3	121.1	137.7
0.10	0.50	42.3	58.1	70.8	80.6	63.5	87.1	106.3	120.9	84.6	116.2	141.7	161.1
	0.55	38.5	52.8	64.4	73.2	57.7	79.2	96.6	109.9	76.9	105.6	128.8	146.5
	0.60	35.3	48.4	59.0	67.1	52.9	72.6	88.5	100.7	70.5	96.8	118.1	134.3
	0.65	32.5	44.7	54.5	62.0	48.8	67.0	81.7	93.0	65.1	89.4	109.0	124.0
0.11	0.50	38.5	52.8	64.4	73.2	57.7	79.2	96.6	109.9	76.9	105.6	128.8	146.5
	0.55	35.0	48.0	58.5	66.6	52.4	72.0	87.8	99.9	69.9	96.0	117.1	133.2
	0.60	32.0	44.0	53.7	61.0	48.1	66.0	80.5	91.6	64.1	88.0	107.3	122.1
	0.65	29.6	40.6	49.5	56.3	44.4	60.9	74.3	84.5	59.2	81.2	99.1	112.7
0.12	0.50	35.3	48.4	59.0	67.1	52.9	72.6	88.5	100.7	70.5	96.8	118.1	134.3
	0.55	32.0	44.0	53.7	61.0	48.1	66.0	80.5	91.6	64.1	88.0	107.3	122.1
	0.60	29.4	40.3	49.2	56.0	44.1	60.5	73.8	83.9	58.8	80.7	98.4	111.9
	0.65	27.1	37.2	45.4	51.6	40.7	55.8	68.1	77.5	54.2	74.5	90.8	103.3

Source: Transportation Research Board 2022.
Unit: 1,000 veh/day

Table J-3. Generalized Daily Service Volumes for Rural Multilane Highways

		Four-Lane Highways				Six-Lane Highways				Eight-Lane Highways			
K	*D*	LOS B	LOS C	LOS D	LOS E	LOS B	LOS C	LOS D	LOS E	LOS B	LOS C	LOS D	LOS E
Level Terrain													
0.08	0.50	42.4	60.1	74.3	86.4	63.6	90.2	111.4	129.6	84.9	120.2	148.5	172.9
	0.55	38.6	54.6	67.5	78.6	57.9	82.0	101.3	117.9	77.1	109.3	135.0	157.1
	0.60	35.4	50.1	61.9	72.0	53.0	75.1	92.8	108.0	70.7	100.2	123.8	144.0
	0.65	32.6	46.2	57.1	66.5	49.0	69.4	85.7	99.7	65.3	92.5	114.2	133.0
0.09	0.50	37.7	53.4	66.0	76.8	56.6	80.1	99.0	115.2	75.4	106.9	132.0	153.7
	0.55	34.3	48.6	60.0	69.8	51.4	72.9	90.0	104.8	68.6	97.1	120.0	139.7
	0.60	31.4	44.5	55.0	64.0	47.1	66.8	82.5	96.0	62.9	89.0	110.0	128.0
	0.65	29.0	41.1	50.8	59.1	43.5	61.6	76.2	88.6	58.0	82.2	101.5	118.2
0.10	0.50	33.9	48.1	59.4	69.1	50.9	72.1	89.1	103.7	67.9	96.2	118.8	138.3
	0.55	30.9	43.7	54.0	62.9	46.3	65.6	81.0	94.3	61.7	87.4	108.0	125.7
	0.60	28.3	40.1	49.5	57.6	42.4	60.1	74.3	86.4	56.6	80.1	99.0	115.2
	0.65	26.1	37.0	45.7	53.2	39.2	55.5	68.5	79.8	52.2	74.0	91.4	106.4
0.11	0.50	30.9	43.7	54.0	62.9	46.3	65.6	81.0	94.3	61.7	87.4	108.0	125.7
	0.55	28.1	39.7	49.1	57.1	42.1	59.6	73.6	85.7	56.1	79.5	98.2	114.3
	0.60	25.7	36.4	45.0	52.4	38.6	54.6	67.5	78.6	51.4	72.9	90.0	104.8
	0.65	23.7	33.6	41.5	48.4	35.6	50.4	62.3	72.5	47.5	67.3	83.1	96.7
0.12	0.50	28.3	40.1	49.5	57.6	42.4	60.1	74.3	86.4	56.6	80.1	99.0	115.2
	0.55	25.7	36.4	45.0	52.4	38.6	54.6	67.5	78.6	51.4	72.9	90.0	104.8
	0.60	23.6	33.4	41.3	48.0	35.4	50.1	61.9	72.0	47.1	66.8	82.5	96.0
	0.65	21.8	30.8	38.1	44.3	32.6	46.2	57.1	66.5	43.5	61.6	76.2	88.6

Source: Transportation Research Board 2022.

Unit: 1,000 veh/day

Table J-4. Generalized Daily Service Volumes for Two-Lane Highways

K-Factor	*D*-Factor	Class I—Level				Class I—Rolling				Class II—Rolling			
		LOS B	LOS C	LOS D	LOS E	LOS B	LOS C	LOS D	LOS E	LOS B	LOS C	LOS D	LOS E
0.09	50%	5.5	9.3	16.5	31.2	4.2	8.4	15.7	30.3	5.0	9.8	18.2	31.2
	55%	4.9	8.7	14.9	30.2	3.7	7.9	14.0	29.2	4.1	8.7	16.0	30.2
	60%	4.4	8.1	13.9	27.6	3.7	6.2	12.8	26.8	3.7	7.9	14.6	27.6
	65%	4.1	7.9	12.9	25.5	3.4	5.9	11.4	24.7	3.3	5.9	13.2	25.5
0.10	50%	5.0	8.4	14.8	28.0	3.8	7.6	14.2	27.2	4.4	8.8	16.3	28.0
	55%	4.4	7.9	13.4	27.1	3.3	7.1	12.6	26.3	3.7	7.9	14.4	27.1
	60%	4.0	7.3	12.5	24.9	3.3	5.6	11.5	24.1	3.3	7.1	13.1	24.9
	65%	3.7	7.1	11.6	23.0	3.0	5.3	10.3	22.3	3.0	5.3	11.9	23.0
0.12	50%	4.1	7.0	12.4	23.4	3.1	6.3	11.8	22.7	3.7	7.4	13.6	23.4
	55%	3.7	6.5	11.2	22.6	2.8	5.9	10.5	21.9	3.1	6.5	12.0	22.6
	60%	3.3	6.1	10.4	20.7	2.7	4.7	9.6	20.1	2.7	5.9	10.9	20.7
	65%	3.1	5.9	9.6	19.1	2.5	4.4	8.5	18.5	2.4	4.4	9.9	19.1
0.14	50%	3.5	6.0	10.6	20.0	2.7	5.4	10.1	19.4	3.2	6.3	11.7	20.0
	55%	3.1	5.6	9.6	19.4	2.4	5.1	9.0	18.8	2.6	5.6	10.3	19.4
	60%	2.8	5.2	8.9	17.7	2.3	4.0	8.2	17.2	2.3	5.1	9.4	17.7
	65%	2.6	5.1	8.2	16.4	2.1	3.8	7.3	15.9	2.1	3.8	8.5	16.4

Notes: Volumes are thousands of vehicles per day.
Assumed values for all entries: 10% trucks, PHF = 0.88, 12-ft lanes, 6-ft shoulders, 10 access points/mi.
Assumed values for Class I—level: BFFS = 65 mi/h, 20% no-passing zones.
Assumed values for Class I—rolling: BFFS = 60 mi/h, 40% no-passing zones.
Assumed values for Class II—rolling: BFFS = 50 mi/h, 60% no-passing zones.

Source: Transportation Research Board 2016

Unit: 1,000 veh/day

Table J-5. Generalized Daily Service Volumes for Urban Street Facilities

K-Factor	*D*-Factor	Daily Service Volume by Lanes, LOS, and Speed (1,000 veh/day)											
		Two-Lane Streets				Four-Lane Streets				Six-Lane Streets			
		LOS B	LOS C	LOS D	LOS E	LOS B	LOS C	LOS D	LOS E	LOS B	LOS C	LOS D	LOS E
Posted Speed = 30 mi/h													
0.09	0.55	NA	1.7	11.8	17.8	NA	2.2	24.7	35.8	NA	2.6	38.7	54.0
	0.60	NA	1.6	10.8	16.4	NA	2.0	22.7	32.8	NA	2.4	35.6	49.5
0.10	0.55	NA	1.6	10.7	16.1	NA	2.0	22.3	32.2	NA	2.4	34.9	48.6
	0.60	NA	1.4	9.8	14.7	NA	1.8	20.4	29.5	NA	2.2	32.0	44.5
0.11	0.55	NA	1.4	9.7	14.6	NA	1.8	20.3	29.3	NA	2.1	31.7	44.1
	0.60	NA	1.3	8.9	13.4	NA	1.7	18.6	26.9	NA	2.0	29.1	40.5
Posted Speed = 45 mi/h													
0.09	0.55	NA	7.7	15.9	18.3	NA	16.5	33.6	36.8	NA	25.4	51.7	55.3
	0.60	NA	7.1	14.5	16.8	NA	15.1	30.8	33.7	NA	23.4	47.4	50.7
0.10	0.55	NA	7.0	14.3	16.5	NA	14.9	30.2	33.1	NA	23.0	46.5	49.7
	0.60	NA	6.4	13.1	15.1	NA	13.6	27.7	30.3	NA	21.0	42.7	45.6
0.11	0.55	NA	6.3	13.0	15.0	NA	13.5	27.5	30.1	NA	20.9	42.3	45.2
	0.60	NA	5.8	11.9	13.8	NA	12.4	25.2	27.6	NA	19.1	38.8	41.5

Notes: NA = not applicable; LOS cannot be achieved with the stated assumptions.
General assumptions include no roundabouts or all-way STOP-controlled intersections along the facility; coordinated, semiactuated traffic signals; Arrival Type 4; 120-s cycle time; protected left-turn phases; 0.45 weighted average *g/C* ratio; exclusive left-turn lanes with adequate queue storage provided at traffic signals; no exclusive right-turn lanes provided; no restrictive median; 2-mi facility length; 10% of traffic turns left and 10% turns right at each traffic signal; peak hour factor = 0.92; and base saturation flow rate = 1,900 pc/h/ln.
Additional assumptions for 30-mi/h facilities: signal spacing = 1,050 ft and 20 access points/mi.
Additional assumptions for 45-mi/h facilities: signal spacing = 1,500 ft and 10 access points/mi.

Source: Transportation Research Board 2022.
Unit: 1,000 veh/day

Table J-6 shows the roadway locations in Tulare and Kern Counties surrounding the proposed construction sites in the project area for the traffic and transportation impact analysis. These locations represent key state and county roadways where hauling and personnel trips would occur in and out of the three project sites and two landfill sites. Daily traffic volumes for these locations were collected from Caltrans' Traffic Census Program (Caltrans 2022), Tulare County's Vehicle, Pedestrian, and Truck Traffic Counts (TCAG) (Tulare County 2016), Kern Counties' MS2 Transportation Data Management System (Kern County 2022) to develop the existing traffic volumes. On Caltrans' Traffic Census Program, the latest year of available data is 2022. Therefore, 2022 was selected as the existing year to reflect more realistic level of traffic. For the four roadway locations in Tulare County, only 2016 counts are available. For one roadway location in Kern County, only 2021 counts are available. At these locations, volumes were grown by a compound annual growth rate (CAGR) of 0.5 percent, which is a conservative assumption for rural area, to estimate the 2022 volumes.

Table J-6. Study Roadway Locations

Roadway	Location
Tulare County	
Ave 96/Ave 95/Terra Bella Ave	At SR 65
CR 208	At Deer Creek Site
Ave 192	At CR 192
CR 152/Bliss Ln	At Ave 188
Kern County	
SR 65	N of SR 155
SR 155	W of SR 65, E of SR 99
SR 99	S of SR 155, N of SR 46, N of Lerdo Hwy
SR 46	W of SR 99, E of SR 43, E of I-5, E of Brown Material Rd
Lerdo Hwy	W of SR 43, W of SR 99
Pond Rd	E of SR 99
Scofield Ave	N of Lerdo Hwy
Holloway Rd	N of SR 46

J.1 Traffic Flow Assessment Methodology

The project would result in increases in traffic during construction and small or no changes during operations. This impact assessment analyzes the increase in traffic that would occur during construction based on changes to the LOS. Because all the roadway segments being analyzed are either state highways that fall under Caltrans' jurisdiction, or county roads that fall under Tulare and Kern Counties' jurisdictions, LOS D is used to identify traffic impacts.

For the proposed project, Low Flow Alternative, and Seasonal Alternative, construction data (number of construction trucks, construction locations, and number of workers) were used to identify anticipated short-term construction-related trip generation. There is no long-term operations-related trip generation anticipated. These additional short-term trips were assigned to roadways that fall on the hauling trips routes and potential commuting routes for construction workers to determine traffic operations under the proposed project, Low Flow Alternative, and Seasonal Alternative. Using the traffic operations' assessment methods mentioned above, potential transportation impacts to relevant roadways were determined for the proposed project, Low Flow Alternative, and Seasonal Alternative.

J.2 Trip Generation

J.2.1 Proposed Project

The maximum daily haul truck trips and maximum daily personnel for relevant project elements for the proposed project were identified from Chapter 2, Project Description.

These numbers were converted to maximum daily one-way truck trips and worker trips as summarized in Table J-7. For worker trips, the number of personnel was multiplied by two to derive total one-way in and out trips.

Table J-7. Trip Generation – Proposed Project

Type	Route		Daily Trips
	Origin	Destination	
Personnel	Bakersfield	Shafter-Wasco	40
		Lake Woollomes	40
		Deer Creek	40
	Shafter-Wasco	Bakersfield	40
	Lake Woollomes		40
	Deer Creek		40
Trucks	Shafter-Wasco	Lake Woollomes	163
		Deer Creek	169
		Shafter-Wasco Landfill	350
	Lake Woollomes	Lost Hills Landfill	175
	Deer Creek	Woodville Landfill	175

Note: All trips one-way.

The haul trips were distributed into the study roadways in different areas based on the haul routes as identified in Chapter 2, Project Description. Since the only major city close to the Project area is Bakersfield, it is assumed that construction workers would commute from Bakersfield to the three project sites. The distributed trips represent the maximum possible trips that could occur at the study roadway locations on a daily level. Figure J-1 illustrates conceptually where the study roadways are located and the number and distributions of the truck and worker trips.

A maximum of 1,032 truck trips and 240 worker trips would be involved with the proposed project. The construction year considered for analyzing the proposed project is 2025. The proposed project is not expected to add any long-term trips to the project site after the construction is complete.

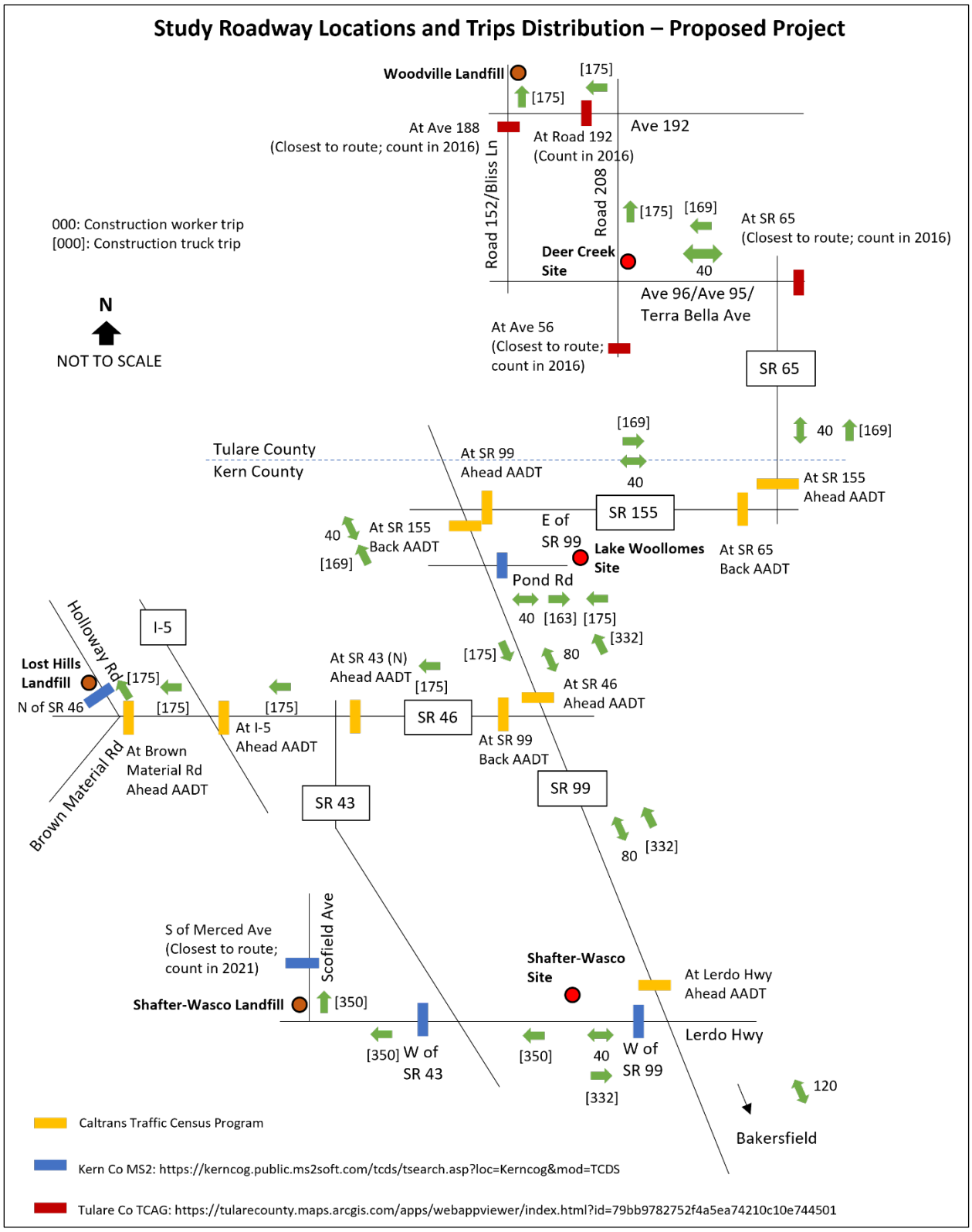

Figure J-1. Study Roadway Locations and Trip Distribution – Proposed Project

J.2.2 No Project Alternative

No additional construction truck trips and personnel trips would be generated on top of background trip.

J.2.3 Low Flow Alternative

The maximum daily haul truck trips and maximum daily personnel for relevant project elements for the proposed project were identified from Chapter 2, Project Description.

These numbers were converted to maximum daily one-way truck trips and worker trips as summarized in Table J-8. For worker trips, the number of personnel was multiplied by two to derive total one-way in and out trips.

Table J-8. Trip Generation – Low Flow Alternative

Type	Route		Daily Trips
	Origin	Destination	
Personnel	Bakersfield	Shafter-Wasco	40
		Lake Woollomes	40
		Deer Creek	40
	Shafter-Wasco	Bakersfield	40
	Lake Woollomes		40
	Deer Creek		40
Trucks	Shafter-Wasco	Lake Woollomes	163
		Deer Creek	169
		Shafter-Wasco Landfill	350
	Lake Woollomes	Lost Hills Landfill	175
	Deer Creek	Woodville Landfill	175

Note: All trips one-way.

As with the proposed project, these haul trips were distributed into the study roadways in different areas based on the hauling routes as identified in Chapter 2, Project Description. Since the only major city close to the Project area is Bakersfield, it is assumed that construction workers would commute from Bakersfield to the three project sites. The distributed trips represent the maximum possible trips that could occur at the study roadway locations on a daily level. Figure J-2 shows conceptually where the study roadways are located and the number and distributions of the truck and worker trips.

A maximum of 1,032 truck trips and 240 worker trips would be involved with the Low Flow Alternative. The construction year considered for analyzing the Low Flow Alternative is 2025. The Low Flow Alternative is not expected to add any long-term trips to the project site after the construction is complete.

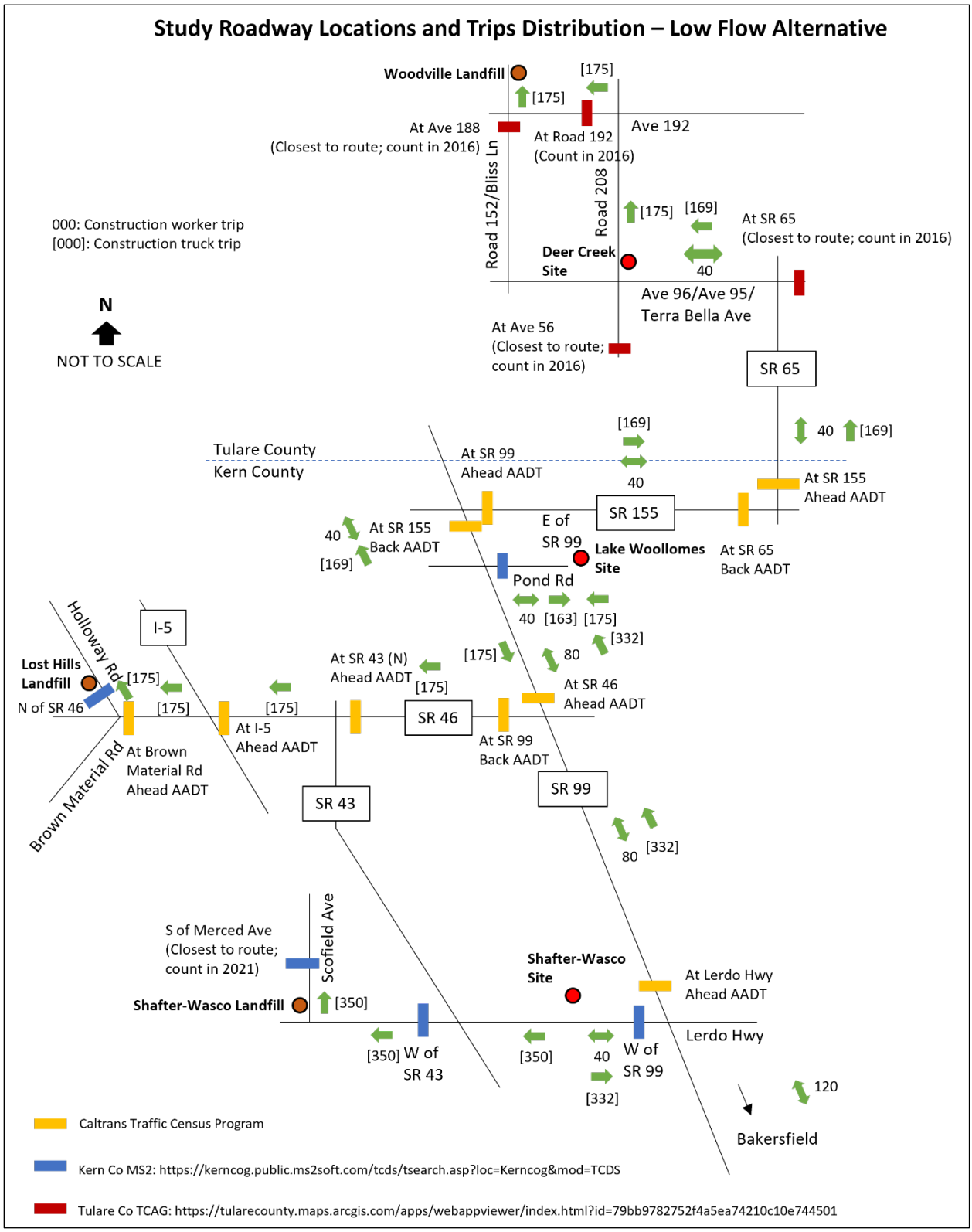

Figure J-2. Study Roadway Locations and Trip Distribution – Low Flow Alternative

J.2.4 Seasonal Alternative

Because the Seasonal Alternative involves seasonal instead of permanent pump-back facilities, the maximum daily haul truck trips and maximum daily personnel for relevant project elements for Seasonal Alternative are expected to be significantly lower than that for the proposed project or the Low Flow Alternative. Therefore, no additional quantitative analysis on construction-related trip generation and distribution was performed; instead, the impacts from the construction-related trips were assessed qualitatively.

J.3 Roadway Operations

Existing traffic conditions are based on 2022 traffic volumes derived from Caltrans' Traffic Census Program (Caltrans 2022) and Kern County's MS2 Transportation Data Management System (Kern County 2022). From Tulare County's Vehicle, Pedestrian, and Truck Traffic Counts (Tulare County 2016), only 2016 counts are available for the study roadway segments in Tulare County. Since the Friant-Kern Canal project limits are in rural area, background traffic growth is expected to be minimal. For this analysis, it was assumed that background traffic would increase at 0.5 percent annually from 2022 to 2025 (or 2016 to 2025 for the roadway segments in Tulare County, and 2021 to 2025 for the Scofield Avenue roadway segment in Kern County).

J.3.1 Proposed Project

Daily roadway operations during construction of the proposed project are summarized in Table J-9.

For daily operations, the added construction-related trips would not change the LOS at any of the study roadway segments, except for Pond Rd East of SR 99. For this location, although the LOS would worsen from B to C, it does not exceed the threshold of significance (LOS D). In addition, the LOS during construction does not exceed the threshold of significance (LOS D) for any of the study roadway segments, except for SR 155 East of SR 99 that operates at LOS E. For this location, it would already operate at LOS E in the No Project Alternative, so the additional construction-related trips would not worsen the LOS.

Table J-9. Daily Roadway Operations – Proposed Project

Roadway	No Action (2025) Volume	No Action LOS (2025)	Maximum Daily Truck Trips	Maximum Daily Worker Trips	Total Volume (2025)	LOS (2025)	LOS Change
Tulare County							
Ave 95/Terra Bella Ave at SR 65	4,800	C	169	80	5,049	C	No Change
CR 208 at Deer Creek Site	860	B	175	0	1,035	B	No Change
Ave 192 at CR 192	2,860	B	175	0	3,035	B	No Change
CR 152/Bliss Ln at Ave 188	2,130	B	175	0	2,305	B	No Change
Kern County							
SR 65 N of SR 155	8,100	D	169	80	8,349	D	No Change
SR 155 W of SR 65	490	B	169	80	739	B	No Change
SR 155 E of SR 99	18,800	E	169	80	19,049	E	No Change
SR 99 S of SR 155	70,000	C	169	80	70,249	C	No Change
SR 99 N of SR 46	69,000	C	507	160	69,667	C	No Change
SR 99 N of Lerdo Hwy	72,100	C	332	160	72,592	C	No Change
SR 46 W of SR 99	6,900	C	175	0	7,075	C	No Change
SR 46 E of SR 43	6,900	C	175	0	7,075	C	No Change
SR 46 E of I-5	6,700	C	175	0	6,875	C	No Change
SR 46 E of Brown Material Rd	9,900	D	175	0	10,075	D	No Change
Lerdo Hwy W of SR 43	6,200	D	350	0	6,550	D	No Change
Lerdo Hwy W of SR 99	16,500	B	332	80	16,912	B	No Change
Pond Rd E of SR 99	4,300	B	338	80	4,718	C	Worsens but does not exceed LOS D
Scofield Ave N of Lerdo Hwy	420	B	350	0	770	B	No Change
Holloway Rd N of SR 46	750	B	175	0	925	B	No Change

J.3.2 No Project Alternative

Since there are no additional construction-related trips generated under No Project Alternative, traffic volumes under No Project Alternative only include projected background traffic. Therefore, roadway operations under No Project Alternative are expected to be the same as background roadway operations.

J.3.3 Low Flow Alternative

Daily roadway operations during construction of the Low Flow Alternative are summarized in Table J-10.

The added construction-related trips for daily operations would not change the LOS at any of the study roadway segments, except for Pond Rd East of SR 99. For this location, although the LOS would worsen from B to C, it does not exceed the threshold of significance (LOS D). In addition, the LOS during construction does not exceed the threshold of significance (LOS D) for any of the study roadway segments, except for SR 155 East of SR 99 that operate at LOS E. For this location, it would already operate at LOS E in the No Project Alternative, so the additional construction-related trips would not worsen the LOS.

Table J-10. Daily Roadway Operations – Low Flow Alternative

Roadway	No Action (2025) Volume	No Action LOS (2025)	Maximum Daily Truck Trips	Maximum Daily Worker Trips	Total Volume (2025)	LOS (2025)	LOS Change
Tulare County							
Ave 95/Terra Bella Ave at SR 65	4,800	C	169	80	5,049	C	No Change
CR 208 at Deer Creek Site	860	B	175	0	1,035	B	No Change
Ave 192 at CR 192	2,860	B	175	0	3,035	B	No Change
CR 152/Bliss Ln at Ave 188	2,130	B	175	0	2,305	B	No Change
Kern County							
SR 65 N of SR 155	8,100	D	169	80	8,349	D	No Change
SR 155 W of SR 65	490	B	169	80	739	B	No Change
SR 155 E of SR 99	18,800	E	169	80	19,049	E	No Change
SR 99 S of SR 155	70,000	C	169	80	70,249	C	No Change
SR 99 N of SR 46	69,000	C	507	160	69,667	C	No Change
SR 99 N of Lerdo Hwy	72,100	C	332	160	72,592	C	No Change
SR 46 W of SR 99	6,900	C	175	0	7,075	C	No Change

Roadway	No Action (2025) Volume	No Action LOS (2025)	Maximum Daily Truck Trips	Maximum Daily Worker Trips	Total Volume (2025)	LOS (2025)	LOS Change
SR 46 E of SR 43	6,900	C	175	0	7,075	C	No Change
SR 46 E of I-5	6,700	C	175	0	6,875	C	No Change
SR 46 E of Brown Material Rd	9,900	D	175	0	10,075	D	No Change
Lerdo Hwy W of SR 43	6,200	D	350	0	6,550	D	No Change
Lerdo Hwy W of SR 99	16,500	B	332	80	16,912	B	No Change
Pond Rd E of SR 99	4,300	B	338	80	4,718	C	Worsens but does not exceed LOS D
Scofield Ave N of Lerdo Hwy	420	B	350	0	770	B	No Change
Holloway Rd N of SR 46	750	B	175	0	925	B	No Change

J.3.4 Seasonal Alternative

Since the construction-related trips for Seasonal Alternative are expected to be significantly lower than that for the proposed project or the Low Flow Alternative, daily roadway operations during construction of the Seasonal Alternative are expected not to be worse than that under the proposed project or the Low Flow Alternative.

As under the proposed project and Low Flow Alternative, the added construction-related trips for daily operations would not worsen the LOS to a level exceeding the threshold of significance (LOS) at any of the study roadway segments.

J.4 References

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Friant-Kern Canal Pump-Back Project Environmental Impact Report

Appendix K: Public Scoping Report

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Contents

Tables

Attachments

Abbreviations and Acronyms

AB	Assembly Bill
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
cfs	Cubic feet per second
CHRIS	California Historical Research Information System
EIR	Environmental Impact Report
FKC	Friant-Kern Canal
FWA	Friant Water Authority
NAHC	Native American Heritage Commission
NOP	Notice of Preparation
Reclamation	Bureau of Reclamation
SB	Senate Bill
Settlement	Stipulation of Settlement in Natural Resource Defense Council et al., v. Kirk Rodgers, et al.
Settlement Act	San Joaquin River Restoration Settlement Act
SCH	State Clearing House
SJRRP	San Joaquin River Restoration Program
SWP	State Water Project
SWRCB	State Water Resource Control Board
USFWS	United States Fish and Wildlife Service

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Chapter 1 Introduction

This report documents the scoping activities that occurred for the Friant-Kern Canal Pump-Back Project Environmental Impact Report (EIR). Friant Water Authority (FWA) is the designated California Environmental Quality Act (CEQA) Lead Agency in preparation for this EIR. FWA conducted public scoping activities to receive input, and FWA held a public scoping meeting via a Microsoft Teams Live Event on June 12, 2024.

1.1 Project Background

The Project is under the San Joaquin River Restoration Program (SJRRP) and proposes the construction of permanent pump-back facilities along the southern portion of the FKC. These facilities would allow water to move from the California Aqueduct, through the Cross Valley Canal, for delivery to Friant Contractors along the southern portion of FKC.

The SJRRP was established in late 2006 to implement a Stipulation of Settlement in *Natural Resource Defense Council et al., v. Kirk Rodgers, et al.* (Settlement). In 1988, a coalition of environmental groups, led by the Natural Resources Defense Council (NRDC), filed a lawsuit, challenging the renewal of long-term water service contracts between the United States and the Central Valley Project (CVP) Friant Contractors. In September 2006, the "Settling Parties," including NRDC, FWA, and the United States Departments of the Interior and Commerce, agreed on terms and conditions of the Settlement, which establishes two primary goals: Restoration Goal and Water Management Goal.

To achieve the Restoration Goal, the Settlement calls for releases of water from Friant Dam to the confluence of the Merced River (referred to as Interim and Restoration Flows), a combination of channel and structural modifications along the San Joaquin River below Friant Dam, and reintroduction of Chinook salmon. To achieve the Water Management Goal, Paragraph 16 of the Settlement and Part III of the San Joaquin River Restoration Settlement Act (Settlement Act) provide for certain activities to be developed and implemented to reduce or avoid adverse water supply impacts on Friant Contractors (Section 10201 of the Settlement Act).

Section 10201 (a)(2) of the Settlement Act directs Reclamation to explore the feasibility of reverse flow pump-back facilities on the FKC, with reverse flow capacity of approximately 500 cubic feet per second (cfs) at the Poso and Shafter check structures and approximately 300 cfs at the Woollomes check structure. Water supply and economic analyses were performed for this option in 2011 and show that much of the pump-back capacity described in this section of the Settlement Act would be unused owing to limited conveyance capacity, availability of recaptured restoration flows, demands, and downstream pump-back capacities.

In 2015, FWA proposed an alternative that would revise the proposed pumping capacities to 200 cfs at the Shafter Check Structure and 75 cfs at the Lake Woollomes and Deer Creek check structures for the additional benefit of accessing water banks or other water supplies available via the Cross Valley Canal (e.g., Kern River, local Kern banking projects, California Aqueduct) during times of

drought. This alternative was evaluated to an appraisal level as part of the SJRRP Water Management Goal Investment Strategy using all new facilities, Project ID 504 – Reverse Flow Pump-Back Facilities on the FKC[1] (SJRRP 2015). However, since 2015, FWA in coordination with Reclamation, has considered the potential benefits of increasing pumping capacities beyond the levels identified in the 2015 Investment Strategy Report.

This expansion of the potential capacity of the pump-back facility would allow for its use to support the pump-back of recapture and recirculated Restoration Flows, delivery of Cross Valley contractors' supplies, return of banked water, and the delivery of additional supplies purchased from the open market.

1.2 Scoping Purpose and Process

Scoping is generally defined as "early public consultation" and is one of the first steps of the CEQA environmental review processes. The purpose of scoping is to involve the public, stakeholders, Native American tribes, and other interested agencies early in the environmental compliance process to help determine the range of alternatives, environmental effects, and mitigation measures to be considered in an environmental document. The results of scoping help to guide an agency's environmental review of a project.

Scoping is not limited to public meetings; however, public meetings allow interested persons, tribes, organizations, and agencies to listen to information about a proposed project and express their concerns and viewpoints to the implementing agencies. The agencies can provide information regarding how additional information or status reports on the process can be obtained.

Agencies also establish a scoping comment period to accept scoping comments submitted in writing. Scoping comments are considered by the agencies during the formulation of alternatives and are used to determine the scope of the environmental issues to be addressed in the environmental document.

1.3 Applicable Regulations

1.3.1 CEQA Guidelines

CEQA does not require public meetings, but it encourages early consultation (or scoping) with affected parties. This early consultation often solves potential problems before they turn into more serious issues further on in the process. CEQA Section 15083 describes two other benefits for early consultation:

a) *"Scoping has been helpful to agencies in identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important.*

[1] San Joaquin River Restoration Program (SJRRP). 2015. Water Management Goal Investment Strategy Final Report. March 2015. Accessed April 5, 2021. Available: https://www.restoresjr.net/?wpfb_dl=394.

b) Scoping has been found to be an effective way to bring together and resolve the concerns of affected federal, state, and local agencies, the proponent of the action, and other interested persons including those who might not be in accord with the action on environmental grounds."

Per CEQA Section 21083.9, FWA held a public scoping meeting via an online web-based tool on June 12, 2024. The scoping meeting is discussed in further detail in Chapter 2.

CEQA requires public notification of the initiation of an EIR through a Notice of Preparation (NOP) (CEQA 15082). The NOP was filed with the State Clearinghouse (SCH) (SCH# 2024051211) on May 29, 2024. A copy of the NOP is in Attachment 1 of this Public Scoping Report.

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Chapter 2 Scoping Meeting

To meet CEQA requirements (CEQA Section 21083.9), one public scoping meeting was held on June 12, 2024, for the Friant-Kern Canal Pump-Back Project EIR. The public scoping meeting was conducted online using a web-based tool that allowed presentation of the project and public participation through the online chat function.

2.1 Publicity

The following meeting notifications were used to announce the intent to start the EIR process, in addition to the public scoping meeting.

2.1.1 Notice of Preparation

FWA filed the NOP with the SCH (SCH# 2024051211) on May 29, 2024. The NOP announced the project purpose, the Lead Agencies on the project, and contact information. The NOP listed the meeting date, time, and location for the scoping meeting. The public comment period extended from the date of filing the NOP (May 29, 2024) to June 27, 2024. A copy of the NOP is in Attachment 1 of this Public Scoping Report.

2.1.2 Newspaper Advertisement

A display advertisement was run in the May 29, 2024, edition of the *Fresno Bee* newspaper. Attachment 2 includes a copy of this advertisement.

2.1.3 Email Announcement

On May 29, 2024, FWA sent an email announcement informing all member agencies of the scoping meeting date, time, location, as well as contact information to provide comments. Attachment 3 includes of a copy of this email announcement.

2.1.4 Radio Interview

On June 12, 2024, a pre-recorded interview with Katie Duncan aired on the Valley Ag Report with Don York on KMJ NOW news talk radio. Katie provided an overview of the proposed project, as well as information regarding the scoping meeting date time, location, and contact information to provide comments.

2.2 FWA Representatives

Table 2-1 provides a list of the FWA representatives in attendance during the public scoping meeting.

Table 2-1. FWA Representatives in Attendance

Representative	Agency
Katie Duncan	FWA
Ian Buck-Macleod	FWA
Greta Gledhill	CDM Smith (Consultant)
Anusha Kashyap	CDM Smith (Consultant)
Laura Campagna	CDM Smith (Consultant)

2.3 Meeting Agenda and Content

The scoping meeting was conducted online. The scoping meeting began with a presentation by FWA. The presentation explained the purpose and format of the meeting, provided an overview of the proposed project, and described the public comment process. During the meeting, public participation was allowed through the online question and answer function. The presentation described how to provide comments using the online question and answer tool. One public comment was received during the online public scoping meeting and is summarized in Chapter 3.1. Attendees were encouraged to mail or email their comments to 854 N. Harvard Avenue, Lindsay, CA, 93247 or fkcpumpback@friantwater.org. A copy of the meeting presentation is in Attachment 4.

Chapter 3 Scoping Comments

Written comments were received during the scoping period of May 29, 2024, through June 27, 2024. A copy of all scoping comments is in Attachment 5. Table 3-1 provides a list of written comments received, including available author, organization, and submission date.

Table 3-1. Comments Received

Comment Author	Organization	Submittal Date	Comment Type
Murphy Donahue	Native American Heritage Commission	6/3/2024	Letter
Manny Bahia	State Water Contractors	6/12/2024	Online Q&A Tool
Jennifer Pierre	State Water Contractors	6/27/2024	Letter
Julie A. Vance	California Department of Fish and Wildlife	6/28/2024	Letter

3.1 Comment Summary

This section presents a summary of the key comments received from the comment letters.

3.1.1 Project Description

- The EIR should detail anticipated Project footprint, construction methods and materials, ground disturbance, and staging and laydown areas.
- The EIR should provide specific locations of project activities relative to public and private property as well as adjacent roads and identify any special conditions needed to complete project work (i.e. nighttime construction).

3.1.2 Water Rights

- The EIR should discuss the source of recirculated water, including a detailed description of all water rights and water entitlements pertaining to the Project.
    - California Department of Fish and Wildlife (CDFW) should be consulted well in advance of any potential State Water Resource Control Board (SWRCB) water rights application process to ensure compliance with CEQA in the protection of special status species and their habitats.

3.1.3 Water Supply

- The EIR should explain how State Water Project (SWP) facilities, including the California Aqueduct and San Luis Canal, will be used during project operations, clarifying how the facilities would be used in recapturing and/or conveying SJRRP flows.
- The EIR should consider how potential impacts to the California Aqueduct and San Luis Canal will be assessed. The EIR should evaluate how the proposed project would impact

these SWP facilities and operations in terms of water supply, water quality, subsidence, and cumulative effects.

3.1.4 Water Quality

- A discussion of potential adverse water quality impacts to State Water Contractor members relying on the San Luis Canal and California Aqueduct is recommended for inclusion in the draft EIR.

3.1.5 Groundwater

- The EIR should detail whether the Project will address and correct overdraft conditions for the groundwater basin and how this will affect groundwater dependent ecosystems and interconnected surface waters.

3.1.6 Tribal and Cultural Resources

- The draft EIR must comply with CEQA noticing, consultation, confidentiality, tribal cultural resources impact analysis, mitigation, and certification requirements under Assembly Bill (AB) 52 and Senate Bill (SB) 18.
- Native American Tribal Contact Lists and Sacred Lands Files and searches should be requested from the Native American Heritage Commission (NAHC).
- Tribal and cultural resources analysis in the EIR should be based on archaeological records searches at the appropriate regional California Historical Research Information System (CHRIS) Center and required field survey results.
- The EIR should include a mitigation and monitoring reporting program plan with provisions to avoid or minimize impacts to unknown cultural and tribal resources during construction and proper treatment and disposition of recovered Native American cultural items and human remains.

3.1.7 Biological Resources

- The EIR should consider impacts to special-status species, including the San Joaquin Kit Fox, Swainson's Hawk, White-tailed Kite, Crotch's Bumble Bee, Nesting Bald Eagle, Golden Eagle, Western Pond Turtle, Burrowing Owl, Western Spadefoot, and American Badger, and identify measures for their protection. Recommendations include implementing project activities outside of nesting seasons, establishing buffers or exclusions for protected species, and allowing migration outside of the project area.
- The project would benefit from a habitat assessment/field survey conducted by a qualified biologist so that a biological study can be included in the EIR. Based on the findings of the field survey, the project may require consultation with CDFW, pursuant to Fish and Game Code Section 2081.

- The project would benefit from pre-activity surveys no more than 10 days prior to ground disturbance activities commencing to determine presence of active bird nests. Once construction begins, it is recommended that continuous monitoring of nests by a qualified biologist take place. If continuous monitoring is not possible, it is recommended that buffers and other mitigation techniques be implemented around bird nests and other biological resources that may be affected by project activities.
- The project would benefit from a formal stream mapping and wetland delineation by a qualified biologist or hydrologist to determine the baseline location, extent, and condition of streams, floodplains, and wetlands within and adjacent to the project area. The effort should include mapping that depicts the extent of project activities to demonstrate how the project may affect state and federally defined wetlands directly and indirectly.
    - The EIR should consider direct and indirect impacts to stream/riparian and wetland habitats and identify measures to avoid, minimize, and/or mitigate those impacts.
- The EIR should include a cumulative impact analysis for all biological resources that may be affected, significantly or less than significantly, by implementation of the project. Past, present, and potential future project impacts should be considered in this analysis.
- Engagement with U.S. Fish and Wildlife Service (USFWS) should occur as early as possible to assure that ESA compliance would be met under the proposed project.

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Friant-Kern Canal Pump-Back Project
Public Scoping Report
Attachment 1: Notice of Preparation

Notice of Preparation

To: Agencies and Interested Parties

From: Friant Water Authority

Date: May 29, 2024

Subject: Notice of Preparation of a Draft Environmental Impact Report for the Friant-Kern Canal Pump-Back Project

A Draft Environmental Impact Report (EIR) is being prepared by the Friant Water Authority (FWA). FWA will be the California Environmental Quality Act (CEQA) Lead Agency for the proposed project.

Purpose of the Notice of Preparation

The purpose of a Notice of Preparation (NOP) is to notify responsible and trustee agencies, Federal agencies involved in approving or funding a project, and interested parties that an EIR will be prepared. (State CEQA Guidelines, 14 CCR Section 15082[a][1] and 15083).

The location, description, and potential environmental impacts of the proposed project are presented below. The EIR will also identify potentially feasible mitigation measures, where appropriate and available, and describe and consider a reasonable range of alternatives to avoid or substantially reduce the proposed project's significant adverse environmental impacts.

The purposes of this NOP are to:

1. Notify the appropriate parties that an EIR will be prepared for the proposed project;

2. Briefly describe the proposed project and alternatives and the anticipated content of the EIR;

3. Provide notice of the public scoping meeting to be held to facilitate public input; and

4. Solicit input by June 27, 2024, from Federal, State, regional, and local agencies, and from interested organizations and individuals, about the content and scope of the EIR, including the alternatives to be addressed and the potentially significant environmental impacts.

Project Background

The San Joaquin River Restoration Program (SJRRP) was established in late 2006 to implement a Stipulation of Settlement in *Natural Resource Defense Council et al., v. Kirk Rodgers, et al.* (Settlement) which established two primary goals: Restoration Goal and Water Management Goal. To achieve the Restoration Goal, the Settlement calls for releases of water from Friant Dam to the confluence of the Merced River (referred to as Interim and Restoration Flows), a combination of channel and structural modifications along the San Joaquin River below Friant Dam, and reintroduction of Chinook salmon. To achieve the Water Management Goal, Paragraph 16 of the Settlement and Part III of the San Joaquin River Restoration Settlement Act (Settlement Act) provide for certain activities to be developed and implemented to reduce or avoid adverse water supply impacts on Friant Contractors (Section 10201 of the Settlement Act).

Section 10201 (a)(2) of the Settlement Act directs the Bureau of Reclamation (Reclamation) to explore the feasibility of reverse flow pump-back facilities on the Friant-Kern Canal (FKC), with reverse flow capacity of approximately 500 cubic feet per second (cfs) at the Poso and Shafter check structures and approximately 300 cfs at the Woollomes check structure. Water supply and economic analyses were performed for this option in 2011 and show that much of the pump-back capacity described in this section of the Settlement Act would be unused owing to limited conveyance capacity, availability of recaptured restoration flows, demands, and downstream pump-back capacities.

In 2015, FWA proposed an alternative that would revise the proposed pumping capacities to 200 cfs at the Shafter Check Structure and 75 cfs at the Lake Woollomes and Deer Creek check structures and support access to water banks or other water supplies available via the Cross Valley Canal (e.g., Kern River, local Kern banking projects, California Aqueduct) during times of drought. This revision of the potential capacity of the pump-back facility would allow for its use to support the pump-back of recaptured and recirculated Restoration Flows, delivery of Cross Valley contractors' supplies, return of banked water, and the delivery of additional supplies purchased from the open market. FWA (in coordination with Reclamation) has continued to evaluate the potential benefits of increasing pumping capacities beyond those levels identified in 2015.

Proposed Project

Project Description

FWA seeks to facilitate the recirculation of recaptured Restoration Flows released from Millerton Lake for the SJRRP and other waters obtained by Friant Contractors to increase operational flexibility and long-term reliability of the water supplies conveyed through the FKC. FWA proposes to increase operational flexibility and long-term reliability by constructing three new permanent pump-back facilities along the FKC with a 500 cubic feet per second (cfs) facility at the Shafter-Wasco check structure, a 250 cfs facility at the Lake Woollomes check structure, and a 250 cfs facility at the Deer Creek check structure.

Project Location

The project location includes the FKC and related water infrastructure near the Shafter-Wasco, Lake Woollomes, and Deer Creek check structures (between Mileposts 101.3 to 101.6, 120.2 to 120.3, and 135.8 to 135.9, respectively) where construction impacts under the proposed project and alternatives could occur. (Figure 1). The project location also includes other Friant Contractors' facilities and related water conveyance infrastructure, including the Cross Valley Canal, Kern River, and California Aqueduct.

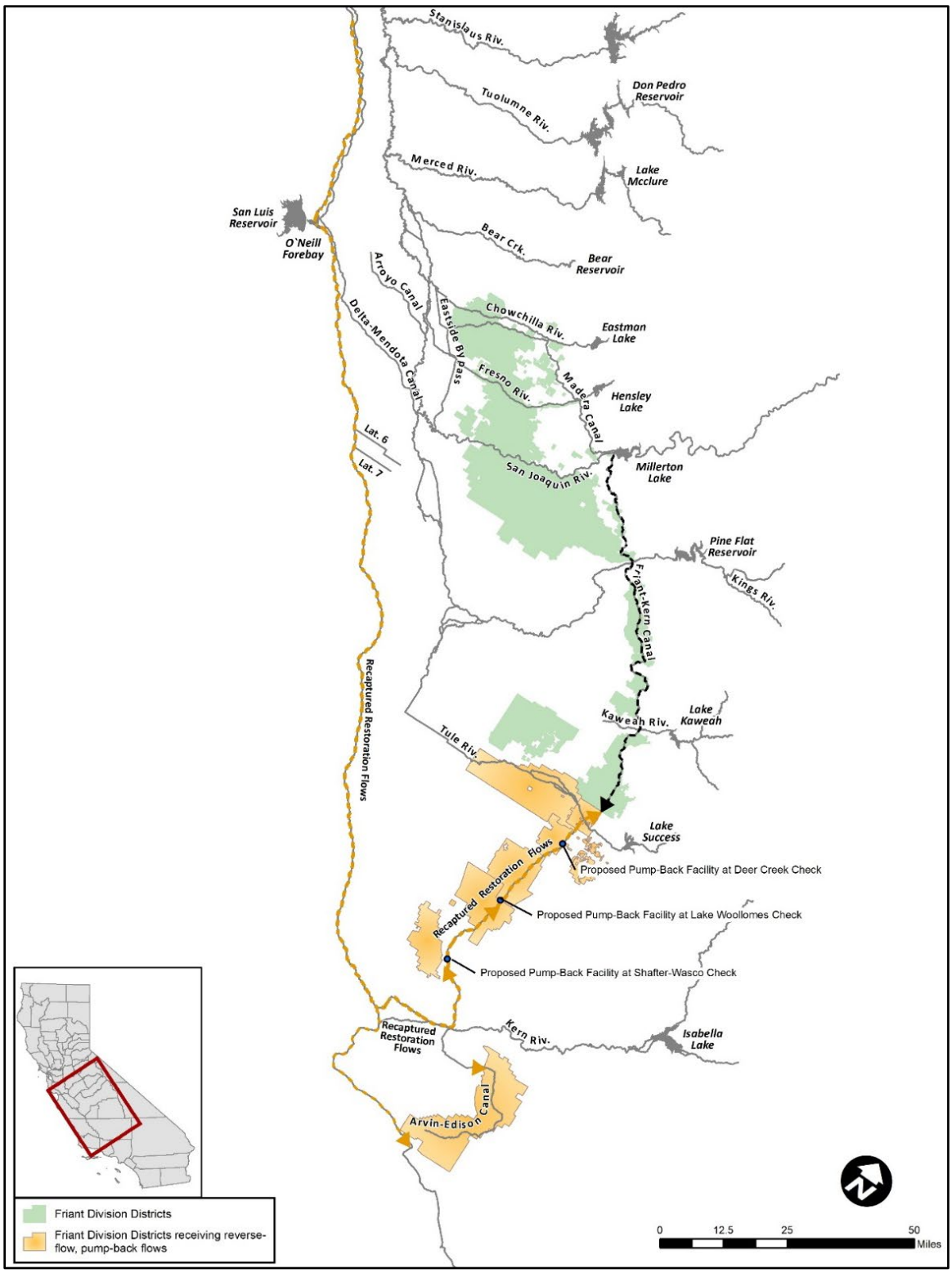

Figure 1. Project Location

Environmental Impacts

The EIR will describe the potentially significant direct and reasonably foreseeable indirect environmental impacts of the proposed project. The EIR will also evaluate the cumulative impacts of the proposed project when considered in conjunction with other related past, present, and reasonably foreseeable future projects. In addition to the proposed project, the EIR will also comparatively evaluate a low flow project alternative, which consists of constructing three new permanent pump-back facilities along the FKC with a 250 cfs facility at the Shafter-Wasco check structure, a 75 cfs facility at the Lake Woollomes check structure, and a 75 cfs facility at the Deer Creek check structure. A seasonal project alternative will also be evaluated, which would install and operate seasonal pump-back facilities at Shafter-Wasco check structure (up to a 200 cfs) and Lake Woollomes check structure (up to a 75 cfs), replacing the existing temporary pump-back facilities present at these two sites.

The EIR will include a detailed hydrologic analysis and will focus on the potential environmental impacts of the proposed project and alternatives, including:

- **Hydrology and Water Resources – Surface Water:** The exposure of bare soils, soil and material stockpiles, and the presence of fuels, lubricants, and solid and liquid wastes during construction could cause short-term water quality impacts. Soil disturbance could result in localized surface erosion, minor changes in drainage patterns and changes in erosion rates. Operation of the proposed project and alternatives could also result in changes to water quality in the FKC.

- **Hydrology and Water Resources - Groundwater:** Construction and operation could result in groundwater water quality impacts. Operation could result in changes to available groundwater supply.

- **Geology and Soils:** Construction could impact known or previously undiscovered paleontological resources or unique geologic features.

- **Air Quality:** Construction could cause temporary, short-term increases in emissions of criteria pollutants or their precursors.

- **Greenhouse Gas Emissions:** Construction could cause temporary, short-term increases in greenhouse gas emissions, including carbon dioxide, methane, and nitrous oxide. Construction and operation could also conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

- **Visual Resources:** Construction could create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

- **Noise:** Noise generated by construction could expose sensitive receptors to noise levels in excess of standards established in the local general plan or noise ordinance. Construction could also cause an increase in ambient noise levels in the project vicinity above levels existing without the project.

- **Traffic and Transportation:** Traffic during construction could increase traffic hazards and result in inadequate emergency access.

- **Hazards and Hazardous Materials:** Construction could increase the risk of exposure from hazardous materials to the public and construction workers, interfere with an active remediation site, conflict with activities and operations at airports, interfere with an emergency response plan or emergency evacuation plan, and increase the risk of wildfire within the vicinity of the project area.

- **Biological Resources:** Construction could affect special-status species, riparian habitat or other habitats, or sensitive natural communities, and Federally or State protected wetlands.

- **Recreation:** Construction and operation could reduce access to or close recreation areas.

- **Cultural Resources:** Construction could result in adverse effects to historic properties, and/or substantial adverse changes to historical resources, unique archaeological resources, or tribal cultural resources, or result in the disturbance of human remains.

These issue areas will be discussed, and potential impacts analyzed in the EIR, and potentially feasible mitigation measures and project alternatives will be explored to avoid or substantially reduce potentially significant impacts.

Opportunities for Public Participation

Scoping Meeting

A public scoping meeting will be held to inform interested parties about the proposed project and to solicit agency and public input on the scope and content of the EIR:

- June 12, 2024, 4:00 p.m. to 5:30 p.m.

The public scoping meeting will be conducted virtually utilizing Microsoft Teams. If special assistance is required to participate in the public scoping meeting, please contact Katie Duncan (contact information is provided below) as far in advance as possible, and no less than five days in advance, to enable FWA to secure the needed services. If a request cannot be honored, the requestor will be notified.

Comments

This NOP is being circulated for a 30-day public comment period, beginning on May 29, 2024, and ending on June 27, 2024. Written comments on the proposed content and scope of the EIR can be submitted via mail or email directly to FWA. Comments must be received no later than 5:00 p.m. on June 27, 2024. When submitting comments, agencies that will need to use the EIR when considering permits or other approvals for the proposed project should:

1. State if they are a responsible or trustee agency for the project, and if so, explain why, and note the specific project elements that are subject to their regulatory authority.

2. Identify any significant environmental issues, reasonable alternatives, and mitigation measures they believe should be explored in the EIR.

3. Provide the name, email address, and phone number of a contact person.

Please send all written comments to Katie Duncan, Friant Water Authority, 854 N. Harvard Avenue, Lindsay, CA 93247; or e-mail at fkcpumpback@friantwater.org.

Before including your name, address, telephone number, e-mail address, or other personal identifying information in your comment, please be aware that your entire comment, including your personal identifying information, may be made publicly available at any time. While you can request in your comment that your personal identifying information be withheld from public review, FWA cannot guarantee that this will be possible.

All comments received during the public comment period will be considered and addressed in the EIR as appropriate.

Friant-Kern Canal Pump-Back Project
Public Scoping Report
Attachment 2: Newspaper Advertisement

Friant Water Authority Announces Public Scoping Meeting for the Friant-Kern Canal Pump-Back Project

Friant Water Authority, in compliance with the California Environmental Quality Act (CEQA), is holding a public scoping meeting and public scoping review period for the Friant-Kern Canal Pump-Back Project (Project) to inform interested parties about the proposed project and to solicit agency and public input on the scope and content of the Environmental Impact Report (EIR). The public scoping meeting is being conducted virtually utilizing Microsoft Teams. This meeting format will allow presentation of the project and public participation through the online chat function. The Notice of Preparation (NOP) is also being circulated for a 30-day comment period and is available here: https://friantwater.org/fkc-pumpback. The public scoping review period begins on May 29, 2024.

The Project proposes construction along the Friant-Kern Canal in Kern and Tulare counties. Operation of the Project could affect water system operations in Fresno, Merced, and Madera counties.

The public scoping meeting to solicit comments on the scope of the EIR has been scheduled for:

June 12, 2024, 4 p.m. to 5:30 p.m. via Microsoft Teams, accessible at the following link: https://bit.ly/3UXtcci

Friant Water Authority will consider written comments received or postmarked by the end of the scoping period which ends June 27, 2024. Written comments should be mailed or emailed to:

ATTN: Katie Duncan
Friant Water Authority
854 N. Harvard Avenue
Lindsay, CA 93247
fkcpumpback@friantwater.org

For additional information, please contact Katie Duncan at (559) 562-6305.

Post Date: 05/29 12:00 AM

Refcode: #IPL0175239 iPrint

Similar Listings

Friant-Kern Canal Pump-Back Project
Public Scoping Report
Attachment 3: Email Announcement

For Immediate Release:

May 29, 2024

Friant Water Authority Announces
Public Scoping Meeting for the Friant-Kern Canal Pump-Back Project

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ATTN: Katie Duncan

Friant Water Authority

854 N. Harvard Avenue

Lindsay, CA 93247

fkcpumpback@friantwater.org

For additional information, please contact Katie Duncan at (559) 562-6305.

###

FWA is a joint-powers authority formed in 2004 by public agencies that receive water from the Friant Division of the Central Valley Project. Its primary purposes are to operate and maintain the Friant-Kern Canal and to serve the information and representation needs of its member agencies.

Friant-Kern Canal Pump-Back Project
Public Scoping Report
Attachment 4: Scoping Meeting Presentation

Friant-Kern Canal Pump-Back Project

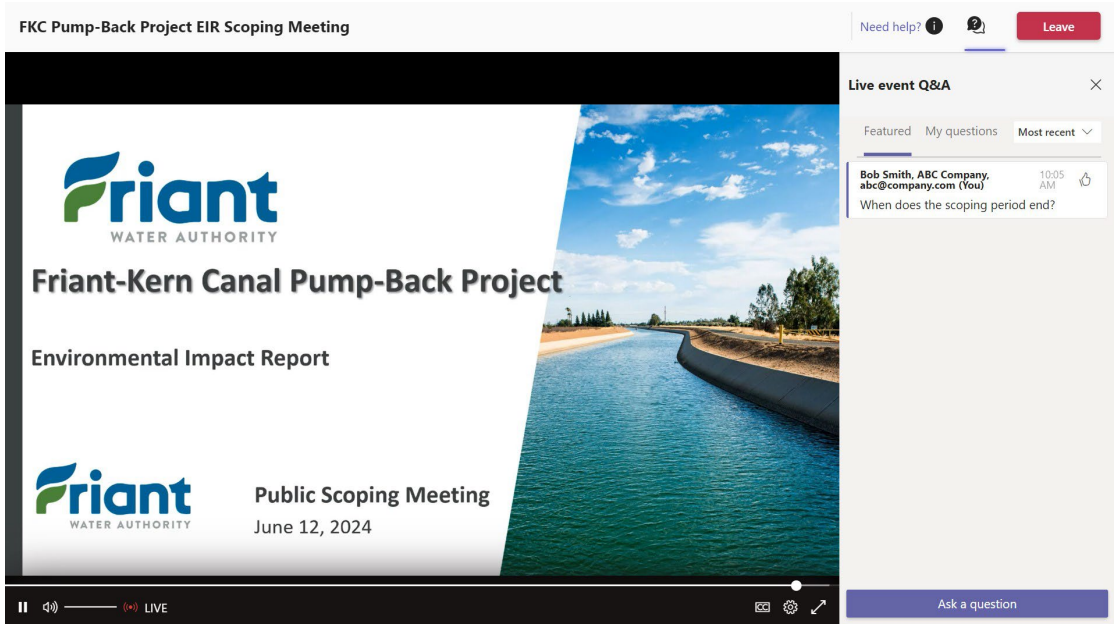
Environmental Impact Report

Public Scoping Meeting

June 12, 2024

Meeting Format

- This MS Teams Live Tool does not allow attendees to share audio
- Comments can be submitted in writing via the Q&A Tool
- Comments submitted using the Q&A Tool during this meeting will be considered in the Public Scoping Report

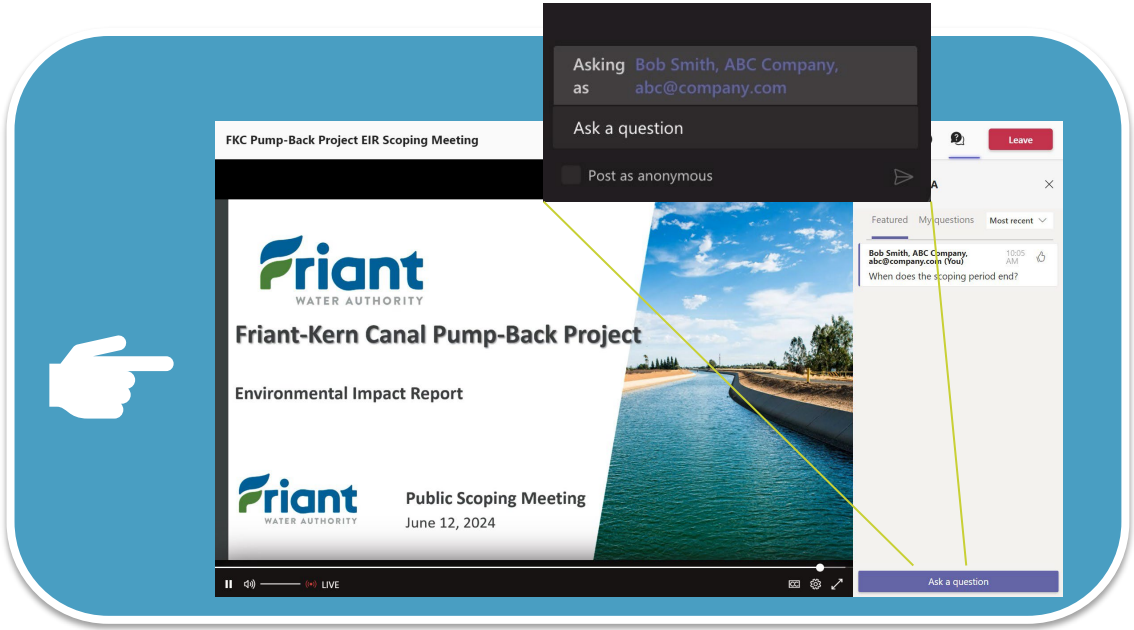


How To Submit Comments During This Meeting

Using Microsoft Teams Q&A Function

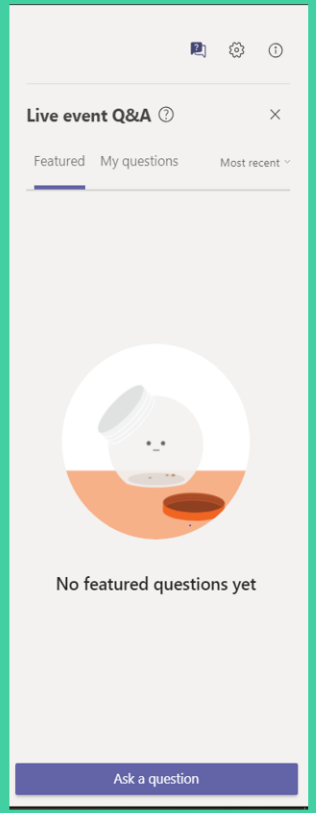
Please Provide:

- Full Name
- Agency/Company name (if applicable)
- Contact Information
- Comment

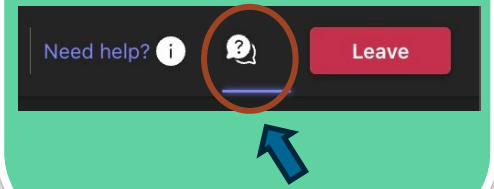


Step-by-Step Approach

Step 1: Use the Q&A Tool on the right side of the screen

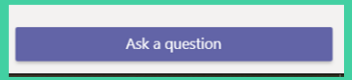


Step 2: If Q&A Tool is not visible, use the Q&A button on the upper right corner of the screen



Show Q&A Tool

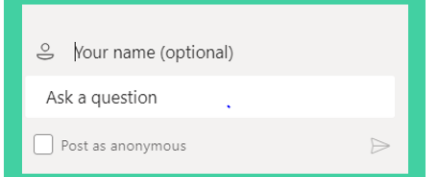
Step 3: Use "Ask a question" button to submit a comment



Step 4: Submit comment

Provide:

- Full name
- Agency/Company name (if applicable)
- Contact information (optional)
- Comment



You can choose to "post anonymous" but you will not be included in our email distribution list for future project correspondence

Inclusion in Future Project Correspondence

- To be included in future project correspondence, please provide your contact information using the Q&A function during this meeting.

- If you provide an anonymous comment or do not provide your contact information, your comment will be considered, but you will not be included in the distribution list.

Meeting Agenda

- Introductions
- Public Scoping Overview
- Meeting Purpose
- Project Overview
- Environmental Impact Report (EIR) Development Process
- Project Schedule
- Scoping Comment Period

What is Public Scoping?

This public scoping meeting invites agencies, stakeholders, and the interested public to participate in the environmental review process

Scoping helps to identify and refine potential:

- Options and alternatives
- Environmental impacts
- Mitigation measures

Notice of Preparation published on **May 29, 2024**

Scoping period closes on **June 27, 2024**

Meeting Purpose

- Provide information about project and environmental compliance process
- Gather information from the public on alternatives and potential environmental issues
- Comply with CEQA Guideline §21083.9

Meeting Outcomes

- A common understanding among participating members of the public and other government representatives of the environmental review process that must be completed by the Friant Water Authority before the project could be implemented

- An opportunity for the public and government representatives to provide topics and questions that they would like to see investigated in the Environmental Impact Report

- A common understanding among participating members of the public and other government representatives of how and when they can provide additional input in the environmental review process

Proposed Project

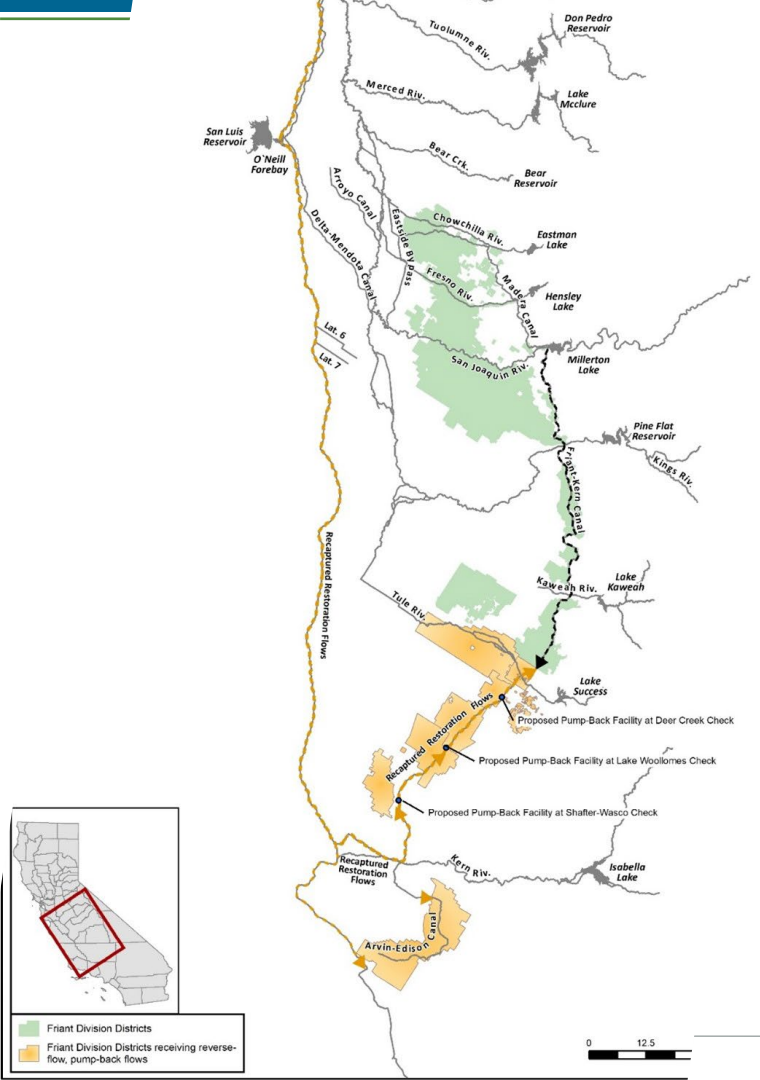
FWA is considering to increase operational flexibility and long-term reliability by constructing three new permanent pump-back facilities along the Friant-Kern Canal

- 500 cfs facility at Shafter-Wasco check structure
- 250 cfs facility at Lake Woollomes check structure
- 250 cfs facility at Deer Creek check structure

Alternatives

Friant Water Authority will comparatively evaluate the following alternatives to the Proposed Project:

1. **No Project Alternative**
   - No new facilities would be constructed, pump-back operations would use only existing facilities located along the Friant-Kern Canal with a 500 cfs pump station that pumps water from the Cross Valley Canal into the lower end of the FKC, a 30 cfs permanent pump-back facility at the Shafter Check, and one 50 cfs temporary pump-back facility installed historically at the Shafter-Wasco check and one 50 cfs temporary pump-back facility at Lake Woollomes check. The temporary facilities would remain in place until their continued use could no longer be supported through regular maintenance.
2. **Low Flow Alternative**
   - Constructing three new permanent pump-back facilities along the Friant-Kern Canal with a 250 cfs facility at Shafter-Wasco check structure, a 75 cfs facility at Lake Woolloomes check structure, and a 75 cfs facility at Deer Creek check structure.
3. **Seasonal Alternative**
   - Install and operate seasonal pump-back facilitates at Shafter-Wasco check structure (up to 200 cfs) and Lake Woollomes check structure (up to 75 cfs)



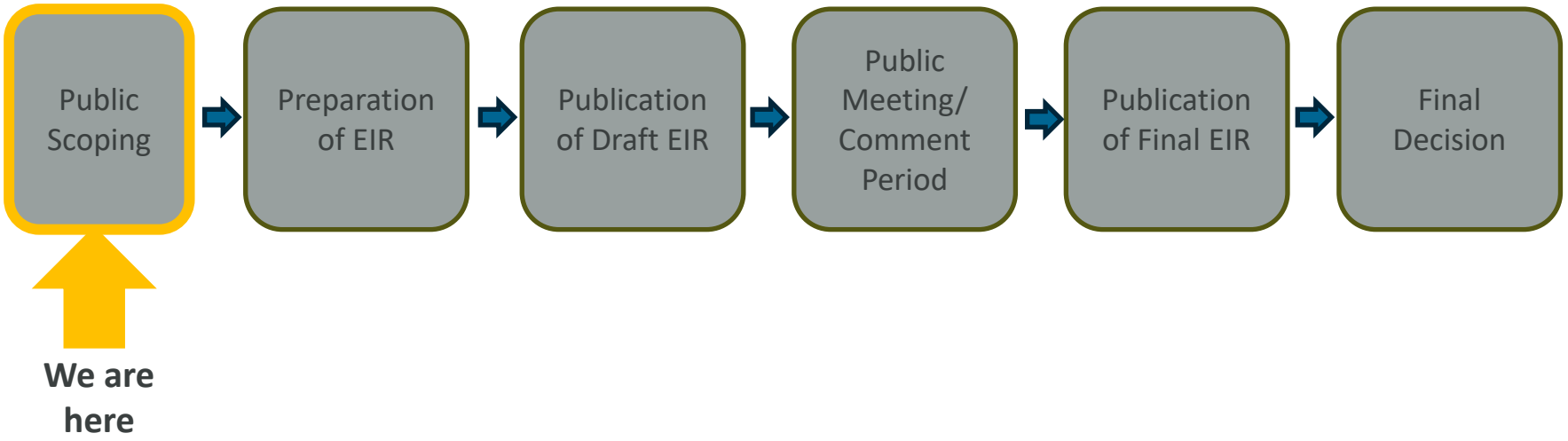
Project Study Area

- Friant-Kern Canal and its related water infrastructure near Shafter-Wasco, Lake Woollomes, and Deer Creek check structures
- Friant Contractors' facilities and related water conveyance infrastructure, including the Cross Valley Canal, Kern River, and the California Aqueduct

Areas of Interest

- Hydrology and Water Resources
- Geology and Soils
- Air Quality
- Greenhouse Gas Emissions
- Visual Resources
- Noise
- Traffic and Transportation
- Hazards and Hazardous Materials
- Terrestrial Resources
- Recreation
- Cultural Resources

Environmental Compliance Process



Project Schedule

Project Milestone	Proposed Date
Notice of Preparation	May 29, 2024
Scoping Period	May 29 – June 27, 2024
Scoping Meeting	June 12, 2024
Draft EIR	Q3/Q4 2024
Public Review Period	Q3/Q4 2024
Final EIR	Q1/Q2 2025
Notice of Determination	Q1/Q2 2025

How To Submit Comments During Review Period

- **A copy of this full presentation will be available at - https://friantwater.org/fkc-pumpback**
- **Comments can be submitted during this meeting utilizing the Question & Answer Tool in this Teams Live Meeting**
- **By June 27, 2024**: mail in comments; OR email to:

Katie Duncan
Friant Water Authority
854 N. Harvard Avenue
Lindsay, CA 93247

fkcpumpback@friantwater.org

Friant-Kern Canal Pump-Back Project
Public Scoping Report
Attachment 5: Comment Letters

NATIVE AMERICAN HERITAGE COMMISSION

May 29, 2024

Ian Buck-Macleod
Friant Water Authority
855 N. Harvard Avenue
Lindsay CA 93247

Re: 2024051211, Friant-Kern Canal Pump-Back Project, Fresno, Kern, Madera, Tulare County

Dear Mr. Buck-Macleod:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Murphy.Donahue@NAHC.ca.gov.

Sincerely,

Murphy Donahue

Murphy Donahue
Cultural Resources Analyst

cc: State Clearinghouse

June 27, 2024

Delivered via email: fkcpumpback@friantwater.org

Ms. Katie Duncan
Friant Water Authority
854 N. Harvard Avenue
Lindsay, CA 93247

Subject: Friant-Kern Canal Pump-Back Project Environmental Impact Report Notice of Preparation Public Scoping

Dear Ms. Duncan:

The State Water Contractors ("SWC")[1] attended the virtual Friant-Kern Canal Pump-Back Project ("Project") Environmental Impact Report ("EIR") Public Scoping Meeting held on June 12, 2024, and is providing the below comments.

The SWC is an organization representing 27 of the 29 Public Water Agencies ("PWAs") that hold contracts with the California Department of Water Resources ("DWR") for participation in the State Water Project ("SWP"). Collectively, the members of the SWC provide part of the water supply delivered to approximately 27 million Californians, roughly two-thirds of the State's population, and to over 750,000 acres of irrigated agriculture. The members of the SWC provide this water to retailers, who, in turn, serve it to consumers throughout the San Francisco Bay Area, the San Joaquin Valley, the Central Coast, and Southern California. The SWP water supply delivered through the Delta constitutes a significant portion of the water supplies available to SWC members, and most of the members rely on water conveyed through the San Luis Canal/California Aqueduct and would be affected by any changes in the quality of the water conveyed through the San Luis Canal.

[1] The SWC members are: Alameda County Flood Control & Water Conservation District, Zone 7; Alameda County Water District; Antelope Valley East Kern Water Agency; Central Coast Water Authority; City of Yuba City; Coachella Valley Water District; County of Kings; Crestline-Lake Arrowhead Water Agency; Desert Water Agency; Dudley Ridge Water District; Empire-West Side Irrigation District; Kern County Water Agency; Littlerock Creek Irrigation District; Metropolitan Water District of Southern California; Mojave Water Agency; Napa County Flood Control & Water Conservation District; Oak Flat Water District; Palmdale Water District; San Bernardino Valley Municipal Water District; San Gabriel Valley Municipal Water District; San Gorgonio Pass Water Agency; San Luis Obispo County Flood Control & Water Conservation District; Santa Clara Valley Water District; Santa Clarita Valley Water Agency; Solano County Water Agency; and Tulare Lake Basin Water Storage District.

SWC appreciates the opportunity to participate in public scoping and provide comments. SWC recognizes the importance of flexible operations of our water systems for maintaining reliability as we face increasingly variable hydrologic conditions as a result of climate change. As written, the Notice of Preparation materials do not describe the Project operations in detail, and it is unclear if State Water Project (SWP) facilities may be used in recapturing and/or conveying the SJRRP flows. Similarly, it is unclear if the SWC members relying on the San Luis Canal/California Aqueduct ("Aqueduct") would experience adverse water quality impacts due to the Project.

The EIR should clearly describe the proposed recapture and conveyance methods for the SJRRP flows and the proposed Project should not impact SWP facilities and operations. The EIR should also thoroughly analyze any impacts to the SWP due to the Project including any operational, water supply, water quality and potential subsidence impacts to the San Luis Canal/California Aqueduct. SWC requests that Friant Water Authority consider appropriate analyses for the Project EIR to address the concerns noted by SWC and ensure that all impacts, including cumulative impacts, are fully mitigated.

Sincerely,

Jennifer Pierre
General Manager

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

June 28, 2024

Ian Buck-Macleod
Friant Water Authority
854 North Harvard Avenue
Lindsey, California 93247
fkcpumpback@friantwater.org

Subject: Friant-Kern Canal Pump-Back Project (Project)
Notice of Preparation (NOP)
State Clearinghouse No. 2024051211

Dear Ian Buck-Macleod:

The California Department of Fish and Wildlife (CDFW) received a NOP for an Environmental Impact Report (EIR) from the Friant Water Authority, as Lead Agency for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

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

While the comment period may have ended, CDFW respectfully requests that the Friant Water Authority still consider our comments.

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

[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.

sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources. CDFW 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.

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 section 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), section 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and section 3513 (regarding unlawful take of any migratory nongame bird).

Fully Protected Species: CDFW has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species was previously prohibited and CDFW was not able authorize their incidental take. Senate Bill No. 147, which became effective on July 10, 2023, amended Fish and Game Code sections 3511, 4700, 5050, and 5515, and added section 2081.15 to authorize CDFW to issue a permit that authorizes the take of a fully protected species resulting from impacts attributable to the implementation of specified projects, which include maintenance, repair, or improvement projects to critical regional or local water agency infrastructure, if certain conditions are satisfied. Bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*) are fully protected species known to occur in the Project area (CNDDB 2024) and suitable nesting and foraging habitat for the fully protected white-tailed kite (*Elanus leucurus*) is located within and adjacent to the Project boundary.

Other Special Status Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened on any State or federal list pursuant to CESA and/or the federal Endangered Species Act (ESA) to be considered Endangered, Rare, or Threatened under CEQA. If a species can be shown to meet the criteria specified in the CEQA Guidelines (Cal. Code Regs., tit. 14, Chapter 3, § 15380), it should be fully considered in the environmental analysis for the Project.

Water Rights: The NOP describes the construction of permanent pump-back facilities with expanded capacity to convey water supplies within the Project location boundary. The capture of unallocated stream flows is subject to appropriation and approval by the State Water Resources Control Board (SWRCB) pursuant to Water Code section 1200 et seq. CDFW, as Trustee Agency, is consulted by the SWRCB during the water rights process to provide terms and conditions designed to protect fish and wildlife prior to appropriation of the State's water resources. Certain fish and wildlife are reliant upon aquatic and riparian ecosystems, which in turn are reliant upon adequate flows of water. CDFW therefore has a material interest in assuring that adequate water flows within streams for the protection, maintenance, and proper stewardship of those resources. CDFW provides biological expertise to review and comment on environmental documents and impacts arising from Project activities.

PROJECT DESCRIPTION SUMMARY

Proponent: Friant Water Authority

Description and Objective: The Friant Water Authority seeks to facilitate the recirculation of recaptured Restoration Flows released from Millerton Lake for the San Joaquin River Restoration Program and other waters obtained by Friant Contractors to increase operational flexibility and long-term reliability of the water supplies conveyed through the Friant-Kern Canal. Friant Water Authority proposes to increase operational flexibility and long-term reliability by constructing three new permanent pump-back facilities along the Friant-Kern Canal with a 500-cubic foot per second (cfs) facility at the Shafter-Wasco check structure, a 250-cfs facility at the Lake Woollomes check structure, and a 250-cfs facility at the Deer Creek Check structure.

Timeframe: Unspecified

Location: The Project location includes the Friant-Kern Canal and related water infrastructure near the Shafter-Wasco, Lake Woollomes, and Deer Creek check structures. The Project location also includes other Friant Contractors' facilities and related water conveyance infrastructure, including the Cross Valley Canal, Kern River, and California Aqueduct.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the Friant Water Authority in adequately identifying and/or mitigating the Project's significant or potentially significant direct and indirect impacts on fish and wildlife (biological) resources. Based on a review of aerial imagery, the Project description, and a review of California Natural Diversity Database (CNDDB) records, several special status species and habitat types could potentially be impacted by Project activities. Project-related construction activities within the Project alignment and surrounding area could impact

the following special status plant and wildlife species and habitats known to occur: the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*); the State threatened Swainson's hawk (*Buteo swainsoni*); the State threatened and fully protected Bald eagle; the State fully protected golden eagle and white-tailed kite (*Elanus leucurus*); the State candidate for listing Crotch's bumble bee (*Bombus crotchii*); the federally proposed threatened and State species of special concern western spadefoot (*Spea hammondii*) and western pond turtle (*Emys marmorata*); and the State species of special concern American badger (*Taxidea taxus*) and burrowing owl (*Athene cunicularia*).

Vegetation communities and habitats in the Project vicinity includes non-native annual grassland, Great Valley cottonwood forest, Great Valley mesquite scrub, 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 Friant-Kern Canal, Lake Woollomes, intermittent streams (i.e., Tule River, Deer Creek, Porter Slough, and White River) and associated riparian and fresh emergent wetlands, groundwater recharge basins, detention basins, agricultural ditches and canals, and agricultural ponds.

San Joaquin Kit Fox: San Joaquin kit fox are known to occur within the Project area and a review of recent aerial imagery shows suitable habitat for San Joaquin kit fox in the Project area (CDFW 2024). Without appropriate avoidance and minimization measures for kit fox, potentially significant Project impacts include habitat loss, den collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals.

CDFW recommends a qualified biologist conduct a habitat assessment for San Joaquin kit fox within Project areas and a 500-foot buffer, for a biological study report to be included in the EIR. In areas of suitable habitat and a 500-foot buffer, CDFW recommends that the EIR prescribe focused field surveys for San Joaquin and any sign, such as potential dens, prior to the start of Project activity. CDFW also recommends following the U.S. Fish and Wildlife Service (USFWS 2011) *Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* during Project implementation. If If San Joaquin kit fox is detected, CDFW recommends that the EIR require consultation with CDFW for guidance on how to avoid take or to acquire an Incidental Take Permit, pursuant to Fish and Game Code section 2081, subdivision (b).

Swainson's Hawk and White-tailed Kite: Swainson's hawk and white-tailed kite are known to the Project area and have the potential to nest in riparian habitat and other mature trees. Suitable foraging habitat for these species also exists within the vicinity of the Project site, including annual grassland, alfalfa or grain fields, and livestock pasture. Without appropriate avoidance and minimization measures for Swainson's hawk and white-tailed kite, potential significant impacts may include nest abandonment and

reduced reproductive success that includes mortality of young, and reduced health and vigor of eggs and/or young. The trees and riparian habitat within the Project area represent some of the only remaining suitable nesting habitats 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 Swainson's hawk. CDFW recommends that a qualified biologist conduct a habitat assessment for nest sites suitable for these species within the Project area and a ½-mile buffer, for a biological study report to be included with the EIR. CDFW recommends that the EIR require protocol-level surveys to be conducted for raptors following the survey methods developed by the Swainson's Hawk Technical Advisory Committee (2000) within the nesting season immediately prior to Project activity in areas of suitable nesting habitat within the Project area and a ½-mile buffer. CDFW recommends maintaining a minimum no-disturbance buffer of ½ mile around active nests 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 for survival. If an active Swainson's hawk or white-tailed kite nest is detected during surveys and a ½-mile buffer is not feasible, CDFW recommends that the EIR require consultation with CDFW for guidance on how to implement the Project and avoid take or to obtain an Incidental Take Permit, pursuant to Fish and Game Code section 2081, subdivision (b) for Swainson's hawk and to potentially acquire an Incidental Take Permit pursuant to Fish and Game Code section 2081.15 for white-tailed kite.

CDFW also recommends compensation for the loss of Swainson's hawk foraging habitat as described in the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks* (CDFG 1994) to reduce impacts to foraging habitat to less than significant. CDFW has the following recommendations to mitigate for habitat loss occurring within a minimum distance of 10 miles from known nest sites:

- For projects within one mile of an active nest tree, a minimum of one acre of habitat management (HM) land for each acre of development is advised.
- For projects within five miles of an active nest but greater than one mile, a minimum of ¾ acre of HM land for each acre of development is advised.
- For projects within 10 miles of an active nest tree but greater than five miles from an active nest tree, a minimum of ½ acre of HM land for each acre of development is advised.

Crotch's Bumble Bee: Crotch's bumble bee has been documented in the vicinity of the Project (CDFW 2024). The species is known to inhabit areas of grasslands and scrub that contain requisite habitat elements for nesting, such as small mammal burrows and bunch or thatched grasses. Based on aerial imagery, the Project appears to contain habitat suitable to support Crotch's bumble bee.

CDFW recommends that a qualified biologist conduct a habitat assessment for Crotch's bumble bee for a biological study report to be included with the EIR. Foraging resources and potential nesting sites, which include all small mammal burrows, perennial bunch grasses, thatched annual grasses, brush piles, old bird nests, dead trees, and hollow logs are advised to be documented as part of the assessment. In areas of suitable habitat, CDFW recommends that the EIR require a qualified biologist to conduct a bumble bee survey using a protocol developed according to the CDFW (2023) *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*, to identify bumble bees and potential nesting sites during the vegetation blooming period prior to activities at Project sites. If any Crotch's bumble bees or a nest are detected, it is recommended that the EIR require consultation with CDFW occur to develop adequate take avoidance measures, including protection for underground overwintering queens if a nest is observed at any time. If avoidance of take is not feasible, CDFW advises take authorization via an Incidental Take Permit, pursuant to Fish and Game Code section 2081, subdivision (b).

Nesting Bald Eagle and Golden Eagle: Bald eagle and golden eagle occurrences have been documented within the vicinity of the Project area (CDFW 2024). Without appropriate survey methods, nesting eagles could remain undetected, resulting in avoidance and minimization measures not being effectively implemented. In addition, human activity near nest sites can cause reduced provisioning rates of golden eagle chicks by adults (Steidl et al. 1993). 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.

CDFW recommends that a qualified wildlife biologist conduct a habitat assessment for nesting 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 2004). If Project activities take place during the avian nesting season of February 1 through September 15, CDFW recommends that the EIR require additional pre-construction surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of construction.

If an active eagle nest is found, CDFW recommends the EIR require implementation of a minimum ½-mile no-disturbance buffer until the breeding season has ended or until a qualified biologist has determined that the young have fledged and are no longer reliant upon the nest site for survival.

If nesting eagles are detected and the ½-mile no-disturbance buffer is infeasible or if the Project proponent chooses to assume presence during Project implementation, consultation with CDFW is recommended to discuss how to implement the Project and

avoid take; or if avoidance is not feasible, to potentially acquire an Incidental Take Permit pursuant to Fish and Game Code section 2081.15 prior to Project activities.

Western Pond Turtle: Western pond turtle occurs in the Project area (CDFW 2024) and a review of aerial imagery of the area shows habitats that western pond turtle utilize for nesting, overwintering, dispersal, and basking, including streams, ponded areas, irrigation canals, and riparian and upland habitats. Western pond turtles are known to nest in the spring or early summer within 100 meters of a water body, although nest sites as far away as 500 meters have also been reported (Thomson et al. 2016). Noise, vegetation removal, movement of workers, construction and ground disturbance as a result of Project activities have the potential to significantly impact western pond turtle populations. Without appropriate avoidance and minimization measures for western pond turtle, potentially significant impacts associated with Project activities could include nest reduction, inadvertent entrapment, reduced reproductive success, reduction in health or vigor of eggs and/or young, and direct mortality.

CDFW recommends that a qualified biologist conduct a habitat assessment for western pond turtles for a biological report to be included in the EIR. CDFW also recommends that the EIR require a qualified biologist to conduct focused surveys in suitable habitat for western pond turtles within 10 days prior to Project activity, and that focused surveys for nests occur during the egg-laying season of March through August.

CDFW recommends that the EIR require that any western pond turtle nests that are discovered remain undisturbed with a no-disturbance buffer maintained around the nest until the eggs have hatched and neonates are no longer in the nest or Project areas. If western pond turtle individuals, including neonates at the nest, are discovered at the site during surveys or Project activities, CDFW recommends that they be allowed to move out of the area of their own volition without disturbance.

Burrowing Owl: Burrowing owls have been documented to occur near the Project alignment (CDFW 2024). Burrowing owls inhabit open grassland or adjacent canal banks, rights-of-way, vacant lots, and other landscape features containing small mammal burrows, a requisite habitat feature for nesting and cover. Burrowing owls rely on burrow habitat year-round for their survival and reproduction. Based on aerial photography, potential habitat occurs both within and bordering the Project alignment.

CDFW recommends that a qualified biologist conduct a habitat assessment for burrowing owls, for a biological study report to be included with the EIR. In areas of suitable habitat, CDFW recommends that the EIR require presence/absence surveying for burrowing owl by a qualified biologist following the California Burrowing Owl Consortium (1993) *Burrowing Owl Survey Protocol and Mitigation Guidelines* and CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). If burrowing owls are detected, CDFW recommends no-disturbance buffers during any ground-disturbing activities, as shown in the following table (CDFG 2012).

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

* meters (m)

In the event that burrowing owls are found within these recommended buffers and avoidance is not possible, CDFW recommends that the EIR analyze the potentially significant impact of excluding owls from a burrow. CDFW recommends that any 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 surveillance methods. CDFW also recommends replacement of occupied burrows with artificial burrows at a ratio of 1 burrow collapsed to 1 artificial burrow constructed (1:1) as mitigation for evicting owls.

Western Spadefoot: Western spadefoot is known to occur within the Project area, using ephemerally ponded water associated with seasonal flooding and rainfall to breed, as well as the associated upland habitats outside of the breeding season. Spadefoot toads inhabit grassland habitats, breed in seasonal wetlands, and seek refuge in upland habitat where they occupy burrows outside of the breeding season (Thomson et al. 2016). Any depressional features in the Project area footprint may support breeding spadefoot and the adjacent areas may provide upland refugia. CDFW recommends that a qualified biologist conduct a habitat assessment for spadefoot for a biological study report to be included with the EIR. In areas of suitable habitat, CDFW recommends that the EIR require a qualified biologist to conduct focused surveys for western spadefoot and their requisite habitat features prior to each Project. CDFW recommends that the EIR describe how avoidance of occupied burrows or other habitat features will occur.

American Badger: The Project area is within the known geographic range of American badger and suitable habitat may be present (CDFW 2024). CDFW recommends that a qualified biologist conduct a habitat assessment for American Badger, for a biological study report to include with the EIR. If potential habitat is present, CDFW recommends that the EIR direct a qualified biologist to conduct focused surveys for the species and its requisite habitat features to evaluate potential Project impacts, and describe avoidance, minimization, and mitigation as warranted to address potentially significant impacts.

Wetland and Riparian Habitats: The NOP states that construction could affect riparian habitat and federally or State protected wetlands. The Project area contains numerous waterways and riparian and wetland areas within an agricultural landscape that also currently supports undeveloped habitats. Development within the Project area has the

potential to involve temporary and permanent impacts to these features, including loss of riparian and wetland vegetation and the degradation of wetland and riparian areas through grading, fill, and related development.

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

CDFW recommends that the EIR include formal stream mapping and wetland delineation conducted by a qualified biologist or hydrologist (as warranted), to determine the baseline location, extent, and condition of streams (including any floodplain) and wetlands within and adjacent to the Project area. Please note that while there is overlap, State and federal definitions of wetlands differ, and complete stream mapping commonly differs from delineations used by the U.S. Army Corps of Engineers specifically to identify the extent of Waters of the U.S. Therefore, it is advised that the delineation identify both State and federal wetlands in the Project area as well as the extent of all streams including floodplains, if present, within the Project area. CDFW recommends that site map(s) depicting the extent of any activities that may affect wetlands, lakes, or streams be included with any Project site evaluations, to clearly identify areas where stream/riparian and wetland habitats could be impacted from Project activities.

CDFW recommends that the potential direct and indirect impacts to stream/riparian and wetland habitat be analyzed according to each Project activity. Based on those potential impacts, CDFW recommends that the EIR include measures to avoid, minimize, and/or mitigate those impacts. CDFW recommends that impacts to riparian habitat (i.e., biotic and abiotic/nonvegetative features) take into account the effects to stream function and hydrology from riparian habitat loss or damage, as well as potential effects from the loss of riparian habitat to special-status species already identified herein. CDFW recommends that losses to stream and wetland habitats be offset with corresponding riparian and wetland habitat restoration incorporating native vegetation to replace the value to fish and wildlife provided by the habitats lost from Project implementation. If on-site restoration to replace habitats is not feasible, CDFW recommends off-site

mitigation by restoring or enhancing in-kind riparian or wetland habitat and providing for the long-term management and protection of the mitigation area, to ensure its persistence.

EDITORIAL COMMENTS AND/OR SUGGESTIONS

Project Description: The NOP lacks detailed information with regard to the actual footprint of the Project and does not address methods and materials, ground disturbance related to each activity, staging and laydown areas, and other specific Project-related activities that could threaten biological resources and result in potentially significant environmental impacts within the Project area. CDFW anticipates these details to be provided in the EIR, in addition to details such as specific locations of activities relative to private or public property and adjacent roads and special conditions such as the need for any night work.

Water Rights: The NOP describes that the Friant Water Authority seeks to facilitate the recirculation of recaptured Restoration Flows released from Millerton Lake for the San Joaquin River Restoration Program and other waters obtained by Friant Contractors to increase operational flexibility and long-term reliability of the water supplies conveyed through the Friant-Kern Canal. CDFW recommends that the EIR discuss the source of the water, including whether it is currently unallocated stream flow or if the Friant Water Authority or another entity already possesses a water right. CDFW recommends providing a detailed description of all water rights and water entitlements that would pertain to the Project, including any applications or change petitions that may be filed to transfer water. If a new water allocation would occur specifically for transfer to the Friant Water Authority, CDFW recommends that the EIR also include an analysis of the impacts of diverting currently unallocated flows, including such details for the point(s) of diversion as a hydrologic study, water availability analysis, and other information that identifies and analyzes the impacts to aquatic ecosystems and fish and wildlife resources.

As Trustee Agency, CEQA is consulted by the SWRCB during the water rights process to provide terms and conditions designed to protect fish and wildlife prior to appropriation of the State's water resources. Given the potential for impacts to special status species and their habitats, it is advised that details be disclosed during the CEQA process and that required consultation with CDFW occur well in advance of any SWRCB water right application process.

Sustainable Groundwater Management Act (SGMA) and Groundwater Dependent Ecosystems: The NOP states that construction and operation could result in groundwater water quality impacts, and operation could result in changes to available groundwater supply. Many sensitive ecosystems and public trust resources such as streams, springs, riparian areas, and wetlands are dependent on groundwater and interconnected surface waters. The Project boundary overlaps the boundary for the Tule

Subbasin (Subbasin No. 5-022.13) and Kern Basin (Subbasin No. 5-022.14), both of which are listed as critically overdrafted and designated as high priority Basins by the Department of Water Resources. Groundwater Sustainability Plans (GSPs) were prepared for the Tule Groundwater Subbasin and the Kern Groundwater Subbasins and were deemed inadequate by the Department of Water Resources on March 22, 2023. Both subbasins are now subject to consideration for probation by the State Water Resources Control Board. CDFW recommends that the EIR detail whether the Project will address and correct overdraft conditions for the groundwater basin and how this will affect groundwater dependent ecosystems and interconnected surface waters.

Lake and Streambed Alteration: CDFW recommends that the EIR include mapping of all stream and associated wetland resources within the Project area as described above and describe the methodology used in determining the extent of all streams in the Project area. Jurisdictional activities are subject to CDFW's authority pursuant to Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation): (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral, intermittent, or episodic, as well as those that are perennial, regardless of the duration, frequency, or volume of flow.

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

California Natural Diversity Database (CNDDB): 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. A lack of an occurrence record in the CNDDB does not mean that a species is not present. In order to adequately assess any potential Project-related impacts to biological resources, surveys conducted by a qualified biologist 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.

Cumulative Impacts: The NOP states the Project will impact riparian, wetland, and other habitats. The Kern River and Deer Creek are within the Project boundary and supports mature riparian woodland habitat and may potentially support several listed

and other special status species, including those listed above. The Project could result in direct and cumulative adverse impacts to these fish and wildlife and other public trust resources. CDFW recommends that a cumulative impact analysis be conducted for all biological resources that will either be significantly or potentially significantly impacted by implementation of the Project, including those whose impacts are determined to be less than significant with mitigation incorporated or for those resources that are rare or in poor or declining condition and will be impacted by the Project, even if those impacts are relatively small (i.e., less than significant). CDFW recommends that cumulative impacts be analyzed using an acceptable methodology to evaluate the impacts of past, present, and reasonably foreseeable future projects on resources and be focused specifically on the resource, not the Project. An appropriate resource study area identified and utilized for this analysis is advised. CDFW staff is available for consultation in support of cumulative impacts analyses as a trustee and responsible agency under CEQA.

Federally Listed Species: CDFW recommends consulting with the USFWS on potential impacts to federally listed species, including but not limited to desert tortoise. Take under the ESA is more broadly defined than CESA; take under ESA 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 ESA is advised well in advance of any ground-disturbing activities.

Nesting birds: CDFW encourages that Project implementation occur outside the bird nesting season; however, if ground-disturbing or vegetation-disturbing activities must occur during the breeding season of 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 ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected by the 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 having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

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 on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so. CDFW recommends that a qualified wildlife biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance.

CDFW appreciates the opportunity to comment on the NOP to assist the Friant Water Authority in identifying and mitigating Project impacts to biological resources. If you have any questions, please contact Annette Tenneboe, Senior Environmental Scientist Specialist, at (559) 580-3202 or by email at Annette.Tenneboe@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Julie Vance
FA83F09FE08945A...
Julie A. Vance
Regional Manager

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