Addendum to the Initial Study/ Mitigated Negative Declaration for the

Regional Drought Resiliency Project



Prepared by:



Addendum to the Initial Study/
Mitigated Negative Declaration for the

Regional Drought Resiliency Project

State Clearinghouse No. 2022010191

Prepared for:

North Kern Water Storage District 33380 Cawelo Ave. Bakersfield, CA 93308

Contact:

Ram Venkatesan District Engineer 661-393-2696

Prepared by:

GEI Consultants, Inc. 2868 Prospect Park Drive, Suite 400 Sacramento, CA 95670

Contact:

Ginger Gillin Principal Environmental Scientist (503) 342-3777

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Abbreviations and Acronyms

BMPs Best Management Practices

CDFW California Department of Fish and Wildlife

CEQA California Environmental Quality Act
CNDDB California Natural Diversity Database

CNPS California Native Plant Society

District North Kern Water Storage District

EIR Environmental Impact Report

GEI Consultants, Inc.

GHG greenhouse gas emissions

IS Initial Study

MMRP Mitigation Monitoring and Reporting Program

MND Mitigated Negative Declaration

ND Negative Declaration

No. number

NPDES National Pollutant Discharge Elimination System

PM particulate matter

PM_{2.5} particulate matter with aerodynamic diameter less than 2.5 micrometers

 PM_{10} particulate matter with aerodynamic diameter less than 10 micrometers

Project Return Capacity Improvements for Regional Drought Resiliency Project

Project refinements the replacement of three District wells, the construction of 1.31 miles of

pipeline in two areas, the Northern and Southern Project Areas, and installation of a discharge outfall to the Lerdo Canal at the Southern

Project Area

S.J.V.A.P.C.D. San Joaquin Valley Air Pollution Control District

SPAL Small Project Analysis Level

SSJVIC Southern San Joaquin Valley Information Center

SWPPP Stormwater Pollution Prevention Plan

U.S. United States

USFWS U.S. Fish and Wildlife Service

USGS United States Geological Survey

1. Introduction

1.1 Background

The North Kern Water Storage District (District) is located in Kern County along the eastern side of California's southern San Joaquin Valley. The District's service area includes approximately 60,000 acres of predominately agricultural land north of the City of Bakersfield, west of State Route (SR) 99, and east of the cities of Shafter and Wasco.

The District, as lead agency under the California Environmental Quality Act (CEQA),¹ publicly distributed the Initial Study/proposed Mitigated Negative Declaration (IS/MND) for the Return Capacity Improvements for Regional Drought Resiliency Project (Project)² on January 13, 2022, for a 30-day public review period (State Clearinghouse Number [No.] 2022010191). The District adopted the IS/MND and, approved the Project at its District Board Meeting on February 15, 2022. The Project was designed to provide the District and neighboring districts with additional water resources for agricultural uses, or other proposed uses, as determined by the District to: (1) improve long-term resiliency to drought; (2) improve and expand District infrastructure to allow for the return of previously stored water to the Districts banking partners; (3) help achieve the United States (U.S.) Bureau of Reclamation's (Reclamation) WaterSMART Drought Response Program goals of modernizing infrastructure and restoring trust with local communities; and (4) increase the District's flexibility to recover previously banked groundwater, with the least amount of potential for increased subsidence.

The IS/MND provided an analysis of impacts associated with the replacement of four wells, installation of three discharge outfalls, and approximately 3.9 miles of pipeline. The Project was comprised of four discreet Project sites adjacent to the Friant-Kern Canal (FKC), west of SR 99 in north-central Kern County. The District connected a total of nine wells, the four replacement wells and five other existing District wells, to the FKC via three new discharge outfalls. A total of 3.96 miles of pipeline was installed primarily in or along the edge of existing agricultural dirt roads under the Project. The northern most pipeline installed from the Project includes 0.56 miles of pipeline extending west from the FKC adjacent to the 8-29 Canal and Poso Creek, approximately 6 miles northeast of Wasco.

The District has now prepared this Addendum to the IS/MND to address minor technical changes or additions to the Project (proposed Project refinements), which include the replacement of three wells, construction of approximately 1.31 miles of pipeline, and the installation of one discharge outfall into the

¹ CEQA is found at California Public Resources Code, Sections 21000 et seq., and the State CEQA Guidelines are found at California Code of Regulations, Title 14, Section 15000 et seq.

North Kern Water Storage District. 2022 (February). *Initial Study and Mitigated Negative Declaration for the North Kern Water Storage District*. State Clearinghouse No. 2022010191. Available: https://ceqanet.opr.ca.gov/2022010191. Accessed: June 16, 2023.

District's Lerdo Canal. See Chapter 2, "Project Refinements" for more details on proposed refinements to the Project.

CEQA Guidelines Section 15164(b) states that an addendum to an adopted Negative Declaration (ND) (or IS/MND) may be prepared if only minor technical changes or additions are necessary and none of the conditions described in Section 15162 calling for the preparation of a subsequent Environmental Impact Report (EIR) or ND have occurred. The District has determined that the Project refinements are necessary, but none of the conditions described in CEQA Guidelines Section 15162 (*see* Section 1.2, "Regulatory Context," below) requiring preparation of a subsequent EIR (or subsequent ND or MND) would occur with the minor project refinements. Therefore, the District has prepared this Addendum to the Project IS/MND in accordance with CEQA Guidelines Section 15164.

1.2 Regulatory Context

As described in CEQA Guidelines Section 15162(a), when an EIR has been certified or ND adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

- 1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or ND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects
- 2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or ND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects
- 3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the ND was adopted, shows any of the following:
 - a) The project will have one or more significant effects not discussed in the previous EIR or ND
 - b) Significant effects previously examined will be substantially more severe than shown in the previous EIR
 - c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative
 - d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative

CEQA Guidelines Section 15164(b) states that a lead agency may prepare an addendum to an adopted ND (or MND) if only minor technical changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR or ND (or MND) have occurred. The analysis in Chapter 3, "Environmental Analysis," below, demonstrates that the proposed refinements to the Project would not result in any of the conditions described in Section 15162, based on substantial evidence

contained with the Project's administrative record. Because none of these conditions have occurred, the lead agency shall determine whether to prepare a subsequent ND (or subsequent MND), an addendum, or no further documentation (CEQA Guidelines Section 15162[b]).

The District, as lead agency, has prepared this Addendum to the IS/MND, in accordance with CEQA Guidelines Section 15164(a) to: present the proposed Project refinements; to provide additional CEQA impact analysis; to address the potential environmental impacts of the proposed Project refinements; and to supplement the administrative record for the Project.

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2. Project Refinements

2.1 Additions to the Return Capacity Improvements for Drought Resiliency

The proposed Project refinements include the replacement of three District wells, the construction of 1.31 miles of pipeline in two areas, identified as Northern and Southern Project Areas (**Figure 2-1**), and the installation of one discharge outfall to the Lerdo Canal within the Southern Project Area. The Northern Project Area is located adjacent to the District's 8-29 Canal and Poso Creek approximately 1 mile west of SR 99 (**Figure 2-2**) and would include the replacement of two District wells (99-26-010 and 88-29-039), and construction of 1.3 miles of pipeline that would tie-in to an existing pipeline installed from the Return Capacity Improvements DRP in 2020. The Southern Project Area is located near the Wright Field spreading basin approximately 0.9 mile west of SR 99 (**Figure 2-3**) and would include the replacement of one District well (88-00-088), the construction of 75 feet of pipeline, and the installation of a discharge outfall to the District's Lerdo Canal.

Construction activities would consist of the demolition and replacement of three existing wells within agricultural land. The proposed replacement wells would be implemented within 100 feet of existing District wells. The replacement wells would be drilled to a depth of approximately 1,200 feet and have an average flow of approximately 5 cubic feet per second (cfs). A concrete pad (approximately 100 square feet, each) would be installed around the replacement wells. The above-ground well heads would be approximately 9 feet tall with a 10-foot diameter. A maximum of approximately 0.10 acre of land would be temporarily disturbed by proposed Project refinements within the well construction areas. This would include tracking onsite, staging equipment, and potential clearing and grubbing around the well locations.

The proposed discharge outfall would be installed below the top-of-bank within the Lerdo Canal prism. Additionally, installation of the discharge outfall would consist of a standard turn-in and small delivery gate for control.

Construction of the pipeline would include the installation of 18 to 30-inch-diameter polyvinyl chloride (PVC) pipe totaling approximately 1.31 miles by excavating open trenches with a maximum construction corridor width of 50 feet. The excavated trench width would be a maximum of 4 feet wide and 7 feet deep within or along the edge of existing dirt roads. The maximum trench width at the ground surface would vary up to 10 feet to accommodate the sloping of the trench sidewall for worker safety. Therefore, the trenches would result in the temporary excavation of approximately 10,000 cubic yards of soil, all of which would be temporarily stockpiled adjacent to the trench. The footprint of the trench is estimated to be 2.1 acres. The trenches would be backfilled with the excavated material and graded after the proposed pipeline is installed. There would no export of excavated materials. The pipeline construction corridor would be up to 50 feet wide to account for the trenches, access routes, materials staging, and overburden

stockpiling. A maximum of approximately 8 acres of land would be temporarily disturbed by Project refinement activities within the pipeline construction corridor.

Construction would take approximately 8 months and is expected to begin Spring 2024. Construction activities would be limited to daylight hours, 10 hours per day, 5 days per week. Anticipated construction equipment includes one each – excavator, loader, backhoe, welding truck, dozer, drill rig, hoist crane, water truck, and pickup trucks. Up to 10 construction workers would be onsite at one time.

SOUTH SAN **Existing Well JOAQUIN** MUD Existing Well to be Replaced **Existing Pipeline** McFarland **Proposed Pipeline** Spreading Basin Incorporated City SEMITROPIC Northern Project Site WSD 99-26-010 Southern Project Site NORTH 88-29-035 88-29-015 North Kern WSD **KERN** WSD Wasco 88-00-088 NORTH KERN WSD CAWELO WD Poso Creek SHAFTER-WASCO ID Shafter 43 Bakersfield Cross Valley Canal 1.5 Miles Z:\Projects\2301216_NKWSD_2022_DRP\NKWSD_DRP2022_ProjectOverview.mxd 19Jun2023 RS

Figure 2-1. Project Refinement Location Overview Map

Figure 2-2: Northern Project Area

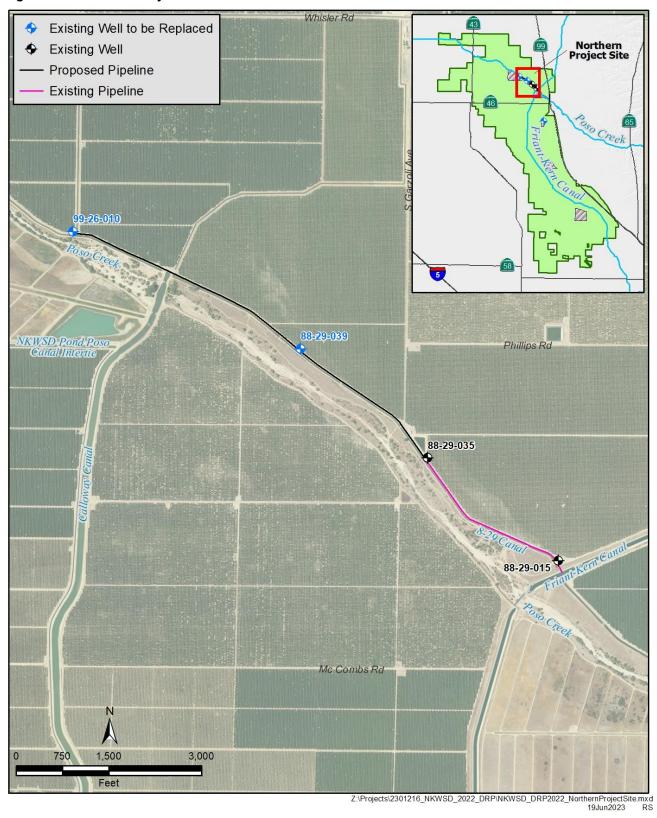
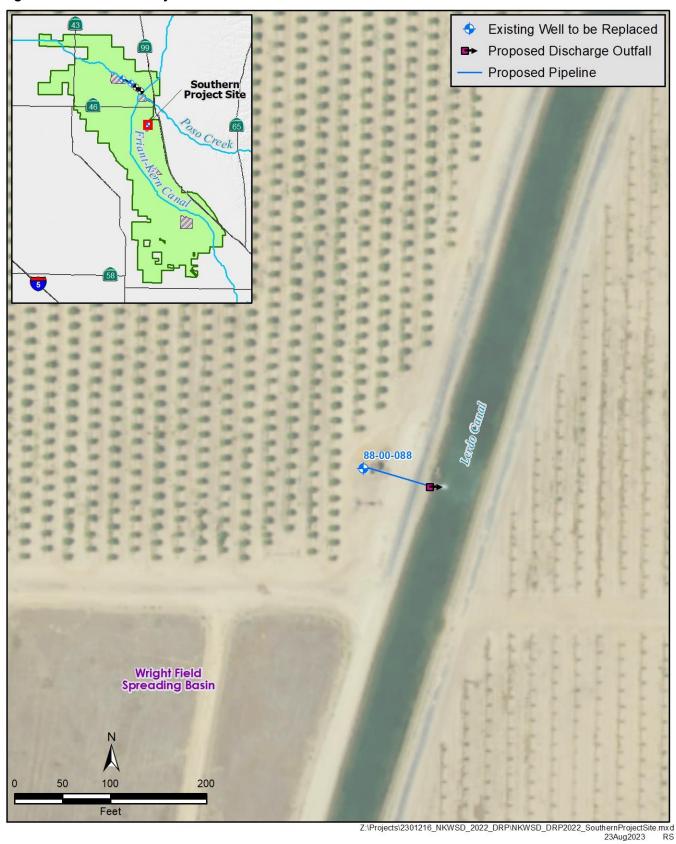


Figure 2-1. Southern Project Area



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3. Environmental Analysis

This section of the Addendum analyzes the potential effects on the physical environment from implementation of the proposed Project refinements. This analysis has been prepared to determine whether any of the conditions in CEQA Guidelines Section 15162 (described in Section 1.2, "Regulatory Context") would occur as a result of the proposed Project refinements.

The proposed Project refinements would not cause any new significant impacts or a substantial increase in the severity of significant effects previously identified in the IS/MND for the resource areas listed below, and/or would not be affected to any greater degree than that analyzed in the IS:

- Aesthetics
- Mineral Resources
- Population, Housing, and Employment
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems
- Wildfire

The following resource areas may be affected by the proposed Project refinements and are analyzed below:

- Air Quality
- Agriculture and Forestry Resources
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Tribal Cultural Resources

3.1 Agriculture and Forestry Resources

The proposed Project refinements would not result in new significant impacts or increase the severity of significant impacts previously identified in IS/MND Environmental Checklist Section 2, "Agriculture and Forestry Resources." The proposed Project refinements in the Northern Project Area would include replacing two existing wells and implementing a pipeline within agricultural roads on adjacent prime farmlands with active Williamson Act contracts (Kern County GIS 2023). The proposed Project refinements in the Southern Project Area includes replacing one existing well and implementing 75 feet of pipeline adjacent to an orchard with active Williamson Act contract (Kern County GIS 2023). Implementation of the proposed Project refinements would not remove agricultural lands from production, convert farmland to non-farmland, nor would it conflict with existing Williamson Act contracts. Ground disturbance activities from construction of the pipeline and replacement wells would not be substantially different than normal agricultural operations or water infrastructure maintenance equipment common to the area. The purpose of the proposed Project refinements is to improve water supply for agricultural water users, which is a benefit to agricultural production. Therefore, this impact would remain less than significant. Additionally, there is no forest land within the vicinity of where the proposed Project refinements would be implemented, therefore no impact to forest resources would occur.

3.2 Air Quality

The proposed Project refinements would not result in new significant impacts or increase the severity of significant impacts previously identified in the IS/MND Environmental Checklist Section 3, "Air Quality." The IS/MND evaluated construction-related emissions associated with the trenching, grading, and vegetation clearing. As discussed in the IS/MND, the San Joaquin Valley Air Pollution Control District (S.J.V.A.P.C.D.) has published guidance on assessing construction projects to determine if they fall below the Small Project Analysis Level (SPAL) threshold (Marjollet & Barber 2012) of 18,000 horsepower hours (hp-hr) per day. The proposed Project refinements would generate approximately 11,818 hp-hr per day during pipeline installation and well construction, which is well below the SPAL threshold.

Daily emissions from Project refinement activities are expected to occur between March and June 2024. The proposed Project refinements would generate a small number of additional emissions from use of one excavator, one loader, one loader, one backhoe, one welding truck, one drill rig, one hoist crane, one water truck, and two pickup trucks: with up to 10 worker trips per day. The proposed Project refinements would require approximately 25 round trips to drop off all required materials and equipment to the Northern and Southern Project Areas. Additionally, proposed Project refinements would require 1,600 truck trips, or 10 trips per day, for workers commuting to the Northern and Southern Project Areas during construction. These additional emissions would not overlap daily emissions estimated for the Project evaluated in the IS/MND. Therefore, emissions estimated from the proposed Project refinements would be significantly lower than the threshold and would not substantially increase annual emissions. As mentioned in the IS/MND, the District would spray water to keep dust to minimal levels during construction. Therefore, this impact would remain less than significant.

The San Joaquin Valley Air Basin is currently designated as being in nonattainment for the Federal and State ambient air quality standards for ground-level ozone, particulate matter with aerodynamic diameter

less than 2.5 micrometers (PM_{2.5}), as well as State standards for particulate matter with aerodynamic diameter less than 10 micrometers (PM₁₀). Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. The Project would not exceed S.J.V.A.P.C.D.'s annual emissions thresholds and the proposed Project refinements, as discussed above, would not substantially contribute to a cumulatively considerable increase in annual emissions from the Project. Therefore, the Project in conjunction with the Project refinements, would not conflict with or obstruct implementation of applicable air quality plans because it would not violate any air quality standard or result in a cumulatively considerable net increase of any criteria pollutant. This impact would remain less than significant and no new additional mitigation measures would be required.

During construction, most of the particulate matter (PM), emissions are released in the form of fugitive dust during ground disturbance activities. PM emissions are also generated in the form of equipment exhaust and re-entrained road dust from vehicle travel. Impacts from PM emissions would be temporary and would go back to normal after completing the construction phase. Given the short-term emissions, distance from sensitive receptors impacts would be less than significant. Therefore, impact conclusions identified in the IS/MND remain the same, and no new mitigation measures have been identified.

3.3 Biological Resources

GEI Consultants, Inc. (GEI) reviewed the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2023) and the California Native Plant Society (CNPS) online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2023). These reviews were centered on the Pond United States Geological Survey (USGS) 7.5-minute quadrangle and included the eight surrounding quadrangles. Lists of resources under jurisdiction of the U.S. Fish and Wildlife Service (USFWS) that could occur on or near the Northern or Southern Project Areas were obtained from the Information for Planning and Conservation website (USFWS 2023). The species lists obtained from these reviews included six special-status plant taxa and six special-status wildlife taxa that were not evaluated in the IS/MND (special-status designation is based on categories defined in the IS/MND). These special-status taxa and their conservation status are listed below.

Plants

- Lost Hill's crownscale (Atriplex coronate var. vallicola; California Rare Plant Rank [CRPR] 1B.2–fairly endangered in California and elsewhere)
- Brittlescale (*Atriplex depressa*; CRPR 1B.2)
- Alkali mariposa-lily (Calochortus striatus; CRPR 1B.2)
- Slough thistle (Cirsium crassicaule; CRPR 1B.1–seriously endangered in California and elsewhere)
- Alkali-sink goldfields (*Lasthenia chrysantha*; CRPR 1B.1)
- Coulter's goldfields (Lasthenia glabrata ssp. coulteri; CRPR 1B.1)

Invertebrates

• Monarch butterfly (*Danaus plexippus*; candidate for Federal listing as threatened or endangered)

Reptiles

San Joaquin coachwhip (Masticophis flagellum ruddocki; California Species of Special Concern)

Birds

- California condor (*Gymnogyps californianus*; Federally listed as endangered)
- Le Conte's thrasher (*Toxostoma lecontei*; California Species of Special Concern)

Mammals

- San Joaquin antelope squirrel (*Ammospermophilus nelsoni*; State-listed as threatened)
- Buena Vista Lake ornate shrew (Sorex ornatus relictus; Federally listed as endangered)

A field survey of the Northern and Southern Project Areas and adjacent habitat was conducted by GEI biologist Hannah Dunn on April 27, 2023. The survey focused on evaluating potential for special-status species and other sensitive biological resources to occur on or adjacent to the Project Areas and be affected by Project refinement activities. The Project Areas are comprised of active agricultural lands and associated roads and canals. Therefore, they do not support any natural habitats (e.g., wetland, grassland, saltbush scrub) to which most of the special-status species listed above are restricted. Somewhat natural habitat in the Project vicinity is limited to the Poso Creek corridor south of the Northern Project Area. The creek corridor supports some native trees and shrubs but is degraded by human disturbance, such as off-road vehicle use, and is separated from the Northern Project Area by the 8-29 Canal. Habitat conditions where Project refinements would be constructed are consistent with those described in the IS/MND. The refinements would not impact any riparian vegetation or other sensitive natural community and would not substantially adversely affect the Lerdo Canal. They also would not substantially adversely affect fish or wildlife movement and would not conflict with any local ordinances protecting biological resources or provisions of a local, regional, or State conservation plan.

Based on observations made during the field survey, the Project Areas do not provide suitable habitat for any special-status plants, and the Project refinements would have no impact on special-status plants, consistent with findings in the IS/MND. Based on review of existing information and habitat conditions observed on and adjacent to the Project Areas, monarch butterfly and San Joaquin coachwhip are known from or have potential to occur in the Project vicinity. These special-status wildlife taxa are discussed further below. The remaining taxa not addressed in the IS/MND were determined to be very unlikely to occur on or adjacent to the Project Areas due to lack of suitable habitat or poor-quality habitat and lack of known occurrences from the Project vicinity. The Poso Creek corridor does not provide suitable habitat for Le Conte's thrasher, which occurs in native scrub habitats. No suitable nesting habitat for California condor occurs within 20 miles of the Project Areas, and condors are very unlikely to forage in the Project vicinity. Poso Creek provides poor-quality habitat for San Joaquin antelope squirrel, and occurrences in the Project region are limited to areas of remnant native scrub habitat more than 10 miles from the Project Areas. A population of Buena Vista Lake ornate shrew known from approximately 5 miles downstream in Poso Creek occurs where wetland habitat is interspersed along approximately 1 mile of the creek banks (USFWS 2020); the portion of the creek adjacent to the Northern Project Area does not support dense groundcover or moist soils required by the species. Therefore, these special-status wildlife taxa are very unlikely to occur on or adjacent to the Project Areas and would not be impacted by the proposed Project refinements.

Habitat along Poso Creek likely supports potential nectar plants for monarch butterfly but has low potential to support breeding host plants, and neither of the Project Areas supports nectar or breeding

plants. The nearest known occurrences of monarch butterfly are from the Kern National Wildlife Refuge, approximately 20 miles northwest of the Project Areas (Western Monarch and Milkweed Occurrence Database 2023). Because the proposed Project refinements would be constructed in areas that do not support suitable vegetation for monarch butterfly, the proposed refinements would have no impact on this species. Although San Joaquin coachwhip is primarily known from the western portion of the San Joaquin Valley and hills to the west, with very few documented occurrences in the southern San Joaquin Valley, an individual was recently documented along Poso Creek, approximately 1.5 miles upstream of the Northern Project Area (iNaturalist 2023). However, this snake occurs in grassland and saltbush scrub habitats and is unlikely to occur in agricultural lands adjacent to Poso Creek. Therefore, as discussed in the IS/MND for the other non-listed reptiles of concern, there is very low probability for very few, if any, individuals of San Joaquin coachwhip to be impacted by the project refinements, which would not have a substantial adverse effect on this taxon. Therefore, this potential impact would be less than significant, as concluded in the IS/MND for other reptilian California Species of Special Concern.

For the reasons discussed above, the proposed Project refinements would not result in new significant impacts or substantially more severe impacts on biological resources than those identified in IS/MND. Because the Project refinements represent a relatively small proportion of the overall Project components and associated areas of disturbance, the increase in the extent of impacts would be minor. Therefore, impact conclusions identified in the IS/MND would remain the same, and implementing Mitigation Measures BIO-1a, BIO-2a, and BIO-2b identified in the IS/MND would reduce potentially significant impacts to less than significant. However, portions of Mitigation Measure BIO-1 applicable to blunt-nosed leopard lizard (*Gambelia sila*) or Tipton kangaroo rat (*Dipodomys nitratoides*) are not required because the Project Areas do not provide suitable habitat for these taxa.

3.4 Cultural Resources

Additional investigations were conducted to determine if the proposed Project refinements might have an impact on cultural resources. The additional investigations included an updated records search and archaeological/built environment pedestrian survey. Background information on cultural resources in the Project vicinity is provided in the original IS/MND.

GEI archaeologist Amy Wolpert, M.A., submitted a records search request including the Project refinements and a surrounding 0.50-mile-radius at the Southern San Joaquin Valley Information Center (SSJVIC) on April 5, 2023, and an additional supplemental records search on May 5, 2023. The records searches included a review of SSJVIC's USGS 7.5-minute topographic base maps indicating previously conducted investigations and previously reported cultural resources, Department of Parks and Recreation 523 forms, and California Historic Landmarks documentation.

Responses from the SSJVIC were received on, April 24 and May 16, 2023 (Records Search File Nos.: 23-122 and 23-162) and stated that eight previous investigations had been conducted within a portion of the Project Areas. The results identified one previously identified built environment resource, the Calloway Canal (P-15-007233) in the Northern Project Area. The SSJVIC results also identified the Lerdo Canal (P-1513729) as being near but not within the Southern Project Area; this was likely due to a mapping error on the SSJVIC's part because they indicate the resource as a line with no width. The Southern Project

Area includes a small portion of the Lerdo Canal and is therefore being treated as identified by the records search. No archaeological resources within the Project Areas were identified.

A pedestrian survey of the Project Areas were conducted on April 27, 2023. Ground visibility in the Northern Project Area was between 95-100 percent. The linear survey centered on a heavily-trafficked canal road adjacent to orchards. Sediment was heavily disturbed in and around the Northern Project Area by canal road use, pump/well construction, and/or maintenance, agricultural, and recreational use. The canal road has deteriorated in some areas, likely due to recent winter weather, creating some sub-surface sediment visibility in portions of the Northern Project Area, which was examined closely. Sediments were largely sandy with no evidence of cultural material. The Southern Project Area is located between a private orchard field and the Lerdo Canal. Ground visibility in this area was between 95-100 percent. Sediments were heavily disturbed in and around the area by canal road use, pump/well construction, and/or maintenance, and agricultural use. Some animal burrowing was present near the pump/well station. No archaeological resources were identified.

The pedestrian survey did identify four additional built environmental resources: the 829 Canal, the 926 Canal, the 928 Canal, and the 930 Canal. This, including the previously identified Calloway and Lerdo Canals, brings the total of built environmental resources to six. The Calloway Canal was previously evaluated and recommended as not meeting National Register of Historic Places criteria. The State Historic Preservation Officer concurred with the finding (SHPO 1996). The Calloway Canal and remaining five resources were evaluated for California Register of Historic Resources eligibility for the proposed Project refinements. None of the resources identified within the Project areas meet the eligibility requirements and therefore, they are not considered historical resources for the purpose of CEQA. Therefore, impacts to historical resources would remain less than significant.

Although there were no archaeological or tribal cultural resources, or human remains identified within the Northern and Southern Project Areas, there nevertheless remains a small possibility of significant resources or human remains being inadvertently discovered during earthmoving activities. For the reasons discussed above, the proposed Project refinements would not result in new significant impacts or substantially more severe impacts on cultural resources than those identified in IS/MND. Therefore, impact conclusions identified in the IS/MND would remain the same and implementing Mitigation Measures CR-1 and CR-2 identified in the IS/MND would reduce potentially significant impacts to less than significant.

3.5 Energy

The proposed Project refinements would not result any changes to permanent energy use. Therefore, energy use from Project refinements would be limited to use of fuels for short-term, standard operation of construction equipment and vehicles. Emissions associated with use of fuels during construction are analyzed in Section 3.3, "Air Quality" and Section 3.8, "Greenhouse Gas Emissions" of this Addendum. Equipment and vehicle use would occur as specified in Chapter 2, "Project Refinements," of this Addendum, which is typical of similar earthmoving projects, and would be necessary to implement the proposed Project refinements. Due to the temporary nature of energy use during construction, this impact would be remain less than significant.

3.6 Geology and Soils

The proposed Project refinements would not result in new significant impacts or increase the severity of significant impacts previously identified in IS/MND Environmental Checklist Section 7, "Geology, Soils, and Seismicity" because excavation would occur in the same soil types and gravel material as previously analyzed (NRCS 2023). The Northern Project Area is located in the USGS Pond 7.5-minute quadrangle and is zoned as an area of required investigation by the California Geologic Survey's Alquist-Priolo Earthquake Fault Zone Map. This area includes the Poso Creek and Pond Faults (CGS 2023). The Poso Creek Fault (Class A, No. 381) is less than 1 mile from the Northern Project Area, within an unspecified slip rate category, and formed during undifferentiated Quaternary period (< 1.6 million years ago). The Pond Fault is classified as historic (< 150 years) and well constrained, located approximately 4 miles from the Northern Project Area. Damage from surface fault rupture is generally limited to a linear zone a few yards wide. Since the proposed Project refinements are not located on an active fault line, impacts would remain less than significant.

Potentially significant impacts were previously identified for construction-related soil erosion. As discussed in the IS/MND, the District would obtain a California State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) stormwater permit for general construction activity (Order 2009-0009-DWQ as amended by Order 2012-006-DWQ) and prepare a Stormwater Pollution Prevention Plan (SWPPP) to control runoff and erosion in compliance with State and local laws. Additionally, the proposed Project refinements must be constructed in accordance with the Kern County Grading Code (Kern County 2023a).

The Project Areas were previously analyzed for risk of soil erosion, landslides, and liquefaction and impacts from construction-related soil erosion, landslides, and liquefaction would remain less than significant. Previously identified mitigation measures for impacts on subsidence caused by groundwater pumping for return water would be implemented, including equipping monitoring wells with water-level sensors, and conducting subsidence monitoring surveys. Implementation of mitigation would reduce potential impacts of subsidence to less-than-significant levels. Furthermore, implementation of the proposed Project refinements would potentially discover unknown paleontological resources.

For the reasons discussed above, the proposed Project refinements would not result in new significant impacts or substantially more severe impacts on geology, soils, and paleontological resources than those identified in IS/MND. Therefore, impact conclusions identified in the IS/MND would remain the same and implementing Mitigation Measures GEO-1 through GEO-4 identified in the IS/MND would reduce potentially significant impacts to less than significant.

3.7 Greenhouse Gas Emissions

The proposed Project refinements would not result in new significant impacts or increase the severity of significant impacts previously identified in IS/MND Environmental Checklist Section 7, "Greenhouse Gas Emissions." As discussed in the IS/MND, implementing the proposed Project would generate temporary construction-related greenhouse gas (GHG) emissions. Construction emissions would be generated by vehicle engine exhaust from use of heavy-duty construction equipment, haul trips, and construction worker trips and would cease following construction of the proposed Project refinements. As

mentioned in the IS/MND, the San Joaquin Valley Air Pollution Control District (S.J.V.A.P.C.D.) has adopted the *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* (S.J.V.A.P.C.D. 2009). Projects complying with an approved GHG emission reduction plan or mitigation program would be determined to have a less than significant impact to atmospheric GHG levels. The District is in compliance with regulations that target the reduction of GHG emissions and regulations adopted by a public agency with jurisdiction.

The proposed Project refinements would generate a small number of additional emissions from use of one each - excavator, loader, backhoe, welding truck, dozer, drill rig, hoist crane, water truck, and pickup trucks. Since applicable significance thresholds require evaluating GHG emissions on an annual basis, emissions from Project construction to date, which occurred in a previous year, do not need to be considered with emissions from the proposed Project refinements. Additionally, since the Project is in compliance with regulations that target the reduction of GHG emissions, the proposed Project refinements would add a small number of new emissions, which are nominal and would not substantially increase annual emissions. Therefore, impacts associated with greenhouse gas emissions would remain less than significant.

3.8 Hazards and Hazardous Materials

The proposed Project refinements would not result in new significant impacts or increase the severity of significant impacts previously identified in the IS/MND Environmental Checklist Section 9, "Hazards and Hazardous Materials". Database searches were performed to confirm there are no hazardous waste sites in either Northern or Southern Project Areas. The database searches included all data sources included in the Cortese List (enumerated in PRC Section 65962.5). There were no hazardous materials sites identified within 0.25 mile of the Project Areas (DTSC 2023a and 2023b, State Water Board 2023a and 2023b, CalEPA 2022). All other hazards discussed in the IS/MND were analyzed and determined to have no additional impact including wildfire severity (CAL FIRE 2022), risks associated with proximity to school, and likelihood of containing asbestos (D.O.C. 2000). Therefore, this impact would remain less than significant. As discussed in the IS/MND, District has adopted a SWPPP to prevent and control pollution, and to minimize and control runoff and erosion in compliance with State and local laws. The SWPPP includes construction techniques and best management practices (BMPs), as appropriate to reduce the potential for runoff and exposure to hazardous materials. Therefore, with continued implementation of the SWPPP, construction and ongoing maintenance of the proposed Project refinements would remain less than significant.

3.9 Hydrology and Water Quality

The proposed Project refinements would not result in new significant impacts or increase the severity of significant impacts previously identified in IS/MND Environmental Checklist Section 10, "Hydrology and Water Quality". During construction, the District would employ standard measures to control erosion and sediment and to protect water quality during construction as required by Kern County's Grading Code which includes construction standards and *BMPs for Erosion and Sediment Control* (Kern County 2023a). Project refinements would not alter a stream or river, create runoff or add sources of polluted runoff as the pipelines would be buried underground. The Project refinements would not increase the risk of flooding and inundation and would not expose people or structures to a risk of loss. Implementation of

BMPs outlined in the NPDES permit, which were previously adopted and incorporated into the Project, would reduce all potentially significant impacts from construction-related soil erosion to a less-than-significant level.

3.10 Land Use and Planning

The proposed Project refinements would not result in new significant impacts or increase the severity of significant impacts previously identified in IS/MND Environmental Checklist Section 11, "Land Use and Planning." The proposed Project refinements in the Northern and Southern Project Areas would be implemented along existing farm roads in areas zoned as exclusive agriculture (Kern County GIS 2023). The proposed Project refinements would not impact agricultural production and would not inhibit future use of the land. Therefore, consistent with the Project IS/MND, there would be no impact to land use and planning.

3.11 Noise

The proposed Project refinements in both Northern and Southern Project Areas would not result in new significant impacts or increase the severity of significant impacts previously identified in IS/MND Environmental Checklist Section 13, "Noise." Construction noise impacts typically occur when construction activities take place during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), when construction activities occur immediately adjacent to noise sensitive land uses, or when construction durations last over extended periods of time. Similar to impacts discussed in the IS/MND, the proposed Project refinements would generate construction noise from equipment operations. The Project refinements would involve only temporary and short-term construction activities and would not introduce permanent sources of noise. The proposed Project refinements would not generate operational noise beyond what was described in the IS/MND. Since the proposed Project refinements would take approximately 8 months to complete, they do not represent a significant increase in the duration that sensitive receptors could be exposed to additional noise from operating equipment.

The Kern County Code of Ordinances (Kern County 2023b) prohibits construction related noise between the hours of 9:00 p.m. to 6:00 a.m. on weekdays and 9:00 p.m. to 8:00 a.m. on weekends. All equipment operation associated with the proposed Project refinements would occur only within the hours specified in Kern County's Code of Ordinances. Therefore, the proposed Project refinements would not violate Kern County's construction noise standards and this impact would remain less than significant.

3.12 Tribal Cultural Resources

No Tribes have contacted the District specifying that they wish to participate in AB 52 consultation and therefore no letters could be sent. On April 5, 2023 GEI archaeologist Amy Wolpert contacted the Native American Heritage Commission (NAHC) requesting a search of their Sacred Land File (SLF) within Project Areas and vicinity (SLF searches are not limited to Project boundaries). The NAHC responded on May 17, 2023 and stated that a search of the SLF had negative results.

There are no known Tribal Cultural Resources within the Northern and Southern Project Areas. As discussed in the IS/MND, there is an unlikely possibility that Tribal Cultural Resources might be identified

same and implementing Mitigation	refore, impact conclusions identified in Measure CR-1 identified in the all resources to less than significant.	IS/MND would reduce potentially

4. Conclusions

As described in the preceding sections, this Addendum to the MND adopted in 2022, analyzes the following proposed refinements to the Project:

- Replacement of three District wells
- Installation of two segments of pipeline, totaling 1.31 miles
- Installation of one discharge outfall to the Lerdo Canal

Based on the analysis and substantial evidence in Chapter 3, "Environmental Analysis," the proposed Project refinements described in this Addendum would not result in any of the conditions described in Section 15162 of the CEQA Guidelines calling for preparation of a Subsequent EIR, ND, or MND. In summary, the proposed Project refinements:

- Would not result in any new significant environmental effects
- Would not substantially increase the severity of previously identified significant effects
- Would not result in mitigation measures or alternatives previously found to be infeasible becoming feasible
- Would not result in availability/implementation of mitigation measures or alternatives that are considerably different from those analyzed in the previous document that would substantially reduce one or more significant effects on the physical environment.

These conclusions confirm that a subsequent MND is not required and this Addendum to the MND adopted in 2022, is the appropriate CEQA document under CEQA Guidelines Section 15164 to evaluate the Project refinements and resulting environmental impacts thereof. This Addendum is added to the administrative record for the Project. No changes are needed to the MND or MMRP adopted in 2022.

5. Literature Cited

- California Department of Fish and Wildlife (CDFW). 2023. Results of electronic database search for sensitive species occurrences. RareFind 5. Biogeographic Data Branch. Available: https://wildlife.ca.gov/Data/CNDDB. Accessed: April 18, 2023.
- California Native Plant Society (CNPS). 2023. Rare Plant Inventory (online edition, v9.5). Available: http://www.rareplants.cnps.org. Accessed: May 4, 2023.
- California Department of Toxic Substances Control. (DTSC) 2023a. *Envirostor Hazardous Waste and Substances Site List (Cortese)*. Available: https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_typ e=CSITES,OPEN,FUDS,CLOSE&status=ACT,BKLG,COM,COLUR&reporttitle=HAZARDO US+WASTE+AND+SUBSTANCES+SITE+LIST+(CORTESE). Accessed: July 2023.
- _____. 2023b. *Cortese List: Section 65962.5(a)*. Available: https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/. Accessed: July 2023.
- California Environmental Protection Agency (CalEPA). 2023. Sites Identified with Waste Constituents Above Hazardous Waste Levels Outside the Waste Management Unit. Available: https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/SiteCleanup-CorteseList-CurrentList.pdf. Accessed: July 2023.
- CAL FIRE. 2023. Kern County State Responsibility Area Fire Hazard Severity Zones. Available: https://osfm.fire.ca.gov/media/cahjoylh/fhsz_county_sra_11x17_2022_kern_2.pdf. Accessed: July 2023.
- California State Water Resources Control Board. 2021a. *GeoTracker Database*. Available: https://geotracker.waterboards.ca.gov/map/?global_id=T0601700073. Accessed: July 2023.
- iNaturalist. 2023. Special-status species observations in project vicinity. Available: https://www.inaturalist.org/observations. Accessed July 21, 2023.
- Kern County. 2023a. Code of Ordinances Grading Code Chapter 17.28. https://kernpublicworks.com/building-and-code/engineering/grading/. Accessed June 2023.
- _____. 2023b. Code of Ordinances Noise Control Chapter 8.36. https://library.municode.com/ca/kern_county/codes/code_of_ordinances?nodeId=TIT8HESA_C H8.36NOCO. Accessed June 2023.

- Kern County GIS. 2023. Interactive Map Viewer, Zoning and Williamson Act Contract Layers. Available: https://maps.kerncounty.com/H5/index.html?viewer=KCPublic. Accessed: June 2023.
- Marjollet, A., & Barber, D. (2012). Small Project Analysis Levels for Ambient Air Quality Analysis -Combustion Exhaust Emissions [Government FYI]. San Joaquin Valley Unified Air Pollution http://www.valleyair.org/transportation/CEOA%20Rules/Small-Project-Control Analysis-Levels-for-Ambient-Air-Quality-Analysis-Combust.pdf. Accessed: July 2023.
- San Joaquin Valley Air Pollution Control District (S.J.V.A.P.C.D.). 2009. Guidance for Valley Land-use Agencies in Addressing GHG Emissions Impacts for New Projects under CEQA. Available: http://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf Accessed: June 2023.
- State Historic Preservation Officer. (SHPO) 1996. Letter to Bryan Apper, AICP; Chief, Environmental Management Planning Division, Department of Transportation. From State Historic Preservation Office, re: Determination of Eligibility for the Stine and Calloway Canals, Bakersfield, Kern County. May 24, 1996.
- United States Fish and Wildlife Service (USFWS). 2023. IPaC Resource List. Generated at https://ecos.fws.gov/ipac/ on May 1, 2023.
- 2020. Buena Vista Lake Ornate Shrew Species Status Assessment. Region 10, Sacramento, CA. Available: https://ecos.fws.gov/ecp/.
- Western Monarch and Milkweed Occurrence Database. 2023. Data accessed from the Western Monarch Milkweed Mapper, a project by the Xerces Society, U.S. Fish and Wildlife Service, Idaho Department of Fish and Game, and Washington Department of Fish and Wildlife. Available: www.monarchmilkweedmapper.org. Accessed: July 21, 2023.