Initial Study/Mitigation Negative Declaration

El Dorado Irrigation District
Solar Panel Installation at the
Deer Creek Wastewater Treatment Plant

Prepared for:

El Dorado Irrigation District

May 2019

Prepared by:

AECOM

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Prepared for:

El Dorado Irrigation District
2890 Mosquito Road
Placerville, CA 95667

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ACRONYMS AND OTHER ABBREVIATIONS

AB	Assembly Bill
ac	alternative current
AQAPs	air quality attainment plans
AQMPs	air quality management plans
ARB	California Air Resources Board
B.P.	Before Present
BMP	Best Management Practice
ca.	circa
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGS	California Geological Survey
CH_4	methane
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	Carbon dioxide equivalents
Cortese list	DTSC's Hazardous Waste and Substance Site list
CRPR	California Rare Plant Rank
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibels
dc	direct current
DCWWTP	Deer Creek Wastewater Treatment Plant
diesel PM	diesel particulate matter
DOC	California Department of Conservation
DTSC	California Department of Toxic Substances Control
E. coli	Escherichia coli
EDCAPCD	El Dorado County Air Pollution Control District
EDCAQMD	El Dorado County Air Quality Management District
EID	El Dorado Irrigation District
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
FTA	Federal Transit Administration
g	percentage of gravity
GHGs	greenhouse gases
GLO	General Land Office
Guide	El Dorado County Air Pollution Control District Guide to Air Quality Assessment
GWh	gigawatt hours

GWP	Global warming potential
IS	Initial Study
ITE	Institute of Transportation Engineers
kV	kilovolt
kW	kilowatt
L_{eq}	hourly average noise level
L_{max}	maximum level
LOS	level of service
M.D.B.&M	Mount Diablo Base and Meridian
MBTA	Migratory Bird Treaty Act
MCAB	Mountain Counties Air Basin
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MT	metric tons
MW	megawatt
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO_2	nitrogen dioxide
NOA	naturally occurring asbestos
NOI	Notice of Intent
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
	U.S. Natural Resources Conservation Service
OES	Office of Emergency Services
PG&E	Pacific Gas & Electric Company
PGA	Peak horizontal ground acceleration
PM	particulate matter
PM_{10}	PM equal to or less than 10 micrometers in diameter
$PM_{2.5}$	PM equal to or less than 2.5 micrometers in diameter
PPV	peak particle velocity
PRC	California Public Resources Code
PV	photovoltaic
ROG	reactive organic gases
SACOG	Sacramento Area Council of Governments
SCAQMD	South Coast Air Quality Management District
SIP	state implementation plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board
SO_2	sulfur dioxide
SRA	State Responsibility Areas
SSURGO	Soil Survey Geographic Database
SWPPP	Storm Water Pollution Prevention Plan

TACs	toxic air contaminants
TMDL	total maximum daily loads
US 50	U.S. Route 50
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geologic Survey
VdB	velocity decibels
WWTP	wastewater treatment plant

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El Dorado Irrigation District

NOTICE OF INTENT
TO ADOPT A MITIGATED NEGATIVE DECLARATION
(Pursuant to CEQA Section 21092 and CEQA Guidelines Section 15072)
NOTICE OF PUBLIC HEARING
for the
DEER CREEK WASTEWATER TREATMENT PLANT SOLAR PROJECT

The El Dorado Irrigation District (EID) proposes to adopt a Mitigated Negative Declaration (MND) pursuant to the California Environmental Quality Act (Section 15000 et seq., Title 14, California Code of Regulations) for the Deer Creek Wastewater Treatment Plant Solar Project (proposed project).The proposed project involves installation of additional Photovoltaic (PV) solar panels capable of producing electric energy at the existing Deer Creek Wastewater Treatment Plant (DCWWTP).

The proposed solar PV project consists of constructing 2,393 kilowatt (kW) direct current (dc) solar arrays and associated electrical equipment (i.e., inverters, transformers, switchgear, system disconnects, and service meters) at the DCWWTP site. The new solar PV arrays would occupy about 8.5 acres within the boundary of the DCWWTP site. Construction staging areas for equipment storage, material delivery, and employee vehicles would be contained entirely on the waste water treatment plant site. Project construction is anticipated to take approximately 7 to 9 months. The project site is not identified on the lists specified in Government Code section 65962.5. EID is the lead agency under the California Environmental Quality Act (CEQA) for the Project and has directed the preparation of an Initial Study (IS) on the proposed project in accordance with the requirements of CEQA, the State CEQA Guidelines, and EID's guidelines. The IS describes the proposed project and assesses the proposed project's potentially significant adverse impacts on the physical environment. It concludes that the proposed project's potentially significant or significant adverse effects on the environment could be mitigated to less-than-significant levels; therefore, a proposed Mitigated Negative Declaration (MND) has been prepared.

Agencies and members of the public are invited to comment on the proposed IS/MND. The comment period is from May 13, 2019 to June 11, 2019. The proposed IS/MND can be reviewed at EID's Customer Service Building, 2890 Mosquito Road, Placerville, CA 95667 or on the EID web site at www.eid.org/ceqa. Comments must be received by 5:00 p.m. on June 11, 2019. Comments can be sent to Michael C. Baron, Environmental Review Analyst, El Dorado Irrigation District, at the address above or by email at mbaron@eid.org. EID will hold a public hearing to consider the IS/MND on June 24, 2019 at 9:00 a.m. during a regularly scheduled meeting of the EID Board of Directors. The hearing will be in the EID Customer Service Building Board Room at the above address.

In accordance with the Americans with Disabilities Act (ADA) and California law, it is the policy of the El Dorado Irrigation District to offer its public programs, services and meetings in a manner that is readily accessible to everyone, including individuals with disabilities. If you are a person with a disability and require information or materials in an appropriate alternative format; or if you require any other accommodation for this meeting, please contact the EID ADA coordinator at 530.642.4045 or email at adacoordinator@eid.org at least 72 hours prior to the meeting. Advance notification within this guideline will enable the District to make reasonable accommodations to ensure accessibility.

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1 INTRODUCTION

1.1 BACKGROUND

The El Dorado Irrigation District (EID) is proposing to install solar photovoltaic (PV) arrays at its existing Deer Creek Wastewater Treatment Plant (DCWWTP). These solar PV arrays would produce electric power to offset the cost of power required to operate the wastewater treatment plant (WWTP).

As Lead Agency, in accordance with the California Environmental Quality Act (CEQA), EID has prepared this Initial Study (IS) to support the findings and conclusions of the Mitigated Negative Declaration (MND) prepared for this project.

1.2 PURPOSE OF THE INITIAL STUDY

This document is an IS, prepared in accordance with CEQA (Public Resources Code [PRC], Section 21000 et seq.) and the CEQA Guidelines (Title 14, Section 15000 et seq. of the California Code of Regulations). The purpose of this IS is to (1) determine whether project implementation would result in potentially significant or significant effects on the environment; and (2) incorporate environmental commitments into the project design, and propose feasible mitigation measures, as necessary, to eliminate the project's potentially significant or significant project effects, or reduce them to a less than significant level.

An IS presents environmental analysis and substantial evidence in support of its conclusions regarding the significance of environmental impacts. Substantial evidence may include expert opinion based on facts, technical studies, or reasonable assumptions based on facts. An IS is neither intended nor required to include the level of detail provided in an Environmental Impact Report (EIR).

CEQA requires that State and local government agencies consider the environmental consequences of projects that they propose to carry out or over which they have discretionary authority, before implementing or approving those projects. The public agency that has the principal responsibility for carrying out or approving a project is the lead agency for CEQA compliance (CEQA Guidelines Section 15367). EID has principal responsibility for carrying out the proposed project, and EID is the CEQA lead agency for this IS.

EID has prepared this IS to evaluate the potential environmental effects of the proposed project, and has incorporated mitigation measures to reduce or eliminate potentially significant project-related impacts. Therefore, an MND has been prepared for this project.

1.3 SUMMARY OF FINDINGS

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the proposed project. The analysis determined that the proposed project would result in no impacts related to:

- Aesthetics
- Agriculture and Forestry Resources
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services

- Recreation
- Tribal Cultural Resources

Impacts of the proposed project were determined to be less than significant for the following topics:

- Energy
- Greenhouse Gas Emissions
- Noise
- Utilities and Services

The proposed project would result in less than significant impacts *with* mitigation on the following issue areas:

- Air Quality
- Cultural Resources
- Biology
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Transportation/Traffic
- Wildfire

1.4 DOCUMENT ORGANIZATION

This document is divided into the following sections:

Notice of Intent to Consider Adoption of a Proposed MND and Notice of Public Hearing. The notice of intent to consider adoption of a proposed MND provides notice to responsible and trustee agencies, interested parties, and organizations of the availability of this IS and notice of the public hearing.

Mitigated Negative Declaration. The MND, which precedes the IS analysis, summarizes the environmental conclusions and identifies mitigation measures that would be implemented in conjunction with the proposed project.

Chapter 1, "Introduction." This chapter briefly summarizes the proposed project and describes the purpose of the IS/MND, summarizes findings, and describes the organization of this IS/MND.

Chapter 2, "Project Description." This chapter describes the purpose of and need for the proposed project, general background, and project elements.

Chapter 3, "Environmental Checklist." This chapter presents an analysis of environmental issues identified in the CEQA environmental checklist and determines whether project implementation would result in a beneficial impact, no impact, a less than significant impact, a less than significant impact with mitigation incorporated, a potentially significant impact, or a significant impact on the environment in each issue area. Should any impacts be determined to be potentially significant or significant, an EIR would be required. For this project, however, mitigation measures have been incorporated, as needed, to reduce all potentially significant and significant impacts to a less than significant level.

Chapter 4, "References." This chapter lists the references used in preparation of this IS/MND.

Chapter 5, "Report Preparers." This chapter identifies report preparers.

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2 PROJECT DESCRIPTION

2.1 PROJECT PURPOSE AND OBJECTIVES

EID is proposing to install solar photovoltaic (PV) arrays, capable of producing electric energy at the Deer Creek Wastewater Treatment Plant (DCWWTP). The solar PV arrays would be managed and maintained by a third-party power provider that would provide power to EID at a fixed, reduced rate.

The purpose of the proposed project is to install renewable energy that would be produced by the solar PV arrays, to offset consumed conventional power produced by the regional electric utility supplier, Pacific Gas & Electric Company (PG&E), reduce utility billing costs, and provide long-term energy cost savings for operation of the DCWWTP.

2.2 LOCATION

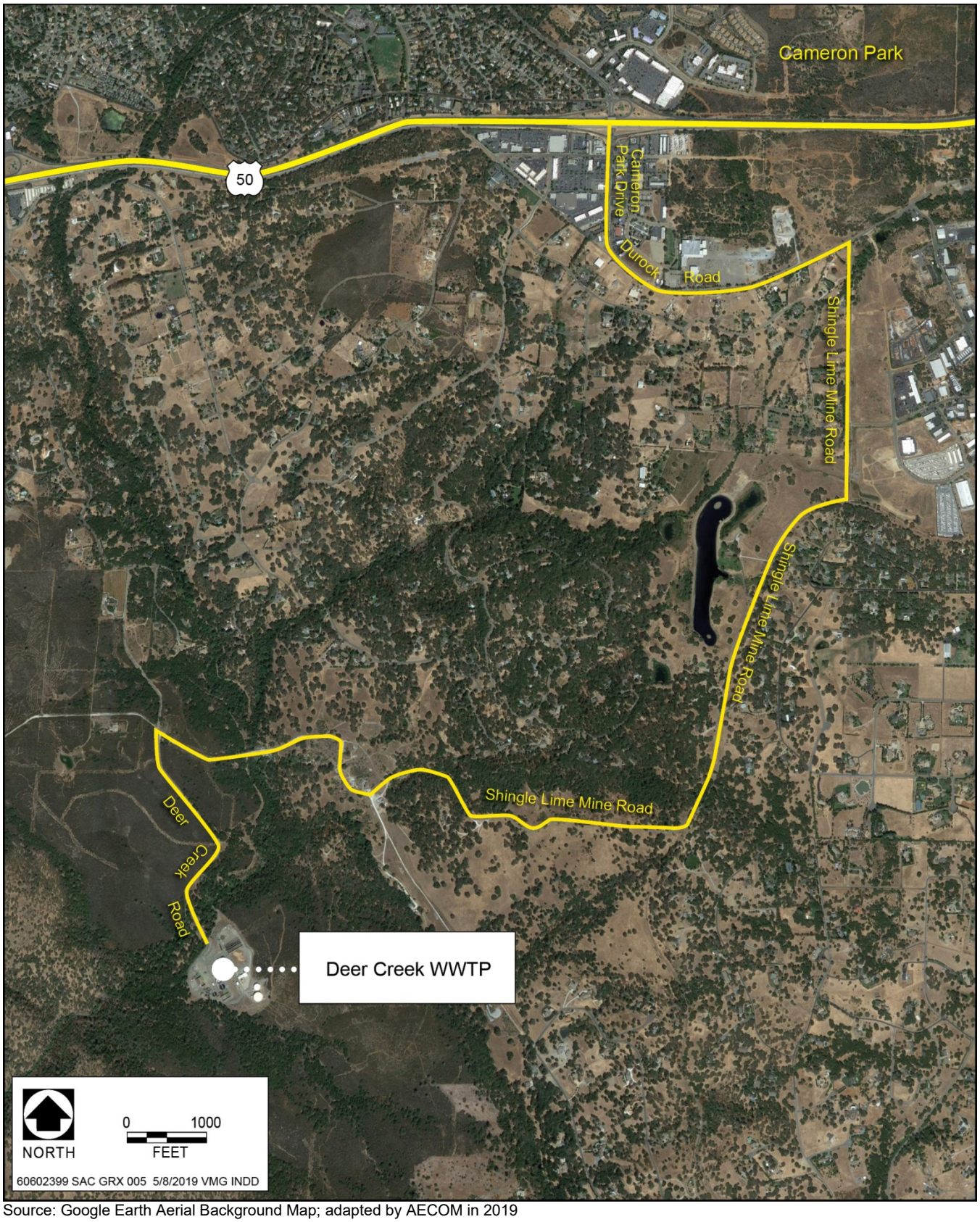
The DCWWTP is located in an unincorporated area of El Dorado County. The project area is about 2 miles south of U.S. Route 50 (US 50) and about 3.8 miles east of El Dorado Hills (Figure 2.1-1). Roadway access from U.S. Highway 50 to the DCWWTP is via Cameron Park Drive, Durock Road, Shingle Lime Mine Road, and Deer Creek Road. The project area is in Township 9 north, Range 9 east, Sections 15 and 22 Mount Diablo Base and Meridian (M.D.B.&M), as shown on the U.S. Geological Survey 7.5 minute Shingle Springs quadrangle.

2.3 PROPOSED SOLAR PV SYSTEM DESCRIPTION

The proposed project would consist of constructing 2,393 kilowatt (kW) direct current (dc) solar PV arrays and associated electrical equipment (i.e., inverters, transformers, switchgear, system disconnects, and service meters). The new solar PV system would be located on the east side of the DCWWTP site. A total of 28 solar PV arrays, of various lengths, would be installed. The new solar PV arrays would occupy about 8.5 acres of vacant land within the boundary of the DCWWTP site. Construction staging areas for equipment storage, material delivery, and project personnel vehicles would be contained entirely on the WWTP site. An existing dirt road would be improved to provide year-round access for installation and maintenance of the solar PV arrays. Figure 2.1-2 shows the proposed layout of the 28 solar PV arrays on the WWTP site.

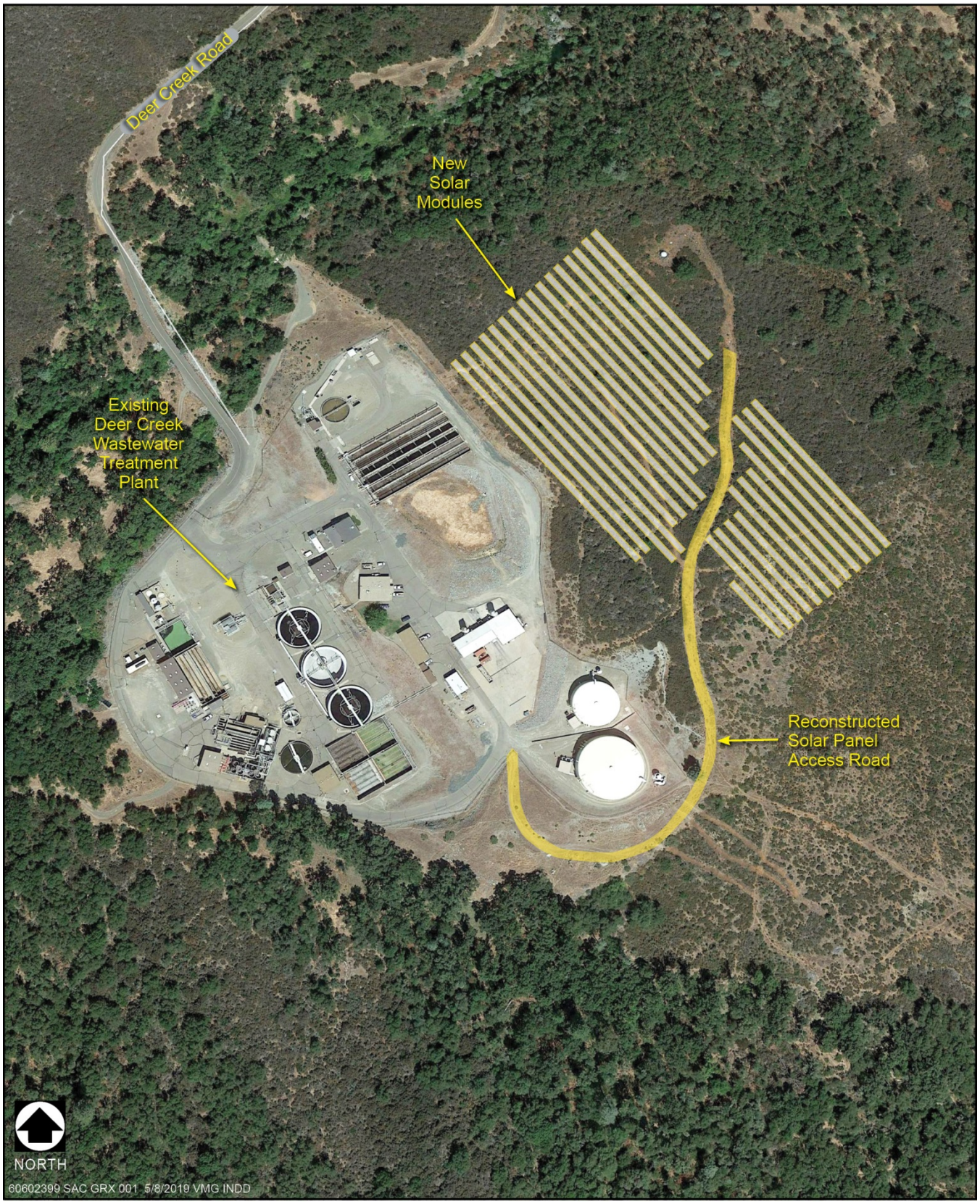
The solar PV arrays layout would consist of two separate groups of ground-mounted, fixed-tilt racking systems, configured in rows facing southwest at an azimuth of 229 degrees, and installed north and south of the existing solar PV system. The solar panels would be attached to the racking structures with a 25 degree tilt facing southwest. The height of the installed panels would range from 2 feet at the lower edge of the titled rows to about 7 feet at the higher rear edge of the array. The solar panels would consist of 370-watt high-efficiency modules with integrated anti-reflective coating. Figure 2.1-3 shows a typical solar module, consisting of an angled solar panel mounted on legs that elevate it above the ground surface. Crushed gravel would be placed around each array, to control weed growth, reduce fire hazards, and provide ease of access to the modules by maintenance crews and vehicles.

The solar PV system would have an estimated 2.39-megawatt (MW)-rated capacity, capable of generating about 6.9 gigawatt-hours (GWh) annually. This energy production estimate assumes an average 8 hours of energy generation over 365 days per year.



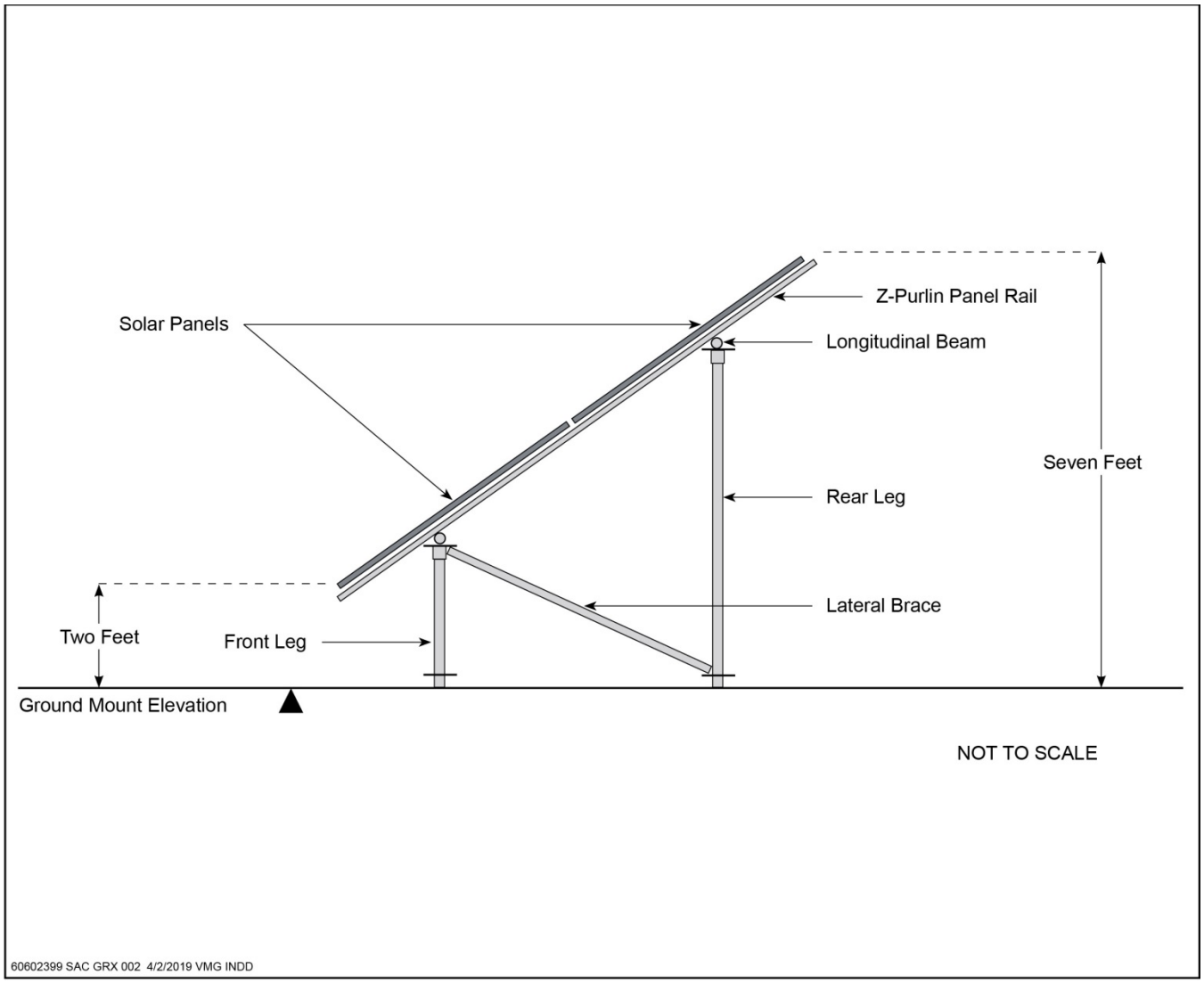
Source: Google Earth Aerial Background Map; adapted by AECOM in 2019

Figure 2.1-1. Project Location Map



Source: Borrego Solar 2018; adapted by AECOM in 2019

Figure 2.1-2. Project Layout



Source: Borrego Solar 2018; adapted by AECOM in 2019

Figure 2.1-3. Typical Solar Module

The wired connection between the solar PV arrays and the designated point of interconnection (southwest of the WWTP) would consist of a 12-kilovolt (kV) alternative current (ac) electrical line, to be routed underground. PG&E would perform minor upgrades to its existing 21-kV distribution system, to facilitate the interconnection.

2.4 CONSTRUCTION METHODS

Site preparations would consist of minor grubbing and grading in the areas where the arrays are to be installed, with minimal change in slope, and all existing drainages would be maintained. The solar PV array racking systems would be secured with in-ground steel posts that would be driven into the ground (if soil conditions permit) or cast in place using concrete foundations.

During grading and soil disturbance (trenching) activities, one grader, one loader, one backhoe, and one 10-yard dump truck would be used to achieve the desired grade of the project site and transport the spoils locally. During the concrete pouring, approximately four concrete trucks would transport the concrete to the project site.

During equipment installation, one to two flatbed semi-trucks would transport the solar panel modules to the project site. A water truck also would be used during each of these phases, to control dust emissions. During the remainder of the project, a limited amount of light duty trucks would be used by construction personnel. Construction staging areas for equipment, material delivery, and employee vehicles would be contained entirely on site.

Solar PV array construction personnel and equipment would access the DCWWTP from U.S. Highway 50 at Cameron Park via Cameron Park Drive, Durock Road, Shingle Lime Mine Road, and Deer Creek Road. Figure 2.1-1 shows the proposed access route in relation to local features.

2.5 CONSTRUCTION SCHEDULE

The project construction phase is expected to begin in July 2019 and last approximately 7 to 9 months, with completion and operations start-up planned to occur in early 2020.

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3 INITIAL STUDY CHECKLIST

PROJECT INFORMATION

1. Project Title: Deer Creek Wastewater Treatment Plant Solar Project

2. Lead Agency Name and Address: El Dorado Irrigation District
   2890 Mosquito Road
   Placerville, CA 95667

3. Contact Person and Phone Number: Michael Baron (530) 642-4188

4. Project Location: Township 9 north, Range 9 east, Sections 15 and 22 Mount Diablo Base and Meridian (M.D.B.&M),

5. Project Sponsor's Name and Address: El Dorado Irrigation District
   2890 Mosquito Road
   Placerville, CA 95667

6. General Plan Designation: Public Facilities

7. Zoning: Open Space

8. Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)
   EID is proposing to install solar (PV) arrays, capable of producing electric energy at the Deer Creek Wastewater Treatment Plant (DCWWTP). The solar PV arrays would be managed and maintained by a third-party power provider that would provide power to EID at a fixed, reduced rate.

9. Surrounding Land Uses and Setting:
   (Briefly describe the project's surroundings)
   The County General Plan designates adjacent property land use to the north as Rural Residential, to the east as Open Space, and to the west and south as Low Density Residential. Surrounding land use consists primarily of open space, with some rural residential to the north and east. Deer Creek, a tributary to the Cosumnes River, is located to the northwest of the project site, approximately 0.1 mile down slope from the northern end, and flows from the northeast to the southwest.

10. Other public agencies whose approval is required:
    (e.g., permits, financing approval, or participation agreement)
    None.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture & Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology/Soils	☐ Greenhouse Gas Emissions	☒ Hazards and Hazardous Materials
☒ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☒ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☒ I find that although the proposed project COULD have a significant effect on the environment, there WILL NOT be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	05/10/2019 Date
Michael C. Baron Printed Name	Environmental Review Analyst Title
El Dorado Irrigation District Agency	

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

3.1 AESTHETICS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Aesthetics. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

3.1.1 ENVIRONMENTAL SETTING

The DCWWTP is approximately 2 miles south of US 50 and the Cameron Park community. The DCWWTP is situated in a small valley, composed of natural vegetation and rolling hills. The DCWWTP is at the end of Deer Creek Road in a rural and secluded area. The new solar PV system would be installed on the eastern portion of the DCWWTP property, on approximately 8.5 acres of currently undeveloped hillsides that slope southwest from the DCWWTP's northern and eastern boundaries. The DCWWTP and proposed project are located on lands owned by EID.

The general viewshed from the DCWWTP includes rolling hills, oak trees, and nearby ridgelines. The area around the DCWWTP is rural with few homes, none of which are visible from the DCWWTP. Views of the new solar PV arrays would be screened by the surrounding rolling hills and vegetation.

3.1.2 DISCUSSION

a) Have a substantial adverse effect on a scenic vista?

No scenic vistas are on the project site. No impact would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The nearest designated scenic highway, US 50, which extends from Placerville to Echo Summit, is approximately 2 miles north of the project site. No scenic resources are on the project site. No impact would occur.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The project site is in a non-urbanized area. The DCWWTP is an industrial-type facility, consisting of wastewater treatment, storage, and disposal structures and equipment. The new solar PV system would be consistent with the existing wastewater treatment plant materials and equipment. The undeveloped land surrounding the project site consists of rural-residential, low density residential, and open space designations. Limited vantage points exist from the small residential roads that allow publicly accessible views of the DCWWTP site. The existing visual character of the oak woodland and rolling foothills surrounding of the project site would not be affected by the proposed project. No impact would occur.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The El Dorado County General Plan has a policy directed to reduce high-intensity nighttime lighting and glare (Policy 2.8.1.1). The policy states that development shall limit excess nighttime light and glare, using design features such as directional shielding or automatic shutoffs and motions sensors. The proposed project would not add any source of nighttime lighting. No impact would occur.

3.2 AGRICULTURE AND FORESTRY RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. Agriculture and Forestry Resources. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

3.2.1 ENVIRONMENTAL SETTING

The proposed project would be installed east of the existing WWTP site. Vegetation on the site consists of various evergreen brush species, including manzanita (*Arctostaphylos* sp.) and chamise (*Adenostoma* sp.). These plants compose an impenetrable barrier throughout most of the project site.

No active agricultural land uses are within or adjacent to the project site. There are no trees with commercial value on the proposed project site. The project site and surrounding area are not zoned for agricultural uses (see Section 3.11, "Land Use and Planning," for further discussion).

The California Department of Conservation's (DOC) Important Farmland classifications—Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance—recognize a land's suitability for agricultural production by considering the physical and chemical characteristics of the soil, such as soil temperature range, depth of the groundwater table, flooding potential, rock fragment content, and rooting depth. The classifications also consider location, growing season, and moisture available to sustain high-yield crops. Together, Important Farmland and Grazing Land are defined by the DOC as "Agricultural Land" (Sections 21060.1 and 21095 of the California Public Resources Code).

Appendix G of the State CEQA Guidelines focuses analysis on conversion of agricultural land on Prime Farmland, Farmland of Statewide Importance, or Unique Farmland; therefore, any conversion of these lands would be considered a significant impact under CEQA. According to the El Dorado County Important Farmland map, published by the DOC's Division of Land Resource Protection (DOC 2016a), the project site and adjacent lands are designated as "Other Land," which is defined as land not included in any other mapping category. "Other Land" consists of miscellaneous uses, such as low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; and water bodies smaller than 40 acres (DOC 2016a). The DOC does not consider "Other Land" to be Important Farmland.

Under the California Land Conservation Act of 1965, also known as the Williamson Act, local governments can enter into contracts with private property owners to protect land (within agricultural preserves) for agricultural and open space purposes. Scattered areas of Williamson Act contract lands are in the southwestern and central parts of the county. No parcels within or adjacent to the project site are under Williamson Act contracts (DOC 2016b).

3.2.2 DISCUSSION

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

As discussed previously, the project site and surrounding areas are designated by the El Dorado County Important Farmland map as Other Land (DOC 2016a). Other Land is not considered Important Farmland under CEQA (Sections 21060.1 and 21095 of the Public Resources Code and Appendix G of the State CEQA Guidelines). Therefore, the conversion of this land would not be considered a significant impact under the State CEQA Guidelines. No impact would occur.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

The project site and surrounding area are not zoned for agricultural uses. No parcels within or adjacent to the site are under Williamson Act contracts (DOC 2016b). Therefore, the proposed project would not conflict with existing zoning for agricultural uses or a Williamson Act contract. No impact would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code

section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

The project site is not zoned as forestland, timberland, or a Timberland Production Zone. Therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of forestry resources. No impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

The project site does not contain 10 percent native tree cover that would be classified as forestland under Section 12220(g) of the Public Resources Code. Therefore, implementation of the proposed project would not result in conversion of forest land to non-forest use. No impact would occur.

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

See responses to items a) and d) above. Because no agricultural land uses or forestland occur within or adjacent to the project site, implementation of the proposed project would not result in other changes in the physical environment that would cause the conversion of agricultural land, including Important Farmland, to nonagricultural uses or cause conversion of forestland to non-forest uses. No impact would occur.

3.3 AIR QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. Air Quality.				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 ENVIRONMENTAL SETTING

The project site is in the Mountain Counties Air Basin (MCAB). The MCAB lies along the northern Sierra Nevada, close to or contiguous with the Nevada border, and covers an area of roughly 11,000 square miles. El Dorado County has a hilly and mountainous terrain that affects airflow patterns throughout the county. These mountain and hill formations direct surface air flows, cause shallow vertical mixing, and create areas of high pollutant concentrations by hindering dispersion. Because of their proximity to the Sacramento Valley, the MCAB and El Dorado County are prone to receiving pollutant transport from more populated and traffic-heavy areas.

Various air pollutants may adversely affect human or animal health, reduce visibility, damage property, and reduce the productivity or vigor of crops and natural vegetation. Criteria air pollutants have been identified by the U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (ARB) as being of concern, both on a nationwide and statewide level. These include: ozone; carbon monoxide (CO); nitrogen dioxide (NO_2); sulfur dioxide (SO_2); lead; and particulate matter (PM). PM is subdivided into two classes, based on particle size: PM equal to or less than 10 micrometers in diameter (PM_{10}) and PM equal to or less than 2.5 micrometers in diameter ($PM_{2.5}$).

In addition to criteria air pollutants, EPA and ARB regulate toxic air contaminants (TACs), also known as hazardous air pollutants. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health.

Serpentine is a mineral commonly found in seismically active regions of California, usually in association with ultramafic rocks and along associated faults. Certain types of serpentine occur naturally in a fibrous form, generically known as asbestos. The project site is in geologic material composed of serpentine rock, in an area that has been identified as likely to contain naturally occurring asbestos (NOA) (Figure 3.3-1).

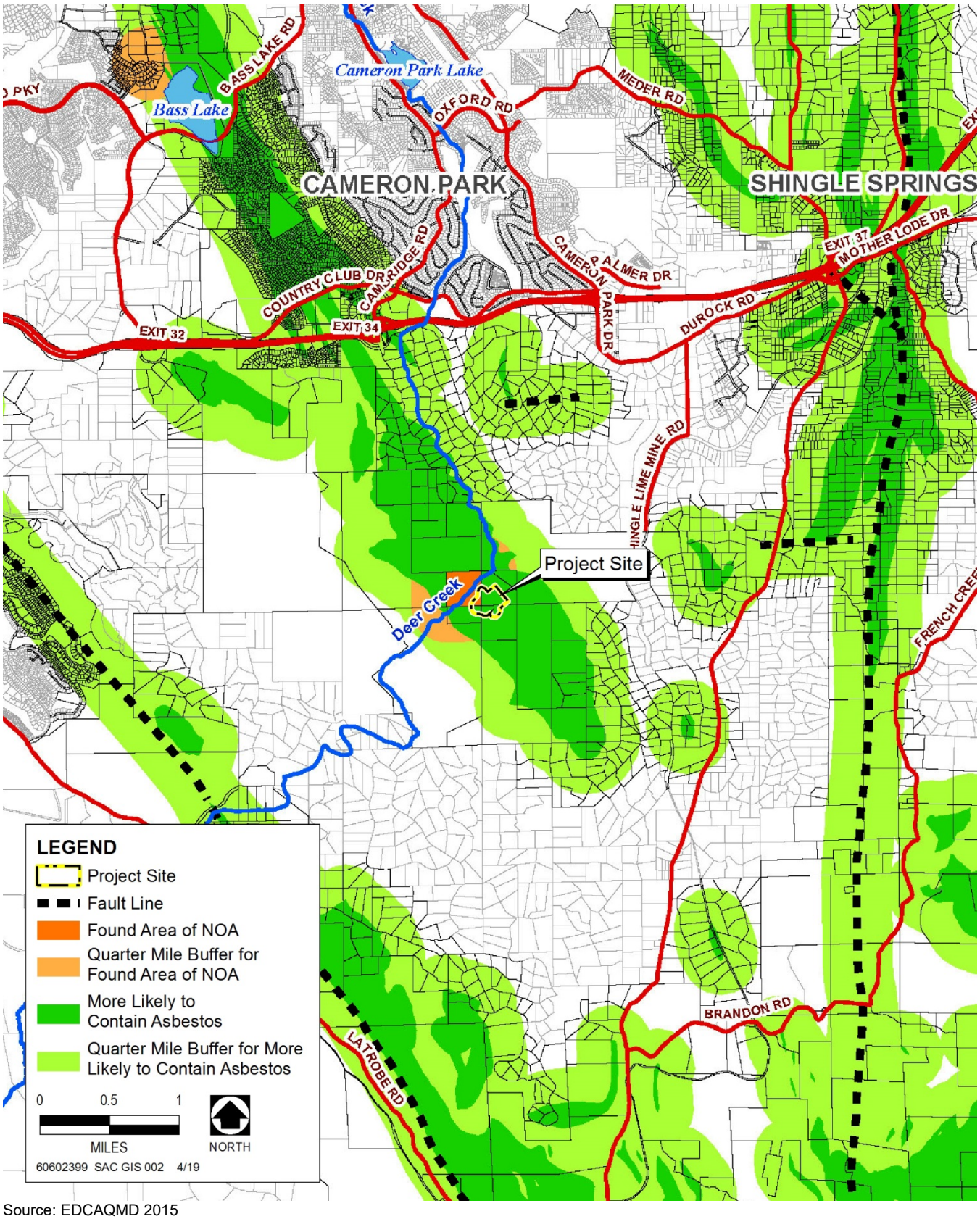
Federal, State, and local plans, policies, laws, and regulations provide a framework for addressing aspects of air quality that would be affected by the proposed project. Health-based air quality standards have been established for the criteria air pollutants by EPA at the national level, and by ARB at the state level; these are referred to as the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS), respectively.

The MCAB is designated as a nonattainment area for ozone, and as an attainment or unclassified area for all other pollutants. With respect to the CAAQS, the MCAB currently is designated as a nonattainment area for ozone and PM_{10}, and as an attainment or unclassified area for all other pollutants.

EPA requires each state with regions that have not attained the NAAQS to prepare a state implementation plan (SIP), detailing how each local area will meet these standards. ARB is the lead agency for developing California's SIP and oversees the activities of local air quality management agencies. Emission reduction programs and measures are described in air quality attainment plans (AQAPs) or air quality management plans (AQMPs) that the air districts submit to ARB for review and approval. ARB incorporates the AQAPs and AQMPs from local air districts into the SIP for EPA approval.

The El Dorado County Air Quality Management District (EDCAQMD) attains and maintains air quality conditions in El Dorado County. The EDCAQMD was formerly known as the El Dorado County Air Pollution Control District (EDCAPCD). After the EDCAPCD Guide to Air Quality Assessment (Guide) was published, the name of the air district was changed. Therefore, all references to the air district in this analysis, except for the Guide, are to the EDCAQMD.

The EDCAQMD requires all projects to implement Rule 202 (Visible Emissions), Rule 205 (Nuisance), Rule 223 (Fugitive Dust—General Requirements), Rule 223-1 (Fugitive Dust—Construction, Bulk Material Handling, Blasting, Other Earthmoving Activities and Carryout and Trackout Prevention), Rule 223-2 (Fugitive Dust—Asbestos Hazard Mitigation), and Rule 300 (Open Burning).



Source: EDCAQMD 2015

Figure 3.3-1. Naturally Occurring Asbestos

3.3.1 DISCUSSION

a) Conflict with or obstruct implementation of the applicable air quality plan?

Construction-Related Impact

Project consistency is based on whether a project would conflict with or obstruct implementation of the air quality plan and/or applicable portions of the SIP, which would lead to increases in the frequency or severity of existing air quality violations. The region's AQAP was developed pursuant to California Clean Air Act requirements and identifies feasible emissions control measures to provide expeditious progress in attaining the ozone standard. Assumptions about land use development used in the AQAP are taken from local and regional planning documents, including general plan land use designations and zoning. Consistency with the AQAP is determined by analyzing a project with the assumptions in the AQAP.

The proposed project would involve the use of off-road equipment, haul trucks, and worker commute trips. The proposed project would not substantially increase mobile-source emissions beyond that included in the AQAP. Therefore, the emissions associated with project implementation have been accounted in the emissions modeling for the current AQAP and will be accounted in future AQAPs. Accordingly, project implementation would not exceed the assumptions used to develop the current plan and would not obstruct or conflict with the AQAP.

As discussed later in the emissions analysis, the proposed project also would not exceed the recommended thresholds of significance for emissions of ozone precursors (reactive organic gases [ROG] and oxides of nitrogen [NO_X]). Because the proposed project would not result in a significant increase in ROG and NO_X emissions, it would not conflict with or obstruct implementation of the AQAP and SIP. EID contract specifications include requirements that contractors maintain construction equipment in good operating condition to minimize air pollution. The impact would be less than significant. No mitigation is required.

Operation-Related Impact

Project implementation would not require or result in additional activities for operations and maintenance beyond existing conditions. Therefore, no impact would occur.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable increase in emissions. By its very nature, air pollution generally is a cumulative impact. The nonattainment status of regional pollutants is from past and present development in the MCAB, and this regional impact is cumulative rather than being attributable to any one source. A project's emissions may be limited individually but be cumulatively considerable in respect to past, present, and future development projects.

The EDCAQMD approach for determining whether a project would have a significant cumulative impact is by determining whether the project would be consistent with an approved plan or mitigation program of regional application, in place for the pollutants that would be emitted by the project. This applies to both the construction and operation phases of a project.

Regarding ROG and NO_X emissions, a project would be considered consistent with the AQAP and not have a significant cumulative impact if the project:

- does not require a change in the existing land use designation (e.g., a general plan amendment or rezone), and projected emissions of ROG and NO_X from the project are equal to or less than the emissions anticipated for the site if developed under the existing land use designation;
- does not exceed the "project alone" significance criteria;
- includes any applicable emission reduction measures contained in and/or derived from the AQAP; and
- complies with all applicable air district rules and regulations.

Regarding PM_{10} emissions, a project would not be considered significant for cumulative impacts of PM_{10} if the project:

- is not significant for "project alone" emissions of these pollutants (i.e., does not exceed CAAQS or NAAQS);
- complies with all applicable rules and regulations of the EDCAQMD; and
- is not cumulatively significant for ROG, NO_X, and CO, based on the criteria set forth above.

Construction-Related Impact

As discussed previously, the proposed project would generate construction-related emissions of criteria air pollutants, but at levels that would not exceed the EDCAQMD's thresholds. These thresholds are designed to identify projects that would result in significant levels of air pollution on a project level that would impede and obstruct the region in attaining and maintaining the applicable CAAQS and NAAQS. Because the emission estimates shown in Table 3.3-1 would not exceed any EDCAQMD project-level significance thresholds for air quality, the proposed project would not impede or obstruct attainment and maintenance of the ambient air quality standards.

The proposed project would not exceed the EDCAQMD significance criteria, would comply with the existing AQAP, would include applicable emission reduction measures, and would comply with all applicable air district rules and regulations. Therefore, the proposed project's construction emissions would not be make a cumulatively considerable contribution to regional air quality. EID contract specifications include requirements that contractors maintain construction equipment in good operating condition to minimize air pollution. The impact would be less than significant. No mitigation is required.

Operation-Related Impact

The proposed project would not require a change to the existing land use designation. Project implementation would not require or result in additional activities for operations and maintenance beyond existing conditions. Therefore, no impact would occur.

c) Expose sensitive receptors to substantial pollutant concentrations?

Some members of the population—children, older adults, and persons with pre-existing respiratory or cardiovascular illness—are especially sensitive to air pollutant emissions. Such people are given additional consideration when the impacts of projects on air quality are evaluated. Therefore, at-risk land uses sensitive to

poor air quality would include residences, schools, daycare centers, playgrounds, medical facilities, and nursing homes. Recreational land uses, such as parks, also are considered moderately sensitive to air pollution. The land uses surrounding the project area include residential uses. Single-family residences are adjacent to and at varying distances from the project area. These are considered the closest sensitive receptors that would be affected by the proposed project.

Construction-Related Impact

Construction emissions are described as "short term" or temporary; however, they have the potential to significantly impact air quality. Project construction temporarily would generate ROG, CO, NO_X, PM_{10}, and $PM_{2.5}$ emissions. During project construction, criteria air pollutants and precursors would be emitted temporarily and intermittently by a number of sources: off-road equipment, on-road haul trucks and worker vehicles, and soil disturbance.

As shown in Table 3.3-1, the average daily construction emissions for the proposed project are estimated to be less than 1 pound of ROG, approximately 6 pounds of NO_X, 4 pounds of CO, 1 pound of PM_{10}, and 1 pound of $PM_{2.5}$. Additional emission modeling assumptions and details are provided in Appendix A.

Table 3.3-1. Average Daily Construction Emissions

	Average Daily Emissions (lb/day)				
Construction Phase	**ROG**	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Average daily emissions	0.6	5.7	4.2	0.9	0.6
Threshold of significance	82	82	AAQS	AAQS	NA
Significant Impact?	No	No	No	No	No

Notes:

AAQS = ambient air quality standards; CO = carbon monoxide; NA = not applicable; NO_X = oxides of nitrogen; PM_{10} = particulate matter equal to or less than 10 micrometers in diameter; $PM_{2.5}$ = particulate matter equal to or less than 2.5 micrometers in diameter; ROG = reactive organic gases

Source: Modeled by AECOM in 2019

As shown in Table 3.3-1, construction-related emissions would not exceed the thresholds of significance, would not violate any air quality standard, and would not contribute substantially to an existing or projected air quality violation. Furthermore, according to the EDCAQMD Guide, construction-related fugitive dust emissions are not considered to be significant if mitigation is part of a project, or a mandatory condition of a project. To make this finding, the project must commit to implementing fugitive dust control measures sufficient to prevent visible dust beyond the project property lines. According to the EDCAQMD Guide, this commitment can be satisfied if the project complies with the requirements of the South Coast Air Quality Management District's (SCAQMD) Rule 403. EID agrees, as part of the proposed project, to comply with the EDCAQMD guidance and implement fugitive dust control measures sufficient to prevent visible dust beyond the project property boundary and SCAQMD Rule 403. Therefore, the impact would be less than significant. No mitigation is required.

Diesel Particulate Matter

The greatest potential for TAC emissions would be related to emissions of diesel particulate matter (diesel PM) during operation of heavy-duty construction equipment. Health effects from carcinogenic TACs usually are described in terms of individual cancer risk, which is based on a 70-year lifetime exposure to TACs.

Project construction would last up to 9 months. Heavy-duty construction equipment would operate at different locations in the 8.5-acre project area, and at varying distances from different sensitive receptors surrounding the project area. Therefore, individual receptors are not anticipated to be exposed to TAC emissions for the entire construction period. Construction emissions would occur intermittently throughout the day, as construction equipment is required, rather than as a constant plume of emissions from the project site.

Because heavy-duty construction equipment would operate only intermittently during that time frame, the proposed project would not result in long-term (i.e., 70-year lifetime exposure period) emissions of TACs in the immediate vicinity of sensitive receptors. All construction emissions would cease after project completion. Therefore, because the duration of potentially harmful construction activities near a sensitive receptor would be about 1 year, the exposure would be approximately 2 percent of the total exposure period required for typical health risk calculations (i.e., 70 years). Therefore, the proposed project would not expose sensitive receptors to substantial concentrations of diesel PM. No impact would occur.

Naturally Occurring Asbestos

During project construction, site preparation, grading, and excavation activities would disturb soil and generate dust. The proposed project site is in serpentine rock, in an area that has been identified as likely to contain NOA. El Dorado County Air Quality Management Rule 223-2 requires project activities be implemented to reduce asbestos dust, created from earth-moving activities. An asbestos dust mitigation plan must be prepared, submitted, approved, and implemented when more than 20 cubic yards of earth are to be moved at all sites identified as being in an asbestos review area. Because the project site is in an area "likely to contain asbestos," the proposed project would expose nearby receptors to substantial asbestos concentrations, which would be a potentially significant impact.

Mitigation Measure AQ-1. Naturally Occurring Asbestos

Proximal to and within the mapped NOA zone, periodically material containing NOA may be excavated. The excavated material shall be stockpiled on site and covered to protect it from dispersal by wind and rain. During over excavation, dust suppression methods shall be employed, including periodic wetting. Specifically, the following steps shall be implemented/observed by EID or approved contractor:

a. Best management practices shall be incorporated from El Dorado County Air Quality Management District Rule 223-2 Table 5. These measures shall include:

- Washing trucks and equipment wheels that are used during excavation and ground disturbing activities before entering public roadways.
- Equipping work crews with dust masks
- Providing disposable covering for work crews

- Restricting ground disturbing activities when onsite wind speeds exceed 10 mph.

b. Establish permanent cover or vegetation upon completion of disturbance.

c. A 15-mile per hour maximum speed limit will be maintained for all equipment and vehicles at the work site.

d. Soil storage piles and disturbed areas will be stabilized by adequate wetting, treatment with a chemical dust suppressant, or covered with non-native soil material containing less than 0.25 percent asbestos.

Implementation of Mitigation Measure AQ-1 would effectively reduce potential NOA emissions to a less than significant level. The impact would be less than significant with mitigation incorporated.

Operation-Related Impact

Post-project operations and maintenance would not require new or result in additional activities beyond existing conditions. Therefore, no impact would occur.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Construction-Related Impact

The occurrence and severity of odor impacts from a project depend on numerous factors: the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. Although offensive odors rarely cause physical harm, they still can be very unpleasant, and can generate citizen complaints to local governments and regulatory agencies.

Exhaust from diesel construction equipment may emit odors during project construction. However, because of the temporary nature of these emissions and the highly diffusive properties of diesel exhaust, nearby receptors would not be likely to be adversely affected by project-related diesel exhaust odors. Odors from these sources would be localized and generally confined to the immediate area surrounding the project site, and the odors would be typical of most construction sites and temporary. EID includes requirements in the contractor plans and specifications requiring compliance with the EDCAQMD Rule 205 for reducing potential for nuisance resulting from objectionable odors. Thus, the project would not create objectionable odors affecting a substantial number of people. The impact would be less than significant. No mitigation is required.

Operation-Related Impact

Post-project operations and maintenance would not require new or result in additional activities beyond existing conditions. Therefore, no impact would occur.

3.4 BIOLOGICAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. Biological Resources. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

3.4.1 ENVIRONMENTAL SETTING

El Dorado County is located within the California Floristic Province, which is characterized by a Mediterranean climate with cool, wet winters and hot, dry summers. The elevation of the project site ranges from approximately 850–1,000 feet above mean sea level. Soils on the project site are mapped as serpentine rock land and are weathered from highly resistant serpentine and other ultramafic rocks (2019). Immediately west of the project site is the existing waste water treatment plant facility comprising several buildings, silos, treatment ponds, and basins. Surrounding land use consists primarily of open space, with some rural residential to the north and east. Deer Creek, a tributary to the Cosumnes River, is located to the northwest of the project site, approximately 0.1 mile down slope from the northern end, and flows from the northeast to the southwest.

VEGETATION COMMUNITIES AND HABITATS

Vegetation at the project site is characterized by mixed chaparral habitat with a dense canopy. This vegetation community most closely resembles the whiteleaf manzanita-chamise chaparral (*Arctostaphylos viscida-Adenostema fasciculatum*) association (Sawyer et al. 2009). Whiteleaf manzanita and chamise are co-dominant across the site; coyote brush (*Baccharis pilularis*), Lemmon's ceanothus (*Ceanothus lemonii*), yerba santa (*Eriodictyon californicum*), and pitcher sage (*Lepechinia calycina*) are all common on site. Other shrub species observed include hoary coffeberry (*Frangula californica* ssp. *tomentella*), toyon (*Heteromeles arbutifolia*), and poison oak, with a few blue elderberries (*Sambucus nigra* ssp. *caerulea*) present along the southeast edge of the project site. Common herbs observed include deerweed (*Acmispon glaber*), creeping sage (*Salvia sonomensis*), sticky monkeyflower (*Diplacus aurantiacus*), Pacific sanicle (*Sanicula crassicaulis*), and thyme-leafed spurge (*Euphorbia serpillifolia*).

Some areas of disturbance along the access road and at the south end of the site where there is open shrubland have a developed herbaceous layer dominated by nonnative annual grasses such as rattail fescue (*Festuca myuros*), soft chess (*Bromus hordeaceous*), wild oats (*Avena fatua*), and red brome (*Bromus madritensisis*). Common herbs observed in these areas are bird's-foot trefoil (*Acmispon americanus*), filaree (*Erodium botrys*), milk thistle (*Silybum marinum*), mouse-ear chickweed (*Stellaria media*), wild geranium (*Geranium dissectum*), prickly sow thistle (*Sonchus asper*), and spring vetch (*Vicia sativa*).

Wildlife habitats typically are distinguished by vegetation type, with varying combinations of plant species providing different resources for consumption. Chaparral habitat often contains dense, impenetrable overstory of pure stands of a single species or a diverse mixture of several species, with abundant leaf litter that precludes growth of any understory. Chaparral habitat, often interspersed with other habitats, provides foraging and nesting habitat for species that are attracted to edges of communities. Reptiles using this habitat include western rattlesnake (*Crotalus viridis*) and western fence lizard (*Sceloporus occidentalis*), which prefer the xeric community. Avian species found in edge communities include California quail (*Callipepla californica*), California thrasher (*Toxostoma redivivum*), mourning dove (*Zenaida macroura*), and spotted towhee (*Pipilo maculatus*) that forage among the leaf litter for invertebrates. Avian species that use the canopy of the chaparral for catching insects include dusky flycatcher (*Empidonax oberholseri*) and wrentit (*Chamaea fasciata*). Besides insects, flowers of the manzanita and ceanothus attract nectar drinkers such as Anna's hummingbird (*Calypte anna*). Mammals use this habitat for protection and foraging grounds, feeding off new shoots of plants. Black-tailed deer (*Odoicoileus hemionius*) often feed in chaparral, but this habitat supports a lower density of deer than oak savannah does. Other mammals utilizing chaparral habitats include brush rabbit (*Sylvilagus audubonii*), Botta's pocket gopher (*Thomomys bottae*), and deer mice (*Peromyscus maniculatus*). Small mammals attract predators such as long-tailed weasel (*Mustela frenata*), gray fox (*Urocyon cinereoargenteus*), and bobcat (*Felis rufus*).

The chaparral habitat on site is nearly continuous across the site, with the exception of the access road along the south side, and two fire breaks: one spur off the access road to the middle of the site and one along the north edge. The southern portion of the site burned in 2006 and the shrub canopy is less mature with a more developed herbaceous layer while the northern portion is nearly impenetrable with little to no herbaceous cover. While edge habitat on the project site is limited, the site provides good cover and foraging habitat for many species as well as good nesting habitat for some bird species.

SENSITIVE BIOLOGICAL RESOURCES

Sensitive biological resources include those species, natural communities, and habitats that receive special protection through the federal Endangered Species Act, California Endangered Species Act (CESA), Clean Water Act (CWA), California Fish and Game Code, Porter-Cologne Act, or local plans, policies, and regulations; or that are otherwise considered sensitive by federal, State, or local resource conservation agencies. No wetlands and/or waters of the U.S. or State are on the proposed project site, or any special-status natural communities or habitats. No critical habitat is found on the proposed project site; the nearest critical habitat is approximately 12.4 miles to the west for Sacramento Orcutt grass (*Orcuttia viscida*), 13 miles to the south the south for vernal pool fairy shrimp (*Branchinecta lynchi*), and 18.3 miles to the northeast for California red-legged frog (*Rana draytonii*). Because of the lack of sensitive natural communities and habitats at the proposed project site, the only sensitive biological resources evaluated as part of this analysis are special-status plant and wildlife species.

Field reconnaissance, database searches, and a background literature review were conducted to characterize biological resources present or with the potential to occur at the proposed project site. A site reconnaissance survey was conducted on April 5, 2019. Protocol level botanical surveys were conducted May 14 and 28, 2018 by GEI consultants (GEI 2018). No protocol-level wildlife surveys have been conducted within the site to date. The following databases records searches were performed to assist in identifying special-status species known to occur or with the potential to occur in the region and any wetlands or waters at or in the vicinity of the project site:

- California Natural Diversity Database (CNDDB) nine-quadrangle (quad) search in the U.S. Geologic Survey (USGS) Shingle Springs quad, where the proposed project site is located, and the adjacent eight quads (CNDDB 2019);
- California Native Plant Society (CNPS) Rare Plant Inventory standard nine-quad search in the USGS Millerton Lake West quad (CNPS 2019);
- U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation project planning tool (USFWS 2019a);
- USFWS online Critical Habitat Mapper (USFWS 2018);
- soil survey data, in the Soil Survey Geographic Database (SSURGO) (2019);
- USFWS National Wetland Inventory Wetlands Mapper (USFWS 2019b);

SPECIAL-STATUS SPECIES

Special-status species include plants and wildlife in the following categories:

- species listed by the State or federal government as endangered, threatened, or rare;
- candidates for State or federal listing as endangered or threatened;
- taxa (i.e., taxonomic categories or groups) that meet the criteria for listing, even if not currently included on any list, as described in Section 15380 of the California Code of Regulations (CCR), the CEQA Guidelines;

- wildlife designated by CDFW as fully protected and/or species of special concern;
- birds protected under the Migratory Bird Treaty Act (MBTA);
- bats designated by the WBWG as high (red) or medium (yellow) priority; and
- plants ranked by CDFW to be rare, threatened, or endangered in California.

CDFW's California Rare Plant Rank (CRPR) system includes six rarity and endangerment ranks for categorizing plant species of concern, which are summarized as follows:

- CRPR 1A – plants presumed to be extinct in California
- CRPR 1B – plants that are rare, threatened, or endangered in California and elsewhere
- CRPR 2A – plants presumed to be extinct in California, but more common elsewhere
- CRPR 2B – plants that are rare, threatened, or endangered in California, but more common elsewhere
- CRPR 3 – plants about which more information is needed (a review list)
- CRPR 4 – plants of limited distribution (a watch list)

All plants with a CRPR are considered to be "special plants" by CDFW. The term "special plants" is a broad term used by CDFW to refer to all of the plant taxa inventoried in CDFW's CNDDB, regardless of their legal or protection status. Plants ranked as CRPR 1A, 1B, 2A, and 2B may qualify as endangered, rare, or threatened species within the definition of the CEQA Guidelines, Section 15380. CDFW recommends that CRPR 1 and 2 species be addressed within the context of CEQA analyses and documentation. In general, CRPR 3 and 4 species do not meet the definition of endangered, rare, or threatened, pursuant to the CEQA Guidelines; however, these species may be evaluated by the lead agency on a case-by-case basis, to determine significance criteria under CEQA.

The term "California species of special concern" is applied by CDFW to wildlife not listed under the federal Endangered Species Act or CESA, but that nonetheless are declining at a rate that could result in listing, or that historically occurred in low numbers, or have limited ranges, and known threats to their persistence currently exist. "Fully protected" was the first state classification used to identify and protect wildlife species that are rare or facing possible extinction. Most of these species subsequently were listed as threatened or endangered under one or both of the acts. The remaining fully protected species that are not listed officially under one of the acts still are legally protected under California Fish and Game Code, and qualify as endangered, rare, or threatened species within the definition of CEQA Guidelines, Section 15380.

The database searches identified above revealed resulted in 30 special-status plant species being evaluated for their potential to occur in the proposed project site or vicinity. Of those 30, sixteen species had no potential to occur on site because of a lack of suitable habitat or the site is outside the known elevation range of the species. The remaining 14 species had some potential to occur at the project site. However, none of these species were observed during the protocol-level botanical surveys that were conducted in May 2018 and therefore none are expected to occur.

The database searches for special-status wildlife resulted in 30 special-status wildlife species being evaluated for their potential to occur in the proposed project site or vicinity. Of those 30, two special-status wildlife species are known or have the potential to occur in the proposed project area. Table 3.4-1 summarizes the regulatory status,

and habitat for the two species with the potential to occur in the proposed project site. The remaining special-status wildlife species either are unlikely to occur or have no potential to occur because of a lack of suitable habitat on site or the site is outside the known range of the species.

Table 3.4-1. Special-Status Animal Species Known or with Potential for Occurrence on the Project Site

Species	Regulatory Status[a]		Habitat	Potential for Occurrence
	Federal	State		
Reptiles				
Blaineville's (Coast) horned lizard *Phrynosoma blainvillii*	_	SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Low. Marginally suitable habitat on site. There are 3 occurrences known within 5 miles, all to the north, the nearest is 2.5 miles.
Mammals				
Pallid bat *Antrozous pallidus*	_	SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Low. No suitable roosting habitat on site. Potentially suitable roosting habitat adjacent to the site and suitable foraging habitat on site. Only one occurrence known within 10 mile radius.

Notes:
a. Legal Status Definitions
State:
SSC Species of special concern (no formal protection other than CEQA consideration)
Sources: CNDDB 2019; USFWS 2019; AECOM 2019

3.4.2 DISCUSSION

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

The proposed project construction would result in temporary and permanent impacts on habitat. Temporary impacts caused by construction would be related to vegetation removal and grading. Permanent habitat loss would occur in the areas occupied by the new solar array. The construction activities that could cause direct and indirect impacts on sensitive biological resources present in the project site include vegetation removal, grading, and trenching, and potential runoff of soil or sediment, diesel fuel, gasoline, oil, or other toxic materials used for project equipment into adjacent drainages and habitat.

No special-status plants are expected to occur on site, therefore there would be no impact to special-status plants. Potential impacts from runoff of soils or toxic materials that could potentially reach the Deer Creek riparian corridor would be minimized with water quality measures to control erosion and sedimentation and construction best management practices. Therefore there would be no impact to special-status species that may be present in the Deer Creek riparian corridor.

Pallid bat has some potential to use the project site for foraging; however, no suitable roosting habitat is present on site. Trees in the Deer Creek riparian corridor could provide suitable roosting habitat; however the bat's preferred habitats are crevices in rocky outcrops and cliffs, caves, and mines. While the presence of pallid bat cannot be entirely ruled out, pallid bats have the ability and are known to switch day roosts and any potential impacts to the species resulting from noise disturbance or the removal of 8.5 acres of foraging habitat would be less than significant. No mitigation is required.

While the dense, tall chaparral habitat on the site is potentially suitable for Blainville's (Coast) horned lizard, the lizard is commonly found in more open habitats with scattered, low bushes and open areas for sunning. Additionally, soils on the project site are shallow and gravelly and generally lack areas of loose, sandy soils that are preferred for foraging and for constructing egg nests. Therefore, while presence of Blainville's (Coast) horned lizard cannot be entirely ruled out, the project site is unlikely to harbor significant numbers of Blainville's (Coast) horned lizard and any potential impacts to the species from the removal of 8.5 acres of chaparral habitat would be less than significant. No mitigation is required.

Many special-status migratory birds forage and nest in various artificial and natural biological communities, such as the mixed chaparral and annual grassland habitats on and surrounding the project site. Several raptor species may forage and nest within various communities in the area of the proposed project. The Deer Creek riparian corridor adjacent to the site provides nesting habitat for many migratory birds as well as trees suitable for nesting raptors. Disruption or destruction of migratory bird nests is a violation of the Migratory Bird Treaty Act. Disruption or destruction of active raptor nests is a violation of Section 3503.5 of the California Fish and Game Code. The impact would be potentially significant.

Mitigation Measure BIO-1: Conduct Pre-Construction Surveys for Raptors and Migratory Birds.

Removal of trees and vegetation shall be avoided to the greatest extent feasible. To the extent practicable, trees and vegetation shall be removed outside the nesting season, August 16 through January 31. If removal of trees occurs between February 1 and August 15, EID shall have a qualified biologist conduct preconstruction surveys for active nests of special-status and MBTA protected birds before the start of any project activities. Surveys for nesting raptors shall be conducted in accordance with established CDFW raptor survey protocols. If no active nests are found, tree and vegetation removal, along with other solar PV array installation activities may proceed without further studies or mitigative actions. If active nests are found, EID shall have a qualified biologist establish avoidance buffers around nests that are sufficient so that breeding is not likely to be disrupted or adversely affected by construction. An avoidance buffer will constitute an area where project-related activities (i.e., vegetation removal, earth moving, and construction) shall not occur.

Typical avoidance buffers during the nesting season shall be 100 feet for nesting passerine birds and 500 feet for nesting raptors unless a qualified biologist, in consultation with USFWS and/or CDFW, determines that smaller buffers will be sufficient to avoid impacts on nesting raptors and/or other birds. Factors to be considered for determining buffer size will include: the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; and baseline levels of noise and human activity.

A qualified biologist shall monitor any active nests during construction, to ensure that the species is not being harmed or harassed by noise or other activities stemming from project-related construction. Buffers

shall be maintained by EID until a qualified biologist, in consultation with USFWS and/or CDFW, has determined that young have fledged and are no longer reliant on the nest or parental care for survival.

Implementation of Mitigation Measure BIO-1 would minimize disturbance or disruption of any active nesting sites of migratory birds and/or raptors and reduce the potentially significant impact to less than significant with mitigation.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?

No riparian or other sensitive habitats are present in the proposed project site. No impact would occur.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No State or federally protected wetlands or waters are on the proposed project site. No impact would occur.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Wildlife movement corridors typically are associated with ridgelines and valleys, rivers, and creeks supporting riparian vegetation. The proposed project site does provide good cover for movement and foraging for many species; however, more typical movement corridors are available adjacent to the site. Proposed project development would temporarily impede wildlife use of the site; however, these project effects would be localized and would not substantially affect wildlife movements. No wildlife nursery sites are in the proposed project site. The impact would be less than significant. No mitigation is required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Proposed project site development would not conflict with any known local policies or ordinances, and would be consistent with provisions of the El Dorado County General Plan Conservation and Open Space Element. The proposed project is not within an important biological corridor or priority conservation area as identified in the general plan. No impact would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No draft or adopted habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans exist. No impact would occur.

3.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. Cultural Resources. Would the proposed project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

3.5.1 ENVIRONMENTAL SETTING

PREHISTORIC SETTING

The general cultural periods (Paleo-Indian, Early, Middle and Late Archaic, and Emergent periods) are used here in connection with the North-Central Sierra Nevada chronology because of their relevancy to the lower foothill region of the proposed project in the vicinity of Folsom.

The Late Pleistocene Pattern and Period (>10,000 Before Present [B.P.]) in the foothill and eastern Sacramento Valley is practically non-existent. Sites CA-SAC-370 and CA-SAC-379, located near Rancho Murieta, produced numerous bifaces, cores, and raw materials from gravel strata estimated to be between 12,000 and 18,000 years in age. Early Holocene Pattern and Period (circa [ca.] 10,000–7000 B.P.) was first defined by Bedwell (1970) as a human adaptation to lake, marsh, and grassland environments that were prevalent at this time. Appearing after 11,000 years B.P., the tradition slowly disappeared ca. 8000–7000 B.P.

During the Archaic Pattern and Period – (ca. 7000–3200 B.P.), the climate in the valleys and foothills of Central California becomes warmer and dryer, and millingstones are found in abundance.

The Early and Middle Sierran Pattern (ca. 3200–600 B.P.) evidences an expansion in use of obsidian, which is interpreted with reservation to indicate an increase in regional land use, and the regular use of certain locales. During this time, a much heavier reliance on acorns as a staple food develops, and supports large, dense populations.

During the Late Sierran Period (ca. 600–150 B.P.), archaeological village sites generally correspond to those identified in the ethnographic literature. Diagnostic artifacts are small contracting-stem points, clam shell disk beads, and trade beads introduced near the end of the period, marking the arrival of European groups (Beardsley 1954:77–79; Elsasser 1978:44; Fredrickson 1984).

ETHNOGRAPHIC SETTING

Ethnographically, the proposed project site is situated in the Nisenan (sometimes referred to as the Southern Maidu) sphere of influence. The Nisenan territory included the drainages of the Yuba, Bear, and American rivers, and the lower drainages of the Feather River, extending from the crest of the Sierra Nevada to the banks of the Sacramento River. In the Nisenan territory, several political divisions, constituting tribelets, each had their own respective headmen who lived in the larger villages. However, it is not known which of these larger population centers wielded more influence than others, although they were all located in the foothill areas. In general, more substantial and permanent Nisenan villages were not established on the valley plain between the Sacramento River and the foothills, although this area was used as a hunting and gathering ground.

HISTORIC SETTING

Early European travels through or near the western end of the proposed project area included Gabriel Moraga and a group of Spanish explorers in 1806–1808, and fur trappers and explorers in the 1820s. Jedediah Smith led a group of trappers along the edge of the foothills to the American River in search of a pass over the Sierra Nevada in 1826 (Flint et al. 2000). Kit Carson and John C. Fremont crossed the mountains near Lake Tahoe and descended to Sutter's Fort along the South Fork of the American River in 1844.

A number of historic mining districts are near the proposed project area, including Folsom, Shingle Springs, Placerville, Pacific, White Rock, and Deer Creek. Deer Creek, which flows southwest, was first placer mined during the Gold Rush. In the 1930s and early 1940s, substantial amounts of gold were recovered here by dragline dredges.

An elaborate network of ditches and flumes were constructed beginning in the mid-19th century to provide power for miners. As the call for hydraulic power increased, so did the size of the ditches, at first providing water for placer mining, and later providing water to the agriculture of the region. One of the larger projects was the South Fork Canal Company, formed in 1851 (Starns 2001). The canal was built in 1852 at a cost of approximately $400,000, and took water from the South Fork American River above Pollock Pines and transported it by flume to Placerville. A network of ditches and flumes controlled by the South Fork Canal Company crossed the region between Weber Creek and the South Fork. Over time, partners in the company came and went, including a group of stockholders who planned a resort on Reservoir Hill, to be served by the Canal. The company changed hands numerous times, with numerous partners each holding a small interest in the venture. In 1873, the company was sold to the El Dorado Water and Deep Gravel Mining Company; and after several other owners, the system eventually was sold in 1919 to the El Dorado Water Company, the predecessor of the EID.

Ranching and cattle and sheep grazing in the foothill region began during the gold rush to supply miners, and continued to supply travelers, as well as shipping to local towns, even as the gold rush began to die down. By the 1880s, fruit orchards covered the foothills. Grazing became one of the biggest industries in El Dorado, as well as several neighboring counties in the 1870s. The foothills and Sierra Nevada offered an advantage to cattlemen in that the areas were unsettled, so there was little competition for the land. Sheepherders quickly followed, including numbers of Basques who carved figures that can still be seen on aspen trees today.

Beginning in 1856, Sacramento Valley Railroad linked Folsom and areas to the east with and Sacramento. From Folsom, stagecoaches took the passengers to the gold fields or smaller settlements in the area, and freight was transported over the same routes by wagon. The railroad thrived in the Folsom area until declining in 1870,

because of fires that decimated Folsom in 1866 and 1868, destroying much of the business district. Completion of the Trans-Sierran railroad in 1860 also contributed to the eventual downfall of the Sacramento Valley Railroad (Maniery 1992).

HISTORIC MAPS, LITERATURE, AND DOCUMENTS

A review of historic literature and maps was summarized in letter report prepared by Far Western Anthropological Research Group, Inc. (FWARG 2019). A General Land Office (GLO) survey plat dated 1866 indicated that the area was mined as early as 1866. This map also depicts several structures in the general vicinity of the WWTP, and which are labeled "Cabins," "House," and "House belonging to Boston Copper Mining Co." An unlabeled structure is shown in the approximate location of the treatment plant, however no structures are depicted in the proposed project site.

Land patent records from 1867 indicate that the southwest quarter of Section 15, where the proposed project is located, was granted to the Central Pacific Railroad. No features of any kind are shown at the location of the WWTP on any of the available historical USGS topographic quadrangles (1893 to 1976).

PREVIOUS CULTURAL STUDIES

A review of records on file at the North Central Information Center indicated that a total of 10 previous cultural resource studies have been conducted within 0.25 miles of the proposed project, and three studies (Derr 1997, Starns 1992, and Ludwig and Tomes 2007) investigated portions of the proposed project site. Although no cultural resources have been documented within the proposed project site eight resources are located within 0.25 miles. These consist of a prehistoric flaked stone scatter and bedrock milling feature, a site with prehistoric milling feature and lithic scatter and historic-era walls/fences, and five historic-era sites consisting of privies, refuse deposits, a railroad grade, a mining cabin site with associated road, trails and earthworks, and the remains of a lime stone quarry and mining operation.

CURRENT FIELD INVESTIGATIONS

FWARG (2019) attempted to inspect eight proposed test-pit locations, however only three (TP 4, TP 5, and TP 8) could be located and no mining features were located within the accessible areas. The other locations were inaccessible because of the nearly impenetrable cover of manzanita, chamise, and other brush. FWARG recommended that excavation of the minimally invasive test pits could proceed, but that a full cultural survey be carried out after the hillside has been cleared of vegetation and before project construction begins. To avoid damage to any mining features or other historical remains that could be present, vegetation clearing should be done using hand tools or other none-destructive methods. If this is not feasible, then it was recommended that a qualified archaeologist be on site during vegetation removal.

AECOM archaeologist, Diana Ewing, conducted a field investigation on April 5, 2019. Similar to the observations by FWARG the prospective site was found to be covered with dense manzanita and chaparral with poison oak. The site is located on a hill adjacent to the DCWWTP. The hill is overall an approximately 40 degree slope that varies in different locations. There is a fire road that traverses the site and allows access to the top of the hill. No cultural artifacts or features were observed.

3.5.2 DISCUSSION

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

The proposed project site is not known to have any historical resources as defined by Section 15064.5 of CEQA. No impact would occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Previous studies and the current investigation did not result in the identification of archaeological resources in the proposed project site as defined by Section 15064.5 of CEQA. Because the proposed project is located on a relatively steep, dry slope with shallow rocky soils in a non-depositional environment, subsurface deposits are most likely not present. However, a possibility still exists that archaeological features could be discovered in the project site. Implementation of mitigation measures CUL-1, CUL-2, and CUL-3, described below, would reduce potential impacts to a level that is less than significant.

Mitigation Measure CUL-1: Inspect Project Site Following the Removal of Vegetation.

Because the majority of the proposed project area could not be inspected for mining related features, the project site shall be inspected by a professional archaeologist following the removal of vegetation. The archaeologist shall inspect and assess the significance of any mining-related features that may be present, and prepare a report documenting the findings.

Mitigation Measure CUL-2: Address Previously Undiscovered Historic Properties and Archaeological Resources.

EID shall implement the following measure to reduce or avoid impacts on undiscovered historic properties and archaeological resources. If interested Native American Tribes provide information demonstrating the significance of the project location and tangible evidence supporting the determination the site is highly sensitive for prehistoric archaeological resources, EID will retain a qualified archaeologist 1) monitor for potential prehistoric archaeological resources during initial ground disturbing activities, 2) prepare a worker awareness brochure, and 3) invite tribal representatives to review the worker awareness brochure.

If buried or previously unidentified historic properties or archaeological resources are discovered during project activities, all work within a 100-foot radius of the find shall cease. EID shall retain a professional archaeologist meeting the Secretary of the Interior's Professional Standards for Archaeologists to assess the discovery and recommend what, if any, further treatment or investigation is necessary for the find. Interested Native American Tribes will also be contacted. Any necessary treatment/investigation shall be developed with interested Native American Tribes providing recommendations and shall be coordinated with the State Historic Preservation Officer and Reclamation, if necessary, and shall be completed before project activities continue in the vicinity of the find.

c) Disturb any human remains, including those interred outside of formal cemeteries?

There has been no indication or evidence that the area has been used for human burials in the recent or distant past; therefore, human remains are unlikely to be encountered. If human remains are encountered, during project-

related earth moving activities mitigation measure CUL-3 would be implemented to reduce potential impacts to less than significant.

Mitigation Measure CUL-3: Avoid Potential Effects on Undiscovered Burials.

EID shall implement the following measures to reduce or avoid impacts related to undiscovered burials. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, all potentially damaging ground-disturbance in the area of the burial and a 100-foot radius shall halt and the El Dorado County Coroner shall be notified immediately. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, then Federal laws governing the disposition of those remain would come into effect. Specifically, the Native American Graves Protection and Repatriation Act (NAGPRA), Pub L. 101-601, 25 U.S.C. 3001 et seq., 104 Stat. 3048 requires federal agencies and institutions that receive federal funding to return Native American cultural items to lineal descendants and culturally affiliated Indian Tribes and Native Hawaiian organizations. Cultural items include human remains, funerary objects, sacred objects, and objects of cultural patrimony. NAGPRA also has established procedures for the inadvertent discovery of Native American cultural items on Federal or Tribal lands, which includes consultation with potential lineal descendants or Tribal officials as part of their compliance responsibilities.

California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. EID shall ensure that the procedures for the treatment of Native American human remains contained in California Health and Safety Code Sections 7050.5 and 7052 and Public Resources Code Section 5097 are followed.

3.6 ENERGY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

3.6.1 ENVIRONMENTAL SETTING

The new solar PV system would have two separate solar arrays (to support two separate interconnections) of 2.39 MW total capacity, capable of generating about 6.9 gigawatt-hours annually. The purpose of this project is to install a source of renewable energy, produced by the solar panels to offset the consumed conventional power that is produced by PG&E, reduce utility billing costs, and provide long-term energy cost savings for operation of the DCWWTP.

3.6.2 DISCUSSION

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The proposed project would not substantially affect energy consumption or conservation. It would increase the renewable energy used by EID. Construction equipment and haul trucks would consume fuel during the construction process; however, the project site's small size and relative lack of grading would minimize the energy consumed.

During operations, the proposed project would require fuel for vehicles and equipment used by site maintenance workers. The minimal amount of electricity that would be required would be greatly offset by generation of new electricity from the proposed project, and the project's electricity demand would not constitute a wasteful, inefficient, or unnecessary use of energy. The proposed project would not increase energy consumption or increase inefficient energy use. The impact would be less than significant. No mitigation is required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The proposed project would not conflict with a State or local plan for renewable energy. The proposed project would directly support California's Renewable Portfolio Standard goal of increasing the percentage of electricity procured from renewable sources to 50 percent. Because the proposed project would provide a new source of renewable energy supporting the State's energy goals, would offset its fuel usage, and would comply with fuel and energy efficiency regulations, it would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. No impact would occur.

3.7 GEOLOGY AND SOILS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Geology and Soils. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

3.7.1 ENVIRONMENTAL SETTING

The project site is located in the western foothills region of the Sierra Nevada. Elevations at the project site range from approximately 850 to 1,037 feet above mean sea level. The site is in a narrow belt of Mesozoic-age ultramafic rocks that runs north-south along the Sierra Nevada foothills through El Dorado County (Wagner et al. 1981). Ultramafic rocks are igneous rocks that contain very little silica; instead, they contain high amounts of dark-colored minerals, such as serpentinite. U.S. Natural Resources Conservation Service (NRCS) soil survey

data indicates that the project site does not have a defined soil horizon. Rather, the site is composed of "serpentine rock land," which is derived from serpentinite (NRCS 2018).

Asbestos is a term applied to several types of naturally occurring fibrous materials found in rock formations throughout California. Exposure and disturbance of rock and soil that contains asbestos, particularly from construction activities, can result in the release of fibers to the air and consequent exposure to the public. People exposed to low levels of asbestos may be at elevated risk (e.g., above background rates) of lung cancer and mesothelioma. NOA commonly is found in ultramafic rock, including greenstone and serpentinite. El Dorado County (2015) has compiled a map of areas where NOA is either suspected or has been found, and the project site is located in an area where NOA is known to be present (see Section 3.3, "Air Quality," for the evaluation of environmental impacts related to NOA.)

No known faults exist at the project site (Jennings and Bryant 2010). The project site is approximately 3 miles from the main traces of the Bear Mountains Fault Zone, and an inactive pre-Quaternary (i.e., more than 2.5 million years B.P.) unnamed fault trace has been mapped approximately 1 mile to the northeast. A few segments of the Bear Mountain Fault Zone, such as the Rescue Fault, have shown evidence of movement during the late Quaternary (i.e., approximately 0.5–1 million years B.P.).

3.7.2 DISCUSSION

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

The closest Alquist-Priolo Earthquake Fault Zone is the West Tahoe Fault at Echo Lake (California Geological Survey [CGS] 2017), approximately 50 miles east of the project site. No other known faults exist in the project vicinity. Thus, surface fault rupture is unlikely. No impact would occur.

ii) Strong seismic ground shaking?

Although the Rescue Fault in the Bear Mountains Fault Zone is approximately 6 miles northeast of the project site, this fault is not considered "active" because no evidence of movement has occurred during Holocene time (i.e., the last 11,700 years). Because the nearest active fault is 50 miles away, the project site would be unlikely to experience strong seismic ground shaking. The intensity of ground shaking depends on the distance from the earthquake epicenter to a site, the magnitude of the earthquake, and site soil conditions. Peak horizontal ground acceleration (PGA), which is a measure of the projected intensity of ground shaking from seismic events, can be estimated by probabilistic method using a computer model. The CGS Probabilistic Seismic Hazards Assessment Model (CGS 2008) indicates that a 1-in-10 probability exists for an earthquake occurring in the next 50 years to result in a PGA of approximately 0.129*g* (where *g* is a percentage of gravity) in the project vicinity, which indicates that a very low level of seismic shaking is anticipated. Furthermore, the proposed project does not include any buildings intended for human occupancy, or any paved roads or bridges where damage could occur in the event of an

earthquake. All project-related facilities would be designed and constructed in accordance with standard engineering practices. Therefore, the impact would be less than significant. No mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

Liquefaction is most likely to occur in low-lying areas, where the substrate consists of poorly consolidated to unconsolidated water-saturated sediments, recent Holocene-age sediments, or deposits of artificial fill. Additional factors that determine the liquefaction potential are the distance to an active seismic source and the depth to groundwater. The project site consists of ultramafic (serpentinite) bedrock. Groundwater in the project area is held in small pores within the fractured bedrock; therefore, the project site does not overlie an "aquifer" with a large pool of water at a shallow depth that could contribute to instability. Based on the type of groundwater, the lack of nearby active seismic sources, and the fact that proposed facilities would be installed in bedrock, liquefaction and seismically induced settlement at the project site would not represent a hazard. Thus, no impact would occur.

iv) Landslides?

The project site is steeply sloped, increasing in elevation by nearly 200 feet over a distance of only 560 feet from the eastern side of the DCWWTP to the northeastern edge of the area where the new solar PV system would be installed. However, the proposed project would not include any buildings intended for human occupancy, and the project site is in an area where no buildings would be affected if a landslide were to occur. The proposed project would be designed and constructed in accordance with standard engineering practices and El Dorado County's Design and Improvement Standards Manual Vol. III (El Dorado County 2007), which includes measures to address construction on steep slopes. Adherence to these engineering and design requirements, which include requirements for slope stabilization measures (such as retaining walls, tie backs, soil nails, and controlling surface water runoff) where necessary, would reduce the loss of life and property from landslide hazards at the project site. Therefore, the impact would be less than significant. No mitigation is required.

b) Result in substantial soil erosion or the loss of topsoil?

The proposed project would require grubbing the existing vegetation, trenching, grading, and installing a 16-foot-wide gravel access road from the DCWWTP to the top of the slope where the solar PV panels would be installed. Although the proposed access road would be on a steep slope, little soil is present. The access road is in area that consists primarily of bedrock outcrops. Bedrock has a high stormwater runoff potential, which could result in downstream erosion. Therefore, the proposed project could result in erosion and downstream sedimentation, and this impact would be potentially significant.

Mitigation Measure GEO-1: Prepare and Implement a Stormwater Pollution Prevention Plan

EID or its approved construction contractor shall file a Notice of Intent (NOI) with the Central Valley Regional Water Quality Control Board, to discharge in compliance with the statewide National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-009-DWQ, as amended by Order 2012-0006-DWQ). EID or its approved construction contractor also shall prepare a Storm Water Pollution Prevention Plan (SWPPP) and implement associated Best Management Practices (BMPs) that are specifically designed to reduce construction-related erosion. Construction techniques that may be implemented to

reduce the potential for stormwater runoff include minimizing site disturbance, controlling water flow over the construction site, stabilizing bare soil, and ensuring proper site cleanup. BMPs that may be implemented to reduce erosion include silt fences, staked straw bales/wattles, silt/sediment basins and traps, geofabric, trench plugs, terraces, water bars, soil stabilizers and re-seeding and mulching to revegetate disturbed areas.

The proposed project would comply with the County's erosion and control ordinance; the County's Design and Improvement Standards Manual Vol. III (El Dorado County 2007), which regulates grading, erosion, and sediment control. Furthermore, EID would prepare an SWPPP and would implement BMPs designed to control stormwater runoff and reduce erosion. The impact would be less than significant with mitigation incorporated.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Because the project site is composed of bedrock, geologic hazards such as subsidence, liquefaction, or collapse are unlikely to occur. Because the project site is in an area where NOA may be present, EID is required to comply with El Dorado County General Plan Policy 6.3.1.1. This policy requires that all discretionary projects and all projects requiring a grading permit, or a building permit that would result in earth disturbance, and that are located in areas likely to contain NOA, have a California-registered geologist knowledgeable about asbestos-containing formations inspect the project area for the presence of asbestos, using appropriate test methods (El Dorado County 2015a). Hazards related to landslides are evaluated in item a) iv above. EID would comply with the requirements in El Dorado County's Design and Improvement Standards Manual Vol. III (El Dorado County 2007). The impact would be less than significant. No mitigation is required.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating direct or indirect substantial risks to life or property?

The project site is in "serpentine rock land" (2018), which does not have a developed soil horizon. Bedrock is not subject to hazards from expansion. No impact would occur.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The proposed project would not require installation of wastewater treatment systems. Temporary portable restrooms would be provided for construction workers. No impact would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The project site is in Mesozoic-age ultramafic, plutonic bedrock, consisting of serpentinite. This type of rock originated from magma, which slowly crystallized below the earth's surface. Therefore, the rocks at the project site do not contain fossils. No impact would occur.

3.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. Greenhouse Gas Emissions. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.8.1 ENVIRONMENTAL SETTING

Certain gases in Earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining Earth's surface temperature. A portion of the solar radiation that enters the atmosphere is absorbed by Earth's surface, and a smaller portion of this radiation is reflected toward space. This infrared radiation (i.e., thermal heat) is absorbed by GHGs within the atmosphere; therefore, infrared radiation released from Earth that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the "greenhouse effect," is responsible for maintaining a habitable climate on Earth. Without the naturally occurring greenhouse effect, Earth would not be able to support life as we know it. However, GHG emissions associated with human activities are likely responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of Earth's atmosphere and oceans, with corresponding effects on global circulation patterns and climate (IPCC 2014).

GHGs are present in the atmosphere naturally; are released by natural and anthropogenic (human-caused) sources; and are formed from secondary reactions taking place in the atmosphere. The following are GHGs that are widely accepted as the principal contributors to human-induced global climate change:

- carbon dioxide (CO_2)
- methane (CH_4)
- nitrous oxide (N_2O)
- hydrofluorocarbons
- perfluorocarbons
- sulfur hexafluoride

Global warming potential (GWP) is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to CO_2. The concept of CO_2 equivalents (CO_2e) is used to account the different GWP potentials of GHGs to absorb infrared radiation. The GWP of a GHG is based on several factors, including the relative effectiveness of a gas in absorbing infrared radiation, and the length of time (i.e., lifetime) that the gas remains in the atmosphere ("atmospheric lifetime"). The reference gas for GWP is CO_2; therefore, CO_2 has a GWP of 1. The other main GHGs that have been attributed to human activity are CH_4, which has a GWP of 21, and N_2O, which has a GWP of 310 (UNFCC 2013). For example, 1 ton of CH_4 has the same contribution to the greenhouse effect as approximately 21 tons of CO_2. GHGs with lower emissions rates than CO_2 still may

contribute to climate change because they are more effective at absorbing outgoing infrared radiation than CO_2 (i.e., high GWP).

Impacts of GHGs are borne globally, as opposed to localized air quality effects of criteria air pollutants and TACs. The quantity of GHGs that it takes ultimately to result in climate change is not known precisely; the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature, or to a global, local, or micro-climate. From the standpoint of CEQA, GHG-related effects to global climate change are inherently cumulative.

MANDATORY GREENHOUSE GAS REPORTING RULE

On October 30, 2009, the EPA published the final version of the Mandatory Greenhouse Gas Reporting Rule in the Federal Register. In general, compliance with this national reporting requirement provides EPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons (MT) or more of CO_2 annually. An estimated 85 percent of the total U.S. GHG emissions, from approximately 10,000 facilities, are covered by this final rule. Subsequent rulings have expanded the emissions sources required to report emissions data, and now include oil and natural gas industries, industrial wastewater treatment plants, and industrial landfills.

EXECUTIVE ORDER S-3-05

The goal of this Executive Order, enacted on June 1, 2005, is to reduce California's GHG emissions to year 2000 levels by 2010, 1990 levels by 2020, and 80 percent below the 1990 levels by the year 2050. In 2006, this goal was reinforced with the passage of Assembly Bill (AB) 32.

GLOBAL WARMING SOLUTIONS ACT OF 2006 AND EXECUTIVE ORDER S-20-06

The Global Warming Solutions Act of 2006 set the same overall GHG emissions reduction goals as outlined in Executive Order S-3-05. The act further requires that ARB create a plan including market mechanisms and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06, enacted on October 18, 2006, further directed state agencies to begin implementing the act, including the recommendations made by the State of California's Climate Action Team.

The EDCAQMD has no regulations addressing GHG emissions. The EDCAQMD has not established quantitative significance thresholds for evaluating GHG emissions in CEQA analyses. Each project is evaluated on a case-by-case basis, using the most up-to-date calculation and analysis methods. Therefore, to establish additional context in which to consider the order of magnitude of the project's construction-related GHG emissions, this analysis considers the following guidelines on the levels of GHG emissions that would constitute a cumulatively considerable incremental contribution to climate change:

- The San Luis Obispo Air Pollution Control District has adopted 1,150 MT CO_2e as a project-level GHG significance threshold that would apply to annual operational and amortized construction emissions from land use development projects (SLOAPCD 2012).
- The SCAQMD GHG Working Group has proposed a significance screening level of 3,000 MT CO_2 per year for residential and commercial projects (SCAQMD 2008).

- The Sacramento Metropolitan Air Quality Management District (SMAQMD) has a construction phase GHG emissions thresholds of 1,100 MT CO_2e per year (SMAQMD 2015).

Many California air districts, such as the SMAQMD and the SCAQMD, recommend that construction emissions associated with a project be amortized over the life of the project (typically 30 years) and added to the operational emissions. The EDCAQMD's CEQA Guide to Air Quality Assessment includes numerous references to methodologies developed by the SMAQMD and the SCAQMD for criteria pollutant emissions. Therefore, because of lack of a specific GHG threshold or guidance from the EDCAQMD, referencing methodologies and guidance from those agencies is considered to be appropriate when discussing GHG emissions. The information regarding other jurisdictions' thresholds are provided for comparative purposes only. These thresholds are not applicable to the proposed project and are not intended to be used for assessing the environmental impact of associated GHG emissions.

This analysis includes a quantification of total modeled construction-related GHG emissions. Those emissions are then amortized and evaluated as a component of the proposed project's operational emissions over the 30-year project life. The intent of this analysis to put project-generated GHG emissions into the appropriate statewide context regarding whether the proposed project's contribution of GHG emissions would reach the level that would have a considerable incremental contribution to global climate change. The GHG emission modeling results are included in Appendix A.

3.8.2 DISCUSSION

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction-Related Impact

Project construction would generate short-term GHG emissions. Construction-related GHG emissions would be generated by vehicle engine exhaust from construction equipment, haul trips, and construction worker trips. GHG emissions generated by the proposed project would consist primarily of CO_2. Emissions of other GHGs, such as CH_4 and N_2O, are important with respect to global climate change; however, even when considering the higher GWPs of these other GHGs, their contribution to total GHG emissions is small compared with CO_2 emissions from the proposed project's emission sources (i.e., construction equipment and on-road vehicles). However, where appropriate emission factors were available, emissions of CH_4 and N_2O were included in the analysis of the proposed project.

Project construction would generate approximately 132 MT CO_2e over the entire construction period, which would last 7 to 9 months. These emissions would include heavy-duty construction equipment, haul trucks, and construction worker vehicles. To estimate amortized construction emissions, the total construction-related GHG emissions of 132 MT CO_2e associated with the proposed project are divided by 30 years (approximately 4.4 MT CO_2 per year).

As mentioned previously, many air districts recommend that construction-related GHG emissions be amortized over the lifetime of the project and compared to the thresholds of significance along with operational GHG emissions. Because the proposed project would not include additional GHG emissions associated with operations, the amortized construction-related emissions of 4.4 MT CO_2e need to be compared to any proposed or adopted

GHG thresholds of significance. Because EID and the EDCAQMD do not have adopted thresholds, the amortized construction emissions are discussed in a statewide context regarding other proposed or adopted thresholds. The amortized construction-related GHG emissions would be less than the adopted or proposed GHG levels or thresholds identified for SLOAPCD, SCAQMD, or SMAQMD as previously discussed. Therefore, the proposed project would not generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment. The impact would be less than significant. No mitigation is required.

Post-Project Operation-Related Impact

Project implementation would not require or result in additional operational and maintenance activities above existing conditions. Therefore, no impact would occur.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction-Related Impact

None of the measures listed in ARB's Climate Change Scoping Plan (ARB 2008), which contains the main strategies that California would use to achieve emission reductions necessary to meet the goals of AB 32, relate directly to project construction activities. The scoping plan includes some measures that indirectly would address GHG emissions levels associated with construction activity, such as the phasing in of cleaner technology for diesel engine fleets (including construction equipment) and development of a low-carbon fuel standard. However, successful implementation of these measures primarily would depend on development of laws and policies at the State level. Those policies formulated under the mandate of AB 32 that would apply to project construction-related activity, either directly or indirectly, presumably would be implemented during project construction, if those policies in fact are developed and adopted before the start of project construction. Therefore, project construction is not expected to conflict with the scoping plan.

As discussed previously, the proposed project would not generate GHG emissions that would have a significant impact on the environment. Neither EID nor any other agency with jurisdiction over the proposed project has adopted climate change or GHG reduction measures with which the proposed project would conflict. The proposed project would not conflict with any applicable plan, policy, or regulation for reducing GHG emissions. Therefore, the impact would be less than significant. No mitigation is required.

Post-Project Operation-Related Impact

Project implementation would not require or result in additional operational and maintenance activities above existing conditions. Therefore, no impact would occur.

3.9 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. Hazards and Hazardous Materials. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

3.9.1 ENVIRONMENTAL SETTING

RECORDS SEARCH FOR HAZARDOUS MATERIALS

The SWRCB GeoTracker and the California Department of Toxic Substances Control (DTSC) EnviroStor database were searched to identify toxic releases, hazardous waste, or other violations that could affect the project site (SWRCB 2019; DTSC 2019). The project site is not listed as a hazardous waste site in either of these databases.

In addition, the EPA's Envirofacts database was searched. Envirofacts is an assemblage of databases, including the Comprehensive Environmental Response, Compensation, and Liability Act (commonly known as Superfund) Information System database, which includes National Priorities List sites being assessed under the Superfund

program, hazardous waste sites, and potentially hazardous waste sites. The project site is not listed in the Envirofacts database (EPA 2019).

WILDFIRE RISK AND RESPONSE

PRC 4201-4204 and Government Code 51175-51189 require identification of fire hazard severity zones in California. CAL FIRE has established a fire hazard severity classification system. Fire hazard severity zones are measured qualitatively, based on vegetation, topography, weather, crown fire potential (a fire's tendency to burn upwards into trees and tall brush), ember production, and movement within the area being consumed.

Fire prevention areas considered to be under State jurisdiction are referred to as State Responsibility Areas (SRA). In such areas, CAL FIRE is required to delineate three hazard ranges: moderate, high, and very high. The project site is within an SRA and has been identified by CAL FIRE as being in a Very High Fire Hazard Severity Zone (CAL FIRE 2007).

Battalion 1 of CAL FIRE's Amador-El Dorado Unit has primarily responsibility for response to wildland fires in the project area (CAL FIRE 2018). Battalion 1 encompasses approximately 590,000 acres in El Dorado and Sacramento counties. El Dorado County communities within the Battalion include Camino, Diamond Springs, El Dorado, El Dorado Hills, Pioneer, Logtown, Latrobe, Nashville, Cameron Park, Placerville, Pleasant Valley, Pollock Pines, Rescue, Shingle Springs, and Grizzly Flats. Within Battalion 1, El Dorado Station 43 would provide first response to the project site. El Dorado Station 43 houses two Type III fire engines and one Type II fire dozer (CAL FIRE 2018). It also houses one dozer tender unit and is the Battalion Chief Headquarters. El Dorado Station 43 is approximately 10 miles northeast of the project site, at 5660 Mother Load in Placerville.

3.9.1 DISCUSSION

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Project construction would involve the storage, use, and transport of small amounts of hazardous materials (e.g., asphalt, fuel, lubricants, and other substances) on roadways including Latrobe Road and Shingle Lime Mine Road, as well as regional highways such as US 50. Regulations governing hazardous materials transport are stated in Title 22 of the California Code of Regulations and the California Vehicle Code (Title 13 of the California Code of Regulations). The transportation of hazardous materials also is subject to other local and federal regulations that have been designed specifically to minimize the risk of upset during routine construction activities. The State agencies with primary responsibility for enforcing federal and State regulations, and for responding to hazardous materials transportation emergencies, are the California Highway Patrol and Caltrans. Together, these agencies determine container types to be used and license hazardous waste haulers for transportation of hazardous waste on public roads.

Project contractors would be required to comply with the California Environmental Protection Agency Unified Program; regulated activities would be managed by the El Dorado County Department of Environmental Management, which is the designated Certified Unified Program Agency for El Dorado County, in accordance with the regulations included in the Unified Program (e.g., hazardous materials release response plans and inventories, California Uniform Fire Code hazardous material management plans and inventories). Such compliance would reduce the potential for accidental release of hazardous materials during project construction.

Project construction and operation would be required by law to implement and comply with existing hazardous material regulations. Each of these regulations is designed specifically to protect public health through improved procedures for handling hazardous materials, better technology in equipment used to transport these materials, and a more coordinated, quicker response to emergencies. The proposed project would implement the measures needed to comply with existing regulations. The impact would be less than significant. No mitigation is required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

EPA's Envirofacts, the SWRCB's GeoTracker, and the DTSC's EnviroStor databases were searched to identify toxic releases, hazardous waste, or other violations that could affect the project site. The site is not listed in these databases as a hazardous waste site (EPA 2019; SWRCB 2019; DTSC 2019).

As discussed in Section 3.3, "Air Quality," the project site is in an area designated as "likely to contain asbestos." El Dorado County Air Quality Management rule 223-2 requires an asbestos dust mitigation plan, to be prepared, submitted, approved and implemented when more than 20 cubic yards of earth are to be moved at all sites identified as being in an Asbestos Review Area. Because the project site is in an area "likely to contain asbestos," the proposed project would expose nearby receptors to substantial asbestos concentrations. Therefore, the impact would be potentially significant.

Mitigation Measure HAZ-1: Implement Mitigation Measure AQ-1.

Implementation of Mitigation Measure AQ-1 would reduce the potentially significant impact associated with exposure to asbestos to a less than significant level by stockpiling excavated materials on site and implementing dust suppression methods. The impact would be less than significant with mitigation incorporated.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The project site is not within 0.25 mile of an existing or proposed school. The nearest school is Blue Oak Elementary School, approximately 2.5 miles north of the project site. No potential exists for hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Therefore, no impact would occur.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The project site is not on EPA's list of Superfund hazardous waste sites, nor is it on the DTSC's Hazardous Waste and Substance Site list (the Cortese list) (DTSC 2019). Therefore, no impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project

result in a safety hazard or excessive noise for people residing or working in the project area?

The project site is not in a designated or proposed airport land use plan area, nor is it within 2 miles of a public airport. The nearest airport, the Rancho Murieta Airport, is approximately 12 miles southwest of the project site. Therefore, no impact would occur.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

El Dorado County has not adopted an emergency response plan. However, haul trucks and other on-road vehicles to be used during project construction could increase the hazard risk on existing roadways, including Latrobe Road, as could off-road, earth-moving equipment, transporting soil from the borrow area using the Shingle Lime Mine Road and the Deer Creek Road.

Traffic safety hazard risk could increase because of conflicts when construction vehicles enter a public right-of-way from a project work site; conflicts when road width is narrowed or a roadway is closed during construction activities, which could result in delays to emergency vehicles passing through the project area; or increased truck traffic (and the slower speed and wider turning radius of the trucks) during construction. Therefore, the impact would be potentially significant.

Mitigation Measure HAZ-2: Implement Mitigation Measure TRANS-1.

Implementation of Mitigation Measure TRANS-1 would reduce the potentially significant impact associated with emergency response and evacuation routes to a less than significant level, by requiring a plan for notifications and a process for communication with affected residents and landowners before the start of construction; requiring notification to the public, advising them of alternative routes; providing notification to administrators of police and fire stations, and ambulance service providers of the timing, location, and duration of construction activities and the locations of detours and lane closures, where applicable; and maintaining access for emergency vehicles in and/or adjacent to roadways affected by construction activities at all times. The impact would be less than significant with mitigation incorporated.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The proposed project would occur in an area rated as susceptible to wildfires. As discussed above, the project site has been identified by CAL FIRE as being in a Very High Fire Hazard Severity Zone. The project site vegetation consists of dense brush composed of manzanita and chamise,

During project construction, equipment and on-site diesel engine use could pose a risk for wildfire. Sparks could result from operation of construction equipment; heated mufflers; or accidental ignition of oils, lubricants, and other combustible materials could occur, resulting in a fire. Construction-related activities such as steel cutting and welding also would be potential sources of ignition. However, contractors would be required to comply with Sections 4427, 4428, 4431, and 4442 of the PRC; during construction, they would be responsible for monitoring and implementing safety measures to prevent wildfires, in strict adherence to applicable PRC requirements (see Section 3.20, “Wildfire,” for further discussion of PRC requirements).

Crushed gravel would be placed around each solar array, to control weed growth, which would further reduce the risk of wildland fire, if an ignition source is associated with the array's electrical equipment. Therefore, the impact would be less than significant.

3.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that there the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site;	☐	☒	☐	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
iv) Impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐

3.10.1 ENVIRONMENTAL SETTING

Hydrology

The DCWWTP is located on and discharges treated effluent to Deer Creek, a tributary to the Cosumnes River, and subsequently flowing to the Sacramento–San Joaquin Delta. EID operates the DCWWTP under a permit issued by the Central Valley Regional Water Quality Control Board.

The proposed solar PV system would be installed on a sloping hillside that drains to the west toward the DCWWTP. Surface flows then drain in a northerly direct toward Deer Creek. No defined channels or waterways are on the project site. Surface drainage occurs as sheet flow across the property.

Water Quality

As previously noted, the DCWWTP discharges treated effluent to Deer Creek. EID conveys a portion of the treated effluent from the DCWWTP as recycled water for the communities of El Dorado Hills and Cameron Park.

Water bodies in the Upper Cosumnes Watershed support a series of beneficial uses that include municipal and domestic water supplies; irrigation; stock watering; contact and noncontact recreation; canoeing and rafting; warm freshwater habitats for migration and spawning of striped bass, sturgeon, and shad; cold water habitats for migration and spawning of salmon and steelhead; and wildlife habitat (CVRWQCB 2018). Impairments of these beneficial uses exist in six water bodies in the Upper Cosumnes Watershed for the pollutants listed in Table 3.10-1. Four of the listed water bodies are found in or border El Dorado County (EPA 2016. Water quality priorities for this watershed include aluminum, manganese, Escherichia coli (*E. coli*), invasive exotic species, sediment toxicity, and iron, and water body pollutant combinations on the Clean Water Act Section 303(d) list (Stantec 2018).

Table 3.10-1. Clean Water Act Section 303(d) Listed Water Bodies and Pollutants in the Upper Cosumnes River Watershed

Water Body	Clean Water Act 303(d) Listing
Cosumnes River, Lower	*E. coli*, Invasive Exotic Species, Sediment Toxicity
Cosumnes River, Upper	Invasive Exotic Species
Deer Creek	Iron

E. coli = Escherichia coli

Source: Stantec 2018; modified by AECOM in 2019

The proposed project is located in the Latrobe planning area. This planning area encompasses the Deer Creek impaired water body and is bordered on the southern end by the Upper and Lower Cosumnes River that also are impaired. Total maximum daily loads (TMDL) are expected to be developed for aluminum, invasive exotic species, and iron. A TMDL for manganese, *E. coli*, and sediment toxicity is expected to be available by 2021(Stantec 2018).

3.10.2 DISCUSSION

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

The potential would exist for sediment and erosion to occur in association with project construction that could result in the violation of water quality standards or waste discharge requirements. Implementation of Mitigation Measure GEO-1 as well as erosion control measures and other BMPs as part of the SWPPP, the potential for any violation would be minimized. The impact would be less than significant with mitigation incorporated.

Mitigation Measure HYDRO-1: Implement Mitigation Measure GEO-1.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that there the project may impede sustainable groundwater management of the basin?

The proposed project would not involve extraction of groundwater and would not deplete groundwater supplies. The project area is not located in a known groundwater recharge basin, and the proposed facilities would not interfere substantially with groundwater recharge. No impact would occur.

c i-iv) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site;

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv) Impede or redirect flood flows?

Project construction would have the potential to alter the drainage patterns on the immediate location of the solar PV arrays, which could result in erosion on the site and increase the rate or amount of runoff by creating impermeable surfaces. The potential increase in runoff is not expected to result in flooding, either on or off-site. Implementation of Mitigation Measure HYDRO-1 would minimize erosion and reduce the potential impacts. The impact under item i) would be less than significant with mitigation incorporated. The proposed project would not contribute runoff water, create additional sources of polluted runoff, or impede or redirect flood flows. No impacts would occur for items ii), iii), and iv).

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The project site is not near a body of water and is not be subject to seiche or tsunami. The project site does not pose a risk to release pollutants associated with inundation. No impact would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The proposed project would not conflict with implementation of a water quality control plan or sustainable groundwater management plan. The proposed project would not result in conditions that would alter or contribute to conflicts with an applicable water quality control plan or sustainable groundwater management plan. No impact would occur.

f) Otherwise substantially degrade water quality?

The proposed project would not substantially degrade water quality by introducing pollutants that may be released by inundation or altered drainage patterns. In addition, implementation of Mitigation Measure HYDRO-1 would minimize the risk of effects associated with grading and excavation at the project site on surface water quality in local waterways. The impact would be less than significant with mitigation incorporated.

3.11 LAND USE AND PLANNING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. Land Use and Planning. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

3.11.1 ENVIRONMENTAL SETTING

The project site is at the end of Deer Creek Road, south of US 50 and west of State Highway 49. The Assessor's Parcel Numbers for the project property are 109-02-015, 109-02-019, 109-02-003, and 109-01-016. The land currently is zoned as Open Space and is designated for Public Facilities land use in the El Dorado County General Plan (El Dorado County 2018). The County General Plan designates adjacent property land use to the north as Rural Residential, to the east as Open Space, and to the west and south as Low Density Residential.

The project is proposed by EID, a special district that supplies water to customers throughout much of El Dorado County. Pursuant to Government Code sections 53091(D) and (E), many of EID's activities are not subject to local zoning or land use requirements, as stated below.

> *"(d) Building ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water, wastewater, or electrical energy by a local agency.*
>
> *(e) Zoning ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water, or for the production or generation of electrical energy, facilities that are subject to Section 12808.5 of the Public Utilities Code, or electrical substations in an electrical transmission system that receives electricity at less than 100,000 volts. Zoning ordinances of a county or city shall apply to the location or construction of facilities for the storage or transmission of electrical energy by a local agency, if the zoning ordinances make provision for those facilities."*

As a special district with equal authority, EID is exempt from local land use controls and the goals and policies within the County's General Plan and Zoning Ordinance. However, EID aims to comply with the General Plan and Zoning Ordinance and considers these documents in evaluating impacts.

3.11.2 DISCUSSION

a) Physically divide an established community?

The proposed project would be within an existing public facility site and would not result in the physical division of any established community in the area. No impact would occur.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The El Dorado County Zoning Ordinance allows public facility uses within areas zoned for Open Space. Public facilities are permitted by the Public Facilities General Plan designations. Solar facilities may be permitted in any zone with a conditional use permit. The proposed project involves the installation of a solar array to supplement power at the DCWWTP, which is a public facility for the use of treating wastewater. Additionally, as previously stated, EID is exempt from El Dorado County Zoning Ordinance. No impact would occur.

3.12 MINERAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. Mineral Resources. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

3.12.1 ENVIRONMENTAL SETTING

Under the Surface Mining and Reclamation Act (SMARA), the State Mining and Geology Board (SMGB) may designate certain mineral deposits as being regionally significant to satisfy future needs. The SMGB decision to designate an area is based on a classification report, prepared for the CGS, and on input from other agencies and the public (Lloyd et. al. 1983). In compliance with SMARA, the CGS established a classification system (Table3.12-1) to indicate the locations and significance of key extractive resources.

Table 3.12-1. California Geological Survey Mineral Land Classification System

Classification	Description
MRZ-1	Areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence.
MRZ-2a	Areas underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present.
MRZ-2b	Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered deposits that represent either inferred reserves or deposits that are presently subeconomic as determined by limited sample analysis, exposure, and past mining history.
MRZ-3a	Areas underlain by geologic settings within which undiscovered mineral resources similar to known deposits in the same producing district or region may be reasonably expected to exist (hypothetical resources). Land areas classified MRZ-3a are underlain by geologic settings which are favorable environments for the occurrence of specific mineral deposits.
MRZ-3b	Areas that may contain undiscovered mineral resources that occur either in known types of deposits in favorable geologic settings where mineral discoveries have not been made, or in types of deposits as yet unrecognized for their economic potential (speculative resources). Land areas classified MRZ-3b are underlain by geologic settings which appear to be favorable environments for the occurrence of specific mineral deposits.
MRZ-4	Areas where available data are inadequate for placement in any other mineral resource zone, where geologic information does not rule out either the presence or absence of mineral resources.

Note:
MRZ = Mineral Resource Zone
Source: Lloyd et al. 1983

The CGS has classified the Sierra Nevada foothills in El Dorado and Amador counties for various mineral deposits, including chromite (the source of the metal chromium), sulfide deposits, copper, placer and lode gold, carbonate rock, and talc. Deer Creek and its stream channel immediately adjacent to the northern side of the DCWWTP are classified as MRZ-3a for placer deposits of gold and chromite. The top of the hill immediately adjacent to the northeastern side of the project area has been classified as MRZ-2a for talc and carbonate rock. This area also has been classified as MRZ-2 for limestone, and the site of a former limestone quarry is approximately 1,800 feet northeast of the project area. The project site and vicinity are classified as MRZ-3 for gold, copper, and zinc, formed from volcanogenic processes, and as MRZ-4 for copper and gold (Lloyd et al. 1983). The project site is not in a designated regionally important area of known mineral resources (i.e., MRZ-2), and it is not within a designated locally important area of known mineral resources under the 2004 El Dorado County General Plan (El Dorado County 2017).

3.12.2 DISCUSSION

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The project site is not classified by the CGS as an area where known regionally important mineral resources are present (Lloyd et al. 1983). No active mining operations are in the project vicinity. **No impact** would occur.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The 2004 El Dorado County General Plan (El Dorado County 2017) indicates that the only locally important mineral resource recovery sites in the county are those designated as MRZ-2. In the project vicinity, MRZ-2 deposits of talc, carbonate rock, and limestone are adjacent to and northeast of, but not in the project site. As described in a) above, no mineral resources are found at the project site, which consists of vacant land adjacent to the DCWWTP. **No impact** would occur.

3.13 NOISE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. Noise. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

3.13.1 ENVIRONMENTAL SETTING

The area around the project site consists primarily of open space but has been developed with scattered rural residential developments and light industrial land uses. The most significant source of noise generated in the project area is associated with vehicular traffic on Deer Creek Road.

3.13.2 DISCUSSION

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The El Dorado County General Plan identifies noise level limits for sensitive land uses (i.e., schools, hospitals, churches, and residential). The maximum level (L_{max}) identified for these receptors is 75 decibels (dB), and the highest hourly average noise level (L_{eq}) is 55 dB (El Dorado County 2004). Proposed project construction activities may result in temporary noise level increases from heavy construction and possibly from blasting operations. The noise levels during these activities may reach 80 to 84 dB, when measured at 50 feet from the source.

The nearest sensitive receptors to proposed clearing and grubbing activities are approximately 1,800 feet from the center of the project site, with partial shielding resulting from intervening topography. Noise levels decrease with distance from a source, and shielding that is provided by natural topography can further reduce noise exposure. Accounting distance and partial shielding effects, temporary project construction activities would result in hourly and maximum noise levels of approximately 45 A-weighted decibels (dBA) L_{eq} and 52 dBA L_{max}, respectively, at the nearest noise-sensitive receptor. Proposed project construction activities would comply with the County's

maximum noise level standard of 75 dB; and the County's hourly noise level standard of 55 dB. Therefore, the impact would be less than significant. No mitigation is required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Proposed project construction activities may generate temporary groundborne vibration from equipment movement and operation. The Federal Transit Administration (FTA) has developed criteria for human annoyance, and the California Department of Transportation (Caltrans) has developed criteria for potential structural damage to adjacent buildings. To determine vibration impacts for human annoyance and structural damage, these FTA and Caltrans standards commonly are applied as an industry standard. The FTA recommends 72 velocity decibels (VdB) at residential uses to avoid human annoyance (FTA 2018). Caltrans recommends 0.3-inch-per-second peak particle velocity (PPV) at residential uses, to avoid structural damage to newer buildings (Caltrans 2013).

Based on FTA reference vibration levels, the vibration level associated with the use of a large bulldozer is 0.089 inches per second PPV (87 VdB) at 25 feet. The nearest vibration-sensitive uses to project construction activities would occur at the DCWWTP facilities, approximately 1,800 feet to the east. At this distance, the highest vibration levels that would be generated by project construction equipment would attenuate to less than 0.003 PPV and 59 VdB. The vibration that would be generated by equipment is not anticipated to be excessive.

Long-term operational-related activities associated with the proposed project would not include any major new sources of groundborne noise or vibration. Furthermore, the nearest vibration-sensitive receptors are more than 1,800 feet from the project area, a sufficient distance to attenuate and dampen potential groundborne vibration and groundborne noise impacts.

The short-term project construction and long-term operation would not result in the exposure of individuals to or the generation of excessive groundborne noise or vibration levels. Therefore, the impact would be less than significant. No mitigation is required.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The project area is not in the vicinity of a private airstrip or an airport land use plan, or in a place where such a plan has not been adopted, within 2 miles of a public airport or public use airport, and the proposed project would not expose people residing or working in the project area to excessive noise levels. The Cameron Park Airport is approximately 3.5 miles northeast of the project site. In addition, the project site is not located within an adopted or proposed airport land use plan. Therefore, no impact would occur.

3.14 POPULATION AND HOUSING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. Population and Housing. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.14.1 ENVIRONMENTAL SETTING

The project site is on DCWWTP property in an unincorporated area of El Dorado County. No homes or businesses are on the project site.

3.14.2 DISCUSSION

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The proposed project would not induce unplanned population growth in the area. No new homes or businesses are proposed. The project would increase renewable energy, produced by new solar panels, to offset consumed conventional power produced by PG&E, reduce utility billing costs, and provide long-term energy cost savings for operation of the DCWWTP. Revenues received from the sale of the power generated would offset the cost to operate the DCWWTP. No increase in the maximum capacity of the DCWWTP would occur. No impact would occur.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The project site is designated as a public facility on the El Dorado County General Plan Land Use map, and is zoned as Open Space. No people are residing at or are housed on the project site. Project implementation would not displace people or residences. No impact would occur.

3.15 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Public Services. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

3.15.1 ENVIRONMENTAL SETTING

Proposed project implementation would not affect parks, schools, or other public services. Therefore, the following discussion focuses on fire and police protection providers who would provide emergency response services to the project site.

EL DORADO COUNTY FIRE DISTRICT

The El Dorado County Fire District provides fire protection services to 281 square miles of unincorporated El Dorado County. The Fire District has six staffed and seven unstaffed volunteer fire stations, and 72 uniformed personnel and three support personnel (El Dorado County Fire District 2019). The Fire District responds to structural fires, vehicle accidents, medical aid requests, or any other emergencies. The nearest fire station to the project site is Fire Station 28, approximately 6 miles to the southwest, at 3860 Ponderosa Road in Shingle Springs. This fire station is staffed full time with an engine company and a medic unit. Station 28 also houses the Fire Districts' Office of Emergency Services (OES) engine, which is staffed when requested by the California OES.

EL DORADO COUNTY SHERIFF'S DEPARTMENT

Law enforcement in unincorporated areas of El Dorado County is provided by the El Dorado County Sheriff's Department. The Sheriff's Department operates from its headquarters in Placerville and from substations in South Lake Tahoe, El Dorado Hills, and Georgetown (El Dorado County Sheriff's Department 2017). Specialized members of the Sheriff's Department also serve on additional units, including the Crisis Response, Off-Highway Vehicle Unit, Special Weapons and Tactics Team, Dive Team, and Search and Rescue Team. The patrol unit is

the largest operational unit and consists of three lieutenants, 14 sergeants, and 76 deputy sheriffs (El Dorado County Sheriff's Department 2017). The nearest Sheriff's substation to the project site is approximately 7 miles to the northwest, at 4354 Town Center Drive in El Dorado Hills. The Sheriff's Department is responsible for managing the OES in El Dorado County. The OES is responsible for planning, response, recovery and mitigation of large-scale emergencies, and it provides a link between local emergency services and the State (El Dorado County Sheriff's Department 2017).

3.15.2 DISCUSSION

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

The proposed project would install a new solar PV system. Crushed gravel would be placed around each array to reduce fire hazards, and emergency access would be provided by a 16-foot-wide graveled access road, bisecting the two arrays. The proposed project would not include any new housing or businesses that would increase demand for fire protection services and facilities. Therefore, the proposed project would not affect the El Dorado County Fire District's response times or other performance objectives, and would not result in construction of new or expansion of existing fire protection facilities. No impact would occur.

Police protection?

The proposed project would install a new solar PV system. The new solar PV system would include security fencing to minimize the potential for vandalism. The proposed project would not increase the population in the project area because of new housing or employment opportunities that would increase demand for police protection services or require additional Sheriff's Department staffing to maintain its officer-to-population service ratio. Therefore, the proposed project would not cause construction of new or expansion of existing police protection facilities. No impact would occur.

Schools?

Project implementation would not create any new housing that would generate new students or increase the demand for school services and facilities. No impact would occur.

Parks?

No community or neighborhood parks are near the project site. The proposed project would not increase the population in the project area because of new housing or employment opportunities. Therefore, the proposed project would not increase the use of existing neighborhood or community parks or require construction of new parks to meet the County's parkland standard. No impact would occur.

Other public facilities?

No other public facilities are in the project vicinity. Therefore, project operation would not increase demand for other public facilities. No impact would occur.

3.16 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Recreation.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

3.16.1 ENVIRONMENTAL SETTING

The proposed project would occur within the boundaries of the DCWWTP. The nearest public recreational facility is Valley View Sports Park, approximately 4 miles west of the DCWWTP.

3.16.2 DISCUSSION

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No community parks are within or in the vicinity of the DCWWTP. The nearest recreational facility is Valley View Sports Park, approximately 4 miles to the west. The proposed project would not increase the population in the project area because of new housing or employment opportunities. Therefore, the proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities. No impact would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

The proposed project would install additional PV solar panels at the DCWWTP. The proposed project would not increase the population in the project area because of new housing or employment opportunities. Therefore, the proposed project would not result in construction or expansion of recreational facilities. No impact would occur.

3.17 TRANSPORTATION/TRAFFIC

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. Transportation. Would the project:				
a) Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

3.17.1 ENVIRONMENTAL SETTING

ROADWAYS

The key roadways in the project area that are likely to be affected by project-related traffic are US 50, Cameron Park Drive, Durock Road, Shingle Lime Mine Road, and Deer Creek Road. Primary access to the project site is from Shingle Lime Mine Road, and Deer Creek Road, which extends north from the DCWWTP (see Figure 2.1-1).

According to the El Dorado County Bicycle Transportation Plan (El Dorado County Transportation Commission 2010), bikeways are not planned in the project area along Cameron Park Drive, Durock Road, Shingle Lime Mine Road, and Deer Creek Road. No transit facilities are in the project area. No railroads are in the project area. The project site is approximately 4.8 miles southwest of the Cameron Airpark. However, as noted in Section 3.12, "Noise," the proposed project is outside the area of influence for the Cameron Airpark.

No federal plans, policies, regulations, or laws related to transportation/traffic apply to the proposed project. Caltrans is responsible for planning, designing, constructing, operating, and maintaining State-owned roadways. The goals established for specific highways are documented in transportation concept reports. The Transportation Corridor Concept Report: United States Highway 50 (Caltrans 2010) describes the 20-year improvement concept for US 50. The concept presented for Segment 13, the segment closest to the project site, is a four-lane rural freeway. Segment 13 extends from the Cedar Grove exit to 0.67 mile east of Sly Park Road in El Dorado County.

Operation of the roadway system typically is described in terms of level of service (LOS). It is designated by the letters A through F, with a rating A corresponding to the lowest levels of congestion, and a rating F corresponding to the highest level of congestion. At LOS A, traffic is free-flowing at or above the speed limit. At LOS F, traffic is very slow with frequently slows and stops, and each vehicle moves only when traffic around it moves. The concept for Segment 13 LOS is rated F.

The Sacramento Area Council of Governments (SACOG) is an association of local governments in the six-county Sacramento region that provides transportation planning and funding for the region. SACOG is the metropolitan planning organization, responsible for developing a State and federally required metropolitan transportation plan every 4 years. The Metropolitan Transportation Plan/Sustainable Communities Strategy 2035 has been adopted by the El Dorado County Transportation Commission to serve as its transportation plan.

Government Code Section 53091 states that building and zoning ordinances do not apply to "construction of facilities for the production, generation, storage, treatment, or transmission of water, wastewater, or electrical energy by a local agency." Public utility projects that serve the facilities described above are not subject to local plans, policies, regulations, or ordinances. Local goals and policies related to transportation/traffic resources have been used to assist with CEQA review, for significance thresholds in evaluating potential impacts associated with the proposed project.

The Transportation and Circulation Element of the El Dorado County General Plan requires that County-maintained roads and State highways within the unincorporated areas of the county shall not be worse than LOS E in the community regions, or LOS D in rural centers and rural regions (El Dorado County 2009). In addition, the County is to strive to provide safe, continuous, and accessible sidewalks and pedestrian facilities as a viable alternative transportation mode.

Project operations following completion of the proposed installation would not change, compared to existing conditions. Therefore, an analysis of project-related traffic impacts using LOS was not performed, because LOS primarily is used for analyzing long-term effects of projects on traffic flow. This analysis used the recommended screening criterion from the Institute of Transportation Engineers (ITE 1988) for assessing the effects of construction projects that create temporary traffic increases. To account the large percentage of heavy trucks associated with typical construction projects, the Institute of Transportation Engineers recommends a threshold level of 50 or more new peak-direction (one-way) trips during the peak hour.

3.17.2 DISCUSSION

a) Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Proposed project implementation would not introduce any new land uses or activities in the project area that would generate long-term increases in traffic volume. Potential traffic increases would be limited to temporary construction-related activities associated with installing the new solar PV system.

Proposed project construction would require hauling equipment/materials and worker commute trips to and from the project area along local surface streets. During equipment installation, one to two flatbed semi-trucks would transport the solar panel modules to the project site over approximately 100 trips. An estimated 500 trips would be necessary to bring in the crushed gravel, and 25 trips would be necessary for additional construction materials. During the remainder of the construction activities, a limited number of light-duty trucks would be used by construction personnel. An estimated 12 workers would be required for the duration of project construction.

Trucks trips associated with import or removal of the required materials during project construction would result in up to approximately 25 truck trips per day during transportation of the crushed gravel to the site (i.e., 50 trips per day, assuming a passenger car equivalent value of 2.0). In addition, commuting by construction workers

would result in approximately 12 additional total daily trips in each direction (i.e., 24 trips per day) on the area roadways. In total, activities associated with the proposed project may add as many as 74 total daily trips to project area roadways over the course of the 8-hour work window. This would result in a maximum of 18 additional trips on area roadways during the peak hour (3 truck trips per hour [6 trips per hour, assuming a passenger car equivalent value of 2.0], and 12 worker trips per peak hour).

Because the proposed project would not result in more than 50 new trips during the a.m. or p.m. peak hours, the proposed project is not anticipated to cause an increase in traffic that would be substantial in relation to the existing traffic load and capacity of the street system. Therefore, the proposed project would not result in substantial trip-generated traffic congestion. Also, construction-generated traffic would be temporary, and therefore would not result in any long-term degradation in performance of any of the roadways in the project vicinity. Therefore, the proposed project would not conflict with adopted applicable policies or plans related to the performance of the circulation system. The impact would be less than significant. No mitigation is required.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

The impact under the threshold above would be significant if the proposed project would generate work vehicle miles traveled per employee exceeding 15 percent below the existing average work vehicle miles traveled per employee in the Planning Commission Area in which the project site is located. The proposed project would not require a change to the existing land use designation. Project operations would not change compared to existing conditions. Project implementation would not require or result in additional activities for operations and maintenance beyond existing conditions. Therefore, no impact would occur.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The maneuvering of project construction vehicles and equipment among the general-purpose vehicles on local roads could cause safety hazards. Haul trucks and other on-road vehicles to be used during project construction could increase the hazard risk on existing roadways, as could off-road, earth-moving equipment, transporting soil from the borrow area using Cameron Park Drive, Durock Road, Shingle Lime Mine Road, and the Deer Creek Road.

Traffic safety hazard risk could increase because of conflicts where construction vehicles would enter a public right-of-way from a project work site; conflicts where road width would be narrowed or a roadway would be closed during construction activities, which could result in delays to emergency vehicles passing through the project area; or increased truck traffic (and the slower speed and wider turning radius of the trucks) during construction.

In addition to these potential impacts, the use of large trucks to transport equipment and material to and from a project work site could affect road conditions on the access routes by increasing the rate of road wear. The degree to which this potential impact may occur would depend on the design (pavement type and thickness) and the existing condition of the road. Major arterials and collectors are designed to accommodate a mix of vehicle types, including heavy trucks. The potential impacts are expected to be negligible on those roads. However, lower-capacity roadways could be substantially affected if used by project construction equipment.

Because of the temporary disruption to traffic flow, the presence of construction equipment in the public right-of-way, and the localized increase in traffic congestion, drivers would be presented with unexpected driving conditions and obstacles, which could result in an increased occurrence of automobile or haul-truck accidents. The increased traffic hazard risk created by project construction would be a potentially significant impact.

Mitigation Measure TRANS-1: Prepare and Implement a Traffic Control Plan.

Before project construction begins, EID and/or its approved construction contractor shall prepare and implement a traffic control plan to minimize construction-related traffic safety hazards on the affected roadways and ensure adequate access for emergency responders. EID and/or its contractor shall coordinate development and implementation of this plan with jurisdictional agencies (e.g., El Dorado County), as appropriate. The traffic control plan shall, at minimum:

- Include a discussion of work hours, haul routes, work area delineation, traffic control, and flagging.
- Determine the need to require workers to park personal vehicles at an approved staging area and take only necessary project vehicles to the work sites.
- Develop and implement a plan for notifications and a process for communication with residents and landowners located on Cameron Park Drive, Durock Road, Shingle Lime Mine Road, and Deer Creek Road before the start of construction. Public notification would include posting notices and appropriate signage of construction activities. The written notifications would include the construction schedule, the exact location and duration of activities on each street (e.g., which roads/lanes and access points/driveways would be blocked on which days and for how long), and contact information for questions and complaints.
- Provide notification to the public advising them of alternative routes that may be available to avoid delays.
- Provide notification to administrators of police and fire stations, ambulance service providers, and recreational facility managers of the timing, location, and duration of construction activities, and the locations of detours and lane closures, where applicable. Maintain access for emergency vehicles in and/or adjacent to roadways affected by construction activities at all times.
- Require the repair and restoration of affected roadway rights-of-way to their original condition after construction is completed.

Implementing Mitigation Measure TRANS-1 would reduce the potentially significant impact associated with traffic hazards because the traffic control plan would be used to develop detours to ensure acceptable traffic flow through and/or around the construction zone; minimize impacts on multimodal facilities by providing alternate routes for users of the facilities; and minimize traffic congestion. The impact would be less than significant with mitigation incorporated.

d) Result in inadequate emergency access?

Emergency access to roadways in the project area could be reduced by activities associated with the proposed project. Slow-moving trucks entering and exiting the project site along Cameron Park Drive, Durock Road,

Shingle Lime Mine Road, and Deer Creek Road could delay the movement of emergency vehicles between US 50 ramps and the project site. However, flaggers would be deployed in this area, to control truck traffic in the event of an emergency, to allow unimpeded movement of emergency vehicles. The impact would be less than significant. No mitigation is required.

3.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. Tribal Cultural Resources. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

3.18.1 ENVIRONMENTAL SETTING

NATIVE AMERICAN CONSULTATION

On February 1, 2019, EID contacted the Wilton Rancheria, the El Dorado County Wopumnes Nisenan-Mewuk Nation, United Auburn Indian Community, and the Torres Martinez Desert Cahuilla Indians, requesting a response if the groups are interested in consulting regarding the proposed project in accordance with AB-52. Other tribal groups on the NAHC list will be notified of the availability of this IS/MND and may request consultation with EID if interested.

A sacred lands search was requested by AECOM from the Native American Heritage Commission (NAHC) on March 27, 2019. The purpose of the search was to ascertain whether additional resources or locations exist that may be of importance to Native Americans who traditionally have resided in the project area. The NAHC responded on April 30, 2016 stating that a review of the sacred land files was negative.

3.18.2 DISCUSSION

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

Consultation with local Native American groups and individuals did not identify tribal cultural resources in the project site. No impact would occur.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Consultation with local Native American groups and individuals did not identify tribal cultural resources in the project site. No impact would occur.

3.19 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. Utilities and Service Systems. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

3.19.1 ENVIRONMENTAL SETTING

The proposed project consists of installing 1,886-kilowatt dc solar arrays and associated electrical equipment (i.e., inverters, transformers, switchgear, system disconnects, and service meters). The wired connection between the solar arrays and the designated point of interconnection, southwest of the DCWWTP, would consist of a 12-kV ac electrical line, to be routed underground. PG&E will be performing minor upgrades to its existing 21-kV distribution system to facilitate the interconnection.

3.19.1 DISCUSSION

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The proposed project would not include any new development that would require relocation or construction of new or expanded municipal wastewater treatment, stormwater drainage, natural gas, or telecommunications facilities. No impact would occur.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Only one small waterline, if any, would be needed for the new solar PV arrays, if the modules are determined to need occasional rinsing, to maintain their energy conversion efficiency. The waterline would be serviced by the existing water system, which maintains sufficient capacity to support such a connection. The impact would be less than significant. No mitigation is required.

c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?

The proposed project would not generate new wastewater flows. Therefore, the proposed project would not exceed a wastewater treatment provider's capacity. No impact would occur.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Project construction would involve site clearing and grubbing. The 2016 CALGreen Code (Title 24, Part 11 of the California Code of Regulations) requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting primarily from land clearing be reused or recycled (California Building Standards Commission 2016). Excavated material, other than organic material removed during clearing and grubbing, would remain on site and would be used for site-leveling backfill material, and organic material would be recycled, consistent with the 2016 CALGreen Code.

Project operation would not generate solid waste that would require disposal. Therefore, waste generated by the proposed project would not exceed State standards or otherwise impair the attainment of solid waste reduction goals. No impact would occur.

e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

As discussed in Item (d), the proposed project would comply with 2016 CALGreen Code by re-using excavated soil and recycling 100 percent of the organic material cleared from the project site. Therefore, no impact would occur.

3.20 WILDFIRE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. Wildfire. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

3.20.1 ENVIRONMENTAL SETTING

The long, hot, dry summers in El Dorado County, combined with poor road access, inadequate clearance between structures and vegetation, flammable vegetation, and steep topography result in severe seasonal wildfire conditions every year. The PRC requires the designation of State Responsible Areas (SRAs), which are identified based on cover, beneficial water uses, probable erosion damage and fire risks, and hazards. In such areas, CAL FIRE is required to delineate three hazard ranges: moderate, high, and very high. CAL FIRE designates the project site as a Very High Fire Hazard Severity Zone in a State Responsibility Area (CAL FIRE 20097). The financial responsibility of preventing and suppressing fires in this SRA is primarily the responsibility of the State.

Additional discussion of wildfire risk and response is presented in Section 3.9.1 *Hazards and Hazardous Materials.*

3.20.2 DISCUSSION

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Project construction and operation would not interfere with any adopted emergency response plan or emergency evacuation plan, including any EID emergency response plan or the Countywide Disaster Plan as implemented by the OES of the County Sheriff's Department. The solar PV arrays would be installed on the DCWWTP property, with construction access occurring via Cameron Park Drive, Durock Road, Shingle Lime Mine Road, and Deer

Creek Road, The installation of the arrays would not interfere with vehicle movement on local roadways. No impact would occur.

Because of the temporary disruption to traffic flow, the presence of construction equipment in the public right-of-way, and the localized increase in traffic congestion, drivers would be presented with unexpected driving conditions and obstacles, which could result in an increased occurrence of automobile or haul-truck accidents.

The potential for impairment of an adopted emergency response plan created by project construction traffic on local roadways would be a potentially significant impact.

Mitigation Measure WILDFIRE-1: Implement Mitigation Measure TRANS-1.

Implementation of Mitigation Measure TRANS-1 would effectively reduce the impact for potential delays to emergency vehicles or interference of traffic movement. The impact would be less than significant with mitigation incorporated.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

The new solar PV arrays would be installed on steeply sloping terrain. Project construction would involve some soil disturbance and grading for the conduit and foundations. During construction, equipment and on-site diesel fuel could pose a risk of wildfire, with possible ignition sources such as internal combustion engines, gasoline-powered tools, and equipment that could produce a spark, fire, or flame. However, contractors would have to comply with the following:

- PRC Section 4427: identifies appropriate fire suppression equipment and stipulates removal of flammable materials to a distance of 10 feet from any equipment that could produce a spark, fire, or flame on days when burning permits are required.
- PRC Section 4428: identifies additional firefighting equipment requirements during the period of highest fire danger (April 1–December 1).
- PRC Section 4431: prohibits the use of portable tools powered by gasoline-fueled internal combustion engines within 25 feet of flammable materials when burning permits are required.
- PRC Section 4442: prohibits the use or operation of any internal combustion engine which uses hydrocarbon fuels on any forest-covered land, brush -covered land, or grass covered land unless the engine is equipped with a spark arrester.

During construction, strict adherence to applicable PRC requirements would ensure that contractors would be responsible for monitoring and taking appropriate safety measures, so that any risk to exacerbate wildfire, and in turn, pollution from wildfire, would be minimized.

During operation, the areas around the solar PV arrays would be covered by crushed gravel, which further would reduce the risk of wildland fire on adjacent grasslands, if an electrical problem would occur with the solar PV system. The proposed project would be within a designated SRA at an established EID facility that is served by

fire protection services of the El Dorado County Fire Protection Department and CAL FIRE. The impact would be less than significant. No mitigation is required.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The new solar PV system would include electrical equipment (i.e., inverters, transformers, switchgear, system disconnects, and service meters), which potentially could exacerbate potential fire risks. The proposed project would construct a 16-foot-wide access road from the southern end of the DCWWTP through the middle of the solar array area, for construction and maintenance access. In addition, the project site surrounding the arrays would be covered by crushed gravel, and a water spigot would be provided in the vicinity of the arrays. EID would comply with applicable County regulations, including the provisions of the Fire Hazard Ordinance (El Dorado County 2019). The Fire Hazard Ordinance requires defensible space, including incorporation and maintenance of a 30-foot fire break or clearing around structures. These measures and compliance with Fire Hazard Ordinance requirements would avoid installing infrastructure that may exacerbate fire risk or result in impacts on the environment. The impact would be less than significant. No mitigation is required.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The proposed project would not include any habitable structures and would not significantly change the slope of the project site. Project implementation would not expose people or structures to significant risks because of runoff, post-fire slope instability, or drainage changes. The impact would be less than significant. No mitigation is required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI.	**Mandatory Findings of Significance.**				
	a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
	b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐
	c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Authority: Public Resources Code Sections 21083, 21083.5.

Reference: Government Code Sections 65088.4.
Public Resources Code Sections 21080, 21083.5, 21095; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

3.21.1 DISCUSSION

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

The proposed project would not substantially, reduce the habitat of fish or wildlife species, or cause a fish or wildlife population to drop below self-sustaining levels. Implementation of the mitigation measures presented in Sections 3.3, 3.4, 3.5, 3.7, 3.10, 3.17, and 3.20 would mitigate potential significant impacts that would substantially degrade the quality of the environment, or impact biological or cultural resources. The potential impacts identified in this document would be less than significant with mitigation incorporated.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

The proposed project would not have impacts that would be cumulatively considerable. No known past, present, or future projects at the DCWWTP would contribute in a cumulative manner to effects on the environment. No impact would occur.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

As discussed in Section 3.9, "Hazards and Hazardous Materials," the potential exists for naturally occurring asbestos to be present on the project site. Implementation of the mitigation measures AQ-1 and HAZ-1 identified in Sections 3.3 and 3.9 would minimize project-related environmental effects on human beings. The impact would be less than significant with mitigation incorporated.

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5 DOCUMENT PREPARATION

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Appendix A

Air Quality Emission Modeling Results

DEER CREEK WWTP

El Dorado-Mountain County,
Annual

1.0 PROJECT CHARACTERISTICS

LAND USAGE

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	7.50	0.00	0

OTHER PROJECT CHARACTERISTICS

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	1			**Operational Year**	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

USER ENTERED COMMENTS & NON-DEFAULT DATA

Project Characteristics -

Land Use - The new solar PV arrays will occupy about 7.5 acres located within the boundary of the DCWWTP site

Construction Phase - No Demolition, and no architectural coating.

Off-road Equipment - Project Description.

Off-road Equipment - From Project Description.

Off-road Equipment - From Project Description.

Off-road Equipment - From Project Description.

Trips and VMT - Project Description.

Off-road Equipment - Project Description.

Off-road Equipment - Project Description.

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tblConstructionPhase	NumDays	230.00	80.00
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tblConstructionPhase	PhaseEndDate	7/24/2020	12/25/2020
tblConstructionPhase	PhaseEndDate	6/26/2020	12/13/2019
tblConstructionPhase	PhaseStartDate	7/13/2019	7/15/2019
tblConstructionPhase	PhaseStartDate	8/10/2019	8/12/2019
tblConstructionPhase	PhaseStartDate	6/27/2020	12/14/2020
tblConstructionPhase	PhaseStartDate	8/10/2019	8/26/2019
tblLandUse	LotAcreage	0.00	7.50
tblOffRoadEquipment	HorsePower	247.00	187.00
tblOffRoadEquipment	HorsePower	402.00	132.00
tblOffRoadEquipment	HorsePower	402.00	46.00
tblOffRoadEquipment	LoadFactor	0.40	0.41
tblOffRoadEquipment	LoadFactor	0.38	0.36

tblOffRoadEquipment	LoadFactor	0.38	0.45
tblOffRoadEquipment	OffRoadEquipmentType	Paving Equipment	Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Off-Highway Trucks
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tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	29.00
tblTripsAndVMT	HaulingTripNumber	0.00	29.00
tblTripsAndVMT	HaulingTripNumber	0.00	29.00
tblTripsAndVMT	HaulingTripNumber	0.00	49.00
tblTripsAndVMT	HaulingTripNumber	0.00	29.00
tblTripsAndVMT	VendorTripNumber	0.00	5.00
tblTripsAndVMT	VendorTripNumber	0.00	5.00
tblTripsAndVMT	VendorTripNumber	0.00	5.00
tblTripsAndVMT	VendorTripNumber	0.00	25.00
tblTripsAndVMT	VendorTripNumber	0.00	5.00
tblTripsAndVMT	WorkerTripNumber	5.00	24.00
tblTripsAndVMT	WorkerTripNumber	10.00	24.00
tblTripsAndVMT	WorkerTripNumber	13.00	24.00
tblTripsAndVMT	WorkerTripNumber	5.00	24.00
tblTripsAndVMT	WorkerTripNumber	0.00	24.00

2.0 EMISSIONS SUMMARY

2.1 OVERALL CONSTRUCTION

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1176	1.0317	0.7622	1.4900e-003	0.1167	0.0524	0.1691	0.0559	0.0497	0.1056	0.0000	131.4038	131.4038	0.0235	0.0000	131.9907
2020	7.0700e-003	0.0687	0.0732	1.3000e-004	1.8600e-003	3.1900e-003	5.0400e-003	5.0000e-004	2.9300e-003	3.4300e-003	0.0000	11.8702	11.8702	2.9300e-003	0.0000	11.9435
Maximum	**0.1176**	**1.0317**	**0.7622**	**1.4900e-003**	**0.1167**	**0.0524**	**0.1691**	**0.0559**	**0.0497**	**0.1056**	**0.0000**	**131.4038**	**131.4038**	**0.0235**	**0.0000**	**131.9907**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1176	1.0317	0.7622	1.4900e-003	0.1167	0.0524	0.1691	0.0559	0.0497	0.1056	0.0000	131.4037	131.4037	0.0235	0.0000	131.9905
2020	7.0700e-003	0.0687	0.0732	1.3000e-004	1.8600e-003	3.1900e-003	5.0400e-003	5.0000e-004	2.9300e-003	3.4300e-003	0.0000	11.8702	11.8702	2.9300e-003	0.0000	11.9435
Maximum	**0.1176**	**1.0317**	**0.7622**	**1.4900e-003**	**0.1167**	**0.0524**	**0.1691**	**0.0559**	**0.0497**	**0.1056**	**0.0000**	**131.4037**	**131.4037**	**0.0235**	**0.0000**	**131.9905**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**7-1-2019**	**9-30-2019**	0.5959	0.5959
2	**10-1-2019**	**12-31-2019**	0.5031	0.5031
		Highest	0.5959	0.5959

2.3 OVERALL OPERATIONAL

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

2.3 OVERALL OPERATIONAL

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Deer Creek WWTP - El Dorado-Mountain County, Annual

3.0 CONSTRUCTION DETAIL

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/12/2019	5	10	
2	Grading	Grading	7/15/2019	8/9/2019	5	20	
3	Access Road	Trenching	8/12/2019	8/23/2019	5	10	
4	Solar Array Construction	Building Construction	8/26/2019	12/13/2019	5	80	
5	Paving	Paving	12/14/2020	12/25/2020	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Deer Creek WWTP - El Dorado-Mountain County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Solar Array Construction	Cranes	1	7.00	231	0.29
Solar Array Construction	Forklifts	1	8.00	89	0.20
Solar Array Construction	Generator Sets	1	8.00	84	0.74
Site Preparation	Rubber Tired Dozers	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Solar Array Construction	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Off-Highway Trucks	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Solar Array Construction	Welders	1	8.00	46	0.45
Access Road	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Access Road	Off-Highway Trucks	1	8.00	46	0.45
Solar Array Construction	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	2	24.00	5.00	29.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	24.00	5.00	29.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	24.00	5.00	29.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Access Road	2	24.00	25.00	49.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Solar Array Construction	6	24.00	5.00	29.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 MITIGATION MEASURES CONSTRUCTION

SITE PREPARATION - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0301	0.0000	0.0301	0.0166	0.0000	0.0166	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5700e-003	0.0585	0.0281	5.0000e-005		3.0600e-003	3.0600e-003		2.8200e-003	2.8200e-003	0.0000	4.3708	4.3708	1.3800e-003	0.0000	4.4054
Total	**5.5700e-003**	**0.0585**	**0.0281**	**5.0000e-005**	**0.0301**	**3.0600e-003**	**0.0332**	**0.0166**	**2.8200e-003**	**0.0194**	**0.0000**	**4.3708**	**4.3708**	**1.3800e-003**	**0.0000**	**4.4054**

3.2 SITE PREPARATION - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-004	5.4500e-003	1.5700e-003	1.0000e-005	2.4000e-004	3.0000e-005	2.7000e-004	7.0000e-005	3.0000e-005	1.0000e-004	0.0000	1.1347	1.1347	2.0000e-005	0.0000	1.1351
Vendor	1.3000e-004	3.3200e-003	1.1600e-003	1.0000e-005	1.5000e-004	3.0000e-005	1.7000e-004	4.0000e-005	3.0000e-005	7.0000e-005	0.0000	0.5866	0.5866	2.0000e-005	0.0000	0.5870
Worker	9.1000e-004	6.1000e-004	6.3500e-003	1.0000e-005	1.4700e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.3438	1.3438	5.0000e-005	0.0000	1.3449
Total	**1.2000e-003**	**9.3800e-003**	**9.0800e-003**	**3.0000e-005**	**1.8600e-003**	**7.0000e-005**	**1.9200e-003**	**5.0000e-004**	**7.0000e-005**	**5.7000e-004**	**0.0000**	**3.0651**	**3.0651**	**9.0000e-005**	**0.0000**	**3.0671**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0301	0.0000	0.0301	0.0166	0.0000	0.0166	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5700e-003	0.0585	0.0281	5.0000e-005		3.0600e-003	3.0600e-003		2.8200e-003	2.8200e-003	0.0000	4.3708	4.3708	1.3800e-003	0.0000	4.4054
Total	**5.5700e-003**	**0.0585**	**0.0281**	**5.0000e-005**	**0.0301**	**3.0600e-003**	**0.0332**	**0.0166**	**2.8200e-003**	**0.0194**	**0.0000**	**4.3708**	**4.3708**	**1.3800e-003**	**0.0000**	**4.4054**

SITE PREPARATION - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-004	5.4500e-003	1.5700e-003	1.0000e-005	2.4000e-004	3.0000e-005	2.7000e-004	7.0000e-005	3.0000e-005	1.0000e-004	0.0000	1.1347	1.1347	2.0000e-005	0.0000	1.1351
Vendor	1.3000e-004	3.3200e-003	1.1600e-003	1.0000e-005	1.5000e-004	3.0000e-005	1.7000e-004	4.0000e-005	3.0000e-005	7.0000e-005	0.0000	0.5866	0.5866	2.0000e-005	0.0000	0.5870
Worker	9.1000e-004	6.1000e-004	6.3500e-003	1.0000e-005	1.4700e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.3438	1.3438	5.0000e-005	0.0000	1.3449
Total	**1.2000e-003**	**9.3800e-003**	**9.0800e-003**	**3.0000e-005**	**1.8600e-003**	**7.0000e-005**	**1.9200e-003**	**5.0000e-004**	**7.0000e-005**	**5.7000e-004**	**0.0000**	**3.0651**	**3.0651**	**9.0000e-005**	**0.0000**	**3.0671**

GRADING - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0212	0.2367	0.1169	2.3000e-004		0.0109	0.0109		9.9800e-003	9.9800e-003	0.0000	21.0623	21.0623	6.6600e-003	0.0000	21.2289
Total	**0.0212**	**0.2367**	**0.1169**	**2.3000e-004**	**0.0655**	**0.0109**	**0.0764**	**0.0337**	**9.9800e-003**	**0.0437**	**0.0000**	**21.0623**	**21.0623**	**6.6600e-003**	**0.0000**	**21.2289**

3.3 GRADING - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-004	5.4500e-003	1.5700e-003	1.0000e-005	2.4000e-004	3.0000e-005	2.7000e-004	7.0000e-005	3.0000e-005	1.0000e-004	0.0000	1.1347	1.1347	2.0000e-005	0.0000	1.1351
Vendor	2.6000e-004	6.6400e-003	2.3200e-003	1.0000e-005	2.9000e-004	5.0000e-005	3.5000e-004	8.0000e-005	5.0000e-005	1.4000e-004	0.0000	1.1733	1.1733	3.0000e-005	0.0000	1.1740
Worker	1.8100e-003	1.2300e-003	0.0127	3.0000e-005	2.9400e-003	2.0000e-005	2.9600e-003	7.8000e-004	2.0000e-005	8.0000e-004	0.0000	2.6876	2.6876	9.0000e-005	0.0000	2.6899
Total	**2.2300e-003**	**0.0133**	**0.0166**	**5.0000e-005**	**3.4700e-003**	**1.0000e-004**	**3.5800e-003**	**9.3000e-004**	**1.0000e-004**	**1.0400e-003**	**0.0000**	**4.9955**	**4.9955**	**1.4000e-004**	**0.0000**	**4.9990**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0212	0.2367	0.1169	2.3000e-004		0.0109	0.0109		9.9800e-003	9.9800e-003	0.0000	21.0623	21.0623	6.6600e-003	0.0000	21.2289
Total	**0.0212**	**0.2367**	**0.1169**	**2.3000e-004**	**0.0655**	**0.0109**	**0.0764**	**0.0337**	**9.9800e-003**	**0.0437**	**0.0000**	**21.0623**	**21.0623**	**6.6600e-003**	**0.0000**	**21.2289**

GRADING - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-004	5.4500e-003	1.5700e-003	1.0000e-005	2.4000e-004	3.0000e-005	2.7000e-004	7.0000e-005	3.0000e-005	1.0000e-004	0.0000	1.1347	1.1347	2.0000e-005	0.0000	1.1351
Vendor	2.6000e-004	6.6400e-003	2.3200e-003	1.0000e-005	2.9000e-004	5.0000e-005	3.5000e-004	8.0000e-005	5.0000e-005	1.4000e-004	0.0000	1.1733	1.1733	3.0000e-005	0.0000	1.1740
Worker	1.8100e-003	1.2300e-003	0.0127	3.0000e-005	2.9400e-003	2.0000e-005	2.9600e-003	7.8000e-004	2.0000e-005	8.0000e-004	0.0000	2.6876	2.6876	9.0000e-005	0.0000	2.6899
Total	**2.2300e-003**	**0.0133**	**0.0166**	**5.0000e-005**	**3.4700e-003**	**1.0000e-004**	**3.5800e-003**	**9.3000e-004**	**1.0000e-004**	**1.0400e-003**	**0.0000**	**4.9955**	**4.9955**	**1.4000e-004**	**0.0000**	**4.9990**

ACCESS ROAD - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1600e-003	0.0117	0.0115	2.0000e-005		7.8000e-004	7.8000e-004		7.2000e-004	7.2000e-004	0.0000	1.3950	1.3950	4.4000e-004	0.0000	1.4060
Total	**1.1600e-003**	**0.0117**	**0.0115**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**1.3950**	**1.3950**	**4.4000e-004**	**0.0000**	**1.4060**

3.4 ACCESS ROAD - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.6000e-004	9.2100e-003	2.6500e-003	2.0000e-005	4.1000e-004	5.0000e-005	4.6000e-004	1.1000e-004	5.0000e-005	1.6000e-004	0.0000	1.9172	1.9172	3.0000e-005	0.0000	1.9180
Vendor	6.5000e-004	0.0166	5.8100e-003	3.0000e-005	7.3000e-004	1.3000e-004	8.7000e-004	2.1000e-004	1.3000e-004	3.4000e-004	0.0000	2.9331	2.9331	8.0000e-005	0.0000	2.9350
Worker	9.1000e-004	6.1000e-004	6.3500e-003	1.0000e-005	1.4700e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.3438	1.3438	5.0000e-005	0.0000	1.3449
Total	**1.8200e-003**	**0.0264**	**0.0148**	**6.0000e-005**	**2.6100e-003**	**1.9000e-004**	**2.8100e-003**	**7.1000e-004**	**1.9000e-004**	**9.0000e-004**	**0.0000**	**6.1942**	**6.1942**	**1.6000e-004**	**0.0000**	**6.1979**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1600e-003	0.0117	0.0115	2.0000e-005		7.8000e-004	7.8000e-004		7.2000e-004	7.2000e-004	0.0000	1.3950	1.3950	4.4000e-004	0.0000	1.4060
Total	**1.1600e-003**	**0.0117**	**0.0115**	**2.0000e-005**		**7.8000e-004**	**7.8000e-004**		**7.2000e-004**	**7.2000e-004**	**0.0000**	**1.3950**	**1.3950**	**4.4000e-004**	**0.0000**	**1.4060**

ACCESS ROAD - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.6000e-004	9.2100e-003	2.6500e-003	2.0000e-005	4.1000e-004	5.0000e-005	4.6000e-004	1.1000e-004	5.0000e-005	1.6000e-004	0.0000	1.9172	1.9172	3.0000e-005	0.0000	1.9180
Vendor	6.5000e-004	0.0166	5.8100e-003	3.0000e-005	7.3000e-004	1.3000e-004	8.7000e-004	2.1000e-004	1.3000e-004	3.4000e-004	0.0000	2.9331	2.9331	8.0000e-005	0.0000	2.9350
Worker	9.1000e-004	6.1000e-004	6.3500e-003	1.0000e-005	1.4700e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.3438	1.3438	5.0000e-005	0.0000	1.3449
Total	**1.8200e-003**	**0.0264**	**0.0148**	**6.0000e-005**	**2.6100e-003**	**1.9000e-004**	**2.8100e-003**	**7.1000e-004**	**1.9000e-004**	**9.0000e-004**	**0.0000**	**6.1942**	**6.1942**	**1.6000e-004**	**0.0000**	**6.1979**

SOLAR ARRAY CONSTRUCTION - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0760	0.6387	0.5035	8.6000e-004		0.0370	0.0370		0.0355	0.0355	0.0000	73.7428	73.7428	0.0141	0.0000	74.0958
Total	**0.0760**	**0.6387**	**0.5035**	**8.6000e-004**		**0.0370**	**0.0370**		**0.0355**	**0.0355**	**0.0000**	**73.7428**	**73.7428**	**0.0141**	**0.0000**	**74.0958**

3.5 SOLAR ARRAY CONSTRUCTION - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-004	5.4500e-003	1.5700e-003	1.0000e-005	2.4000e-004	3.0000e-005	2.7000e-004	7.0000e-005	3.0000e-005	1.0000e-004	0.0000	1.1347	1.1347	2.0000e-005	0.0000	1.1351
Vendor	1.0300e-003	0.0266	9.2900e-003	5.0000e-005	1.1800e-003	2.1000e-004	1.3900e-003	3.4000e-004	2.1000e-004	5.5000e-004	0.0000	4.6930	4.6930	1.2000e-004	0.0000	4.6960
Worker	7.2500e-003	4.9100e-003	0.0508	1.2000e-004	0.0118	9.0000e-005	0.0118	3.1300e-003	8.0000e-005	3.2100e-003	0.0000	10.7503	10.7503	3.6000e-004	0.0000	10.7594
Total	**8.4400e-003**	**0.0369**	**0.0617**	**1.8000e-004**	**0.0132**	**3.3000e-004**	**0.0135**	**3.5400e-003**	**3.2000e-004**	**3.8600e-003**	**0.0000**	**16.5780**	**16.5780**	**5.0000e-004**	**0.0000**	**16.5906**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0760	0.6387	0.5035	8.6000e-004		0.0370	0.0370		0.0355	0.0355	0.0000	73.7428	73.7428	0.0141	0.0000	74.0957
Total	**0.0760**	**0.6387**	**0.5035**	**8.6000e-004**		**0.0370**	**0.0370**		**0.0355**	**0.0355**	**0.0000**	**73.7428**	**73.7428**	**0.0141**	**0.0000**	**74.0957**

SOLAR ARRAY CONSTRUCTION - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6000e-004	5.4500e-003	1.5700e-003	1.0000e-005	2.4000e-004	3.0000e-005	2.7000e-004	7.0000e-005	3.0000e-005	1.0000e-004	0.0000	1.1347	1.1347	2.0000e-005	0.0000	1.1351
Vendor	1.0300e-003	0.0266	9.2900e-003	5.0000e-005	1.1800e-003	2.1000e-004	1.3900e-003	3.4000e-004	2.1000e-004	5.5000e-004	0.0000	4.6930	4.6930	1.2000e-004	0.0000	4.6960
Worker	7.2500e-003	4.9100e-003	0.0508	1.2000e-004	0.0118	9.0000e-005	0.0118	3.1300e-003	8.0000e-005	3.2100e-003	0.0000	10.7503	10.7503	3.6000e-004	0.0000	10.7594
Total	**8.4400e-003**	**0.0369**	**0.0617**	**1.8000e-004**	**0.0132**	**3.3000e-004**	**0.0135**	**3.5400e-003**	**3.2000e-004**	**3.8600e-003**	**0.0000**	**16.5780**	**16.5780**	**5.0000e-004**	**0.0000**	**16.5906**

PAVING - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.0000e-003	0.0602	0.0651	1.0000e-004		3.1400e-003	3.1400e-003		2.8900e-003	2.8900e-003	0.0000	8.8593	8.8593	2.8700e-003	0.0000	8.9309
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.0000e-003**	**0.0602**	**0.0651**	**1.0000e-004**		**3.1400e-003**	**3.1400e-003**		**2.8900e-003**	**2.8900e-003**	**0.0000**	**8.8593**	**8.8593**	**2.8700e-003**	**0.0000**	**8.9309**

3.6 PAVING - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	4.9500e-003	1.4100e-003	1.0000e-005	2.4000e-004	2.0000e-005	2.6000e-004	7.0000e-005	2.0000e-005	8.0000e-005	0.0000	1.1248	1.1248	1.0000e-005	0.0000	1.1252
Vendor	1.0000e-004	3.0000e-003	1.0200e-003	1.0000e-005	1.5000e-004	2.0000e-005	1.6000e-004	4.0000e-005	2.0000e-005	6.0000e-005	0.0000	0.5841	0.5841	1.0000e-005	0.0000	0.5844
Worker	8.4000e-004	5.5000e-004	5.6900e-003	1.0000e-005	1.4700e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.3021	1.3021	4.0000e-005	0.0000	1.3031
Total	**1.0700e-003**	**8.5000e-003**	**8.1200e-003**	**3.0000e-005**	**1.8600e-003**	**5.0000e-005**	**1.9000e-003**	**5.0000e-004**	**5.0000e-005**	**5.4000e-004**	**0.0000**	**3.0110**	**3.0110**	**6.0000e-005**	**0.0000**	**3.0126**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.0000e-003	0.0602	0.0651	1.0000e-004		3.1400e-003	3.1400e-003		2.8900e-003	2.8900e-003	0.0000	8.8592	8.8592	2.8700e-003	0.0000	8.9309
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.0000e-003**	**0.0602**	**0.0651**	**1.0000e-004**		**3.1400e-003**	**3.1400e-003**		**2.8900e-003**	**2.8900e-003**	**0.0000**	**8.8592**	**8.8592**	**2.8700e-003**	**0.0000**	**8.9309**

3.6 PAVING - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	4.9500e-003	1.4100e-003	1.0000e-005	2.4000e-004	2.0000e-005	2.6000e-004	7.0000e-005	2.0000e-005	8.0000e-005	0.0000	1.1248	1.1248	1.0000e-005	0.0000	1.1252
Vendor	1.0000e-004	3.0000e-003	1.0200e-003	1.0000e-005	1.5000e-004	2.0000e-005	1.6000e-004	4.0000e-005	2.0000e-005	6.0000e-005	0.0000	0.5841	0.5841	1.0000e-005	0.0000	0.5844
Worker	8.4000e-004	5.5000e-004	5.6900e-003	1.0000e-005	1.4700e-003	1.0000e-005	1.4800e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.3021	1.3021	4.0000e-005	0.0000	1.3031
Total	**1.0700e-003**	**8.5000e-003**	**8.1200e-003**	**3.0000e-005**	**1.8600e-003**	**5.0000e-005**	**1.9000e-003**	**5.0000e-004**	**5.0000e-005**	**5.4000e-004**	**0.0000**	**3.0110**	**3.0110**	**6.0000e-005**	**0.0000**	**3.0126**

4.0 OPERATIONAL DETAIL - MOBILE

4.1 MITIGATION MEASURES MOBILE

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

TRIP SUMMARY INFORMATION

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Commercial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

TRIP TYPE INFORMATION

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Commercial	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

FLEET MIX

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Commercial	0.512962	0.041542	0.225677	0.140684	0.035619	0.007151	0.016044	0.009270	0.001580	0.001207	0.005638	0.000826	0.001801

5.0ENERGY DETAIL

Historical Energy Use: N

5.0 MITIGATION MEASURES ENERGY

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

ENERGY BY LAND USE - NATURALGAS

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

ENERGY BY LAND USE - NATURALGAS

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

ENERGY BY LAND USE - ELECTRICITY

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 ENERGY BY LAND USE - ELECTRICITY

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 AREA DETAIL

6.1 MITIGATION MEASURES AREA

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

AREA BY SUBCATEGORY

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	**0.0000**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 WATER DETAIL

7.1 MITIGATION MEASURES WATER

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

WATER BY LAND USE

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 WATER BY LAND USE

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Commercial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 WASTE DETAIL

8.1 MITIGATION MEASURES WASTE

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

WASTE BY LAND USE

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Commercial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 OPERATIONAL OFFROAD

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 STATIONARY EQUIPMENT

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 VEGETATION

APPENDIX B

Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program

El Dorado Irrigation District Solar Panel Installation at the Deer Creek Wastewater Treatment Plant

Prepared for:

El Dorado Irrigation District

AECOM

May 2019

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El Dorado Irrigation District Solar Panel Installation at the Deer Creek Wastewater Treatment Plant

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MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA), El Dorado Irrigation District (EID) has prepared an initial study/mitigated negative declaration (IS/MND) that identifies environmental impacts related to the implementation of the Solar Panel Installation at the Deer Creek Wastewater Treatment Plant (Project). The IS/MND also identifies mitigation measures that will be implemented to reduce potential significant impacts to a less-than-significant level.

Section 21081.6 of the California Public Resources Code and Sections 15091(d) and 15097 of the CEQA Guidelines require public agencies "to adopt a reporting and monitoring program for changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." A mitigation monitoring and reporting program (MMRP) is required for the Project because the IS/MND identifies potentially significant and significant adverse impacts related to construction and operation activities, and mitigation measures have been identified to mitigate those impacts.

EID is the lead agency that must adopt the MMRP for the Project. Adoption of this MMRP will occur along with approval of the Project.

PURPOSE OF MITIGATION MONITORING AND REPORTING PROGRAM

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed according to schedule and maintained in a satisfactory manner during the construction and operation of the Project. The MMRP may be modified by EID during project implementation, as necessary, in response to changing conditions or other refinements. Table 1 has been prepared to assist the responsible parties in implementing the MMRP. The table identifies individual mitigation measures, monitoring/mitigation timing, the person and/or agency responsible for implementing the measure, and space to confirm implementation of the mitigation measures. The numbering of mitigation measures follows the numbering sequence found in the IS/MND.

ROLES AND RESPONSIBILITIES

EID is responsible for taking all actions necessary to implement the mitigation measures according to the specifications provided for each measure and for demonstrating that the action has been successfully completed. EID, at its discretion, may delegate implementation responsibility or portions thereof to a licensed contractor or other designated agent as long as EID maintains final responsibility for ensuring that the actions are taken.

EID will be responsible for overall administration of the MMRP and for verifying that EID staff members and/or the construction contractor has completed the necessary actions for each measure. EID will designate a project manager to oversee the MMRP. The project manager will be charged with the following duties:

- Ensure that routine inspections of the construction site are conducted by appropriate EID staff; check plans, reports, and other documents required by the MMRP; and conduct report activities

- Serve as a liaison between EID and other responsible agencies (where necessary), and the construction contractor regarding mitigation monitoring issues
- Complete forms and maintain reports and other records and documents generated by the MMRP
- Coordinate and ensure that corrective actions or enforcement measures are taken, if necessary

The responsible party for implementation of each item will identify the staff members responsible for coordinating with EID on the MMRP.

MITIGATION MONITORING PLAN

EID will verify the implementation of mitigation measures. Table 1 provides a template that EID can use to monitor and report on the implementation of mitigation measures.

The column categories identified in Table 1 are described below:

- **Mitigation Measure**—This column lists the mitigation measures according to the number in the IS/MND and provides the text of the mitigation measures identified in the IS/MND.
- **Party Responsible for Monitoring**—This column identifies the entity responsible for complying with the requirements of the mitigation measure.
- **Timeframe for Implementation**—This column lists the time frame in which the mitigation will take place.
- **Monitoring Compliance**—This column is for verifying compliance. The column is to be dated and initialed by the project manager or his/her designee, based on the documentation provided by the construction contractors, its agents (qualified individuals), or through personal verification by EID.

Table 1
Summary of Mitigation Measures, Responsible Parties, and Timing

Mitigation Measure	Party Responsible for Monitoring	Timeframe for Implementation	Monitoring Compliance (Provide Name/Date)
3.3 Air Quality			
AQ-1. Naturally Occurring Asbestos. Proximal to and within the mapped NOA zone, periodically material containing NOA may be excavated. The excavated material shall be stockpiled on site and covered to protect it from dispersal by wind and rain. During over excavation, dust suppression methods shall be employed, including periodic wetting. Specifically, the following steps shall be implemented/observed by EID or approved contractor: e. Best management practices shall be incorporated from Rule 223-2 Table 5. These measures shall include: • Washing trucks and equipment wheels that are used during excavation and ground disturbing activities before entering public roadways. • Equipping work crews with dust masks • Providing disposable covering for work crews • Restricting ground disturbing activities when onsite wind speeds exceed 10 mph. f. Establish permanent cover or vegetation upon completion of disturbance. g. A 15-mile per hour maximum speed limit will be maintained for all equipment and vehicles at the work site. h. Soil storage piles and disturbed areas will be stabilized by adequate wetting, treatment with a chemical dust suppressant, or covered with non-native soil material containing less than 0.25 percent asbestos.	EID and contractor	During construction	
3.4 Biological Resources			
BIO-1: Conduct Pre-Construction Surveys for Raptors and Migratory Birds. Removal of trees and vegetation shall be avoided to the greatest extent feasible. To the extent practicable, trees and vegetation shall be removed outside the nesting	EID and contractor	Prior to or during construction	

Table 1
Summary of Mitigation Measures, Responsible Parties, and Timing

Mitigation Measure	Party Responsible for Monitoring	Timeframe for Implementation	Monitoring Compliance (Provide Name/Date)
season, August 16 through January 31. If removal of trees occurs between February 1 and August 15, EID shall have a qualified biologist conduct preconstruction surveys for active nests of special-status and MBTA protected birds before the start of any project activities. Surveys for nesting raptors shall be conducted in accordance with established CDFW raptor survey protocols. If no active nests are found, tree and vegetation removal, along with other solar PV array installation activities may proceed without further studies or mitigative actions. If active nests are found, EID shall have a qualified biologist establish avoidance buffers around nests that are sufficient so that breeding is not likely to be disrupted or adversely affected by construction. An avoidance buffer will constitute an area where project-related activities (i.e., vegetation removal, earth moving, and construction) shall not occur. Typical avoidance buffers during the nesting season shall be 100 feet for nesting passerine birds and 500 feet for nesting raptors unless a qualified biologist, in consultation with USFWS and/or CDFW, determines that smaller buffers will be sufficient to avoid impacts on nesting raptors and/or other birds. Factors to be considered for determining buffer size will include: the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; and baseline levels of noise and human activity. A qualified biologist shall monitor any active nests during construction, to ensure that the species is not being harmed or harassed by noise or other activities stemming from project-related construction. Buffers shall be maintained by EID until a qualified biologist, in consultation with USFWS and/or CDFW, has determined that young have fledged and are no longer reliant on the nest or parental care for survival.			

Table 1
Summary of Mitigation Measures, Responsible Parties, and Timing

Mitigation Measure	Party Responsible for Monitoring	Timeframe for Implementation	Monitoring Compliance (Provide Name/Date)
3.5 Cultural Resources			
CUL-1: Inspect Project Site Following the Removal of Vegetation. Because the majority of the proposed project area could not be inspected for mining related features, the project site shall be inspected by a professional archaeologist following the removal of vegetation. The archaeologist shall inspect and assess the significance of any mining-related features that may be present, and prepare a report documenting the findings.	EID	Prior to construction	
CUL-2: Address Previously Undiscovered Historic Properties and Archaeological Resources. EID shall implement the following measure to reduce or avoid impacts on undiscovered historic properties and archaeological resources. If interested Native American Tribes provide information demonstrating the significance of the project location and tangible evidence supporting the determination the site is highly sensitive for prehistoric archaeological resources, EID will retain a qualified archaeologist 1) monitor for potential prehistoric archaeological resources during initial ground disturbing activities, 2) prepare a worker awareness brochure, and 3) invite tribal representatives to review the worker awareness brochure. If buried or previously unidentified historic properties or archaeological resources are discovered during project activities, all work within a 100-foot radius of the find shall cease. EID shall retain a professional archaeologist meeting the Secretary of the Interior's Professional Standards for Archaeologists to assess the discovery and recommend what, if any, further treatment or investigation is necessary for the find. Interested Native American Tribes will also be contacted. Any necessary treatment/investigation shall be developed with interested Native American Tribes providing recommendations and shall be coordinated with the State Historic Preservation Officer and Reclamation, if necessary, and shall be	EID	Prior to or during construction	

Table 1
Summary of Mitigation Measures, Responsible Parties, and Timing

Mitigation Measure	Party Responsible for Monitoring	Timeframe for Implementation	Monitoring Compliance (Provide Name/Date)
completed before project activities continue in the vicinity of the find.			
CUL-3: Avoid Potential Effects on Undiscovered Burials. EID shall implement the following measures to reduce or avoid impacts related to undiscovered burials. In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, all potentially damaging ground-disturbance in the area of the burial and a 100-foot radius shall halt and the El Dorado County Coroner shall be notified immediately. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, then Federal laws governing the disposition of those remain would come into effect. Specifically, the Native American Graves Protection and Repatriation Act (NAGPRA), Pub L. 101-601, 25 U.S.C. 3001 et seq., 104 Stat. 3048 requires federal agencies and institutions that receive federal funding to return Native American cultural items to lineal descendants and culturally affiliated Indian Tribes and Native Hawaiian organizations. Cultural items include human remains, funerary objects, sacred objects, and objects of cultural patrimony. NAGPRA also has established procedures for the inadvertent discovery of Native American cultural items on Federal or Tribal lands, which includes consultation with potential lineal descendants or Tribal officials as part of their compliance responsibilities. California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. EID shall ensure that the procedures for the treatment of Native American human remains contained in California Health and Safety Code	EID and contractor	Prior to and during construction	

Table 1
Summary of Mitigation Measures, Responsible Parties, and Timing

Mitigation Measure	Party Responsible for Monitoring	Timeframe for Implementation	Monitoring Compliance (Provide Name/Date)
Sections 7050.5 and 7052 and Public Resources Code Section 5097 are followed.			
3.7 Geology and Soils			
GEO-1: Prepare and Implement a Stormwater Pollution Prevention Plan. EID or its approved construction contractor shall file a Notice of Intent (NOI) with the Central Valley Regional Water Quality Control Board, to discharge in compliance with the statewide National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-009-DWQ, as amended by Order 2012-0006-DWQ). EID or its approved construction contractor also shall prepare a Storm Water Pollution Prevention Plan (SWPPP) and implement associated Best Management Practices (BMPs) that are specifically designed to reduce construction-related erosion. Construction techniques that may be implemented to reduce the potential for stormwater runoff include minimizing site disturbance, controlling water flow over the construction site, stabilizing bare soil, and ensuring proper site cleanup. BMPs that may be implemented to reduce erosion include silt fences, staked straw bales/wattles, silt/sediment basins and traps, geofabric, trench plugs, terraces, water bars, soil stabilizers and re-seeding and mulching to revegetate disturbed areas.	EID and contractor	Submittal of the State Construction General Permit NOI and SWPPP before the start of construction activities and implementation throughout Project construction	
3.9 Hazards and Hazardous Materials			
HAZ-1: Implement Mitigation Measure AQ-1.	EID and contractor	During construction	
HAZ-2: Implement Mitigation Measure TRANS-1.	EID and contractor	Before and during construction activities, as appropriate	
3.10 Hydrology and Water Quality			

Table 1
Summary of Mitigation Measures, Responsible Parties, and Timing

Mitigation Measure	Party Responsible for Monitoring	Timeframe for Implementation	Monitoring Compliance (Provide Name/Date)
HYDRO-1: Implement Mitigation Measure GEO-1.	EID and contractor	Submittal of the State Construction General Permit NOI and SWPPP before the start of construction activities and implementation throughout Project construction	

Table 1 Summary of Mitigation Measures, Responsible Parties, and Timing			
Mitigation Measure	**Party Responsible for Monitoring**	**Timeframe for Implementation**	**Monitoring Compliance (Provide Name/Date)**
3.17 Transportation/Traffic			

TRANS-1: Prepare and Implement a Traffic Control Plan. Before project construction begins, EID and/or its approved construction contractor shall prepare and implement a traffic control plan to minimize construction-related traffic safety hazards on the affected roadways and ensure adequate access for emergency responders. EID and/or its contractor shall coordinate development and implementation of this plan with jurisdictional agencies (e.g., El Dorado County), as appropriate. The traffic control plan shall, at minimum: ▸ Include a discussion of work hours, haul routes, work area delineation, traffic control, and flagging. ▸ Determine the need to require workers to park personal vehicles at an approved staging area and take only necessary project vehicles to the work sites. ▸ Develop and implement a plan for notifications and a process for communication with residents and landowners located on Cameron Park Drive, Durock Road, Shingle Lime Mine Road, and Deer Creek Road before the start of construction. Public notification would include posting notices and appropriate signage of construction activities. The written notifications would include the construction schedule, the exact location and duration of activities on each street (e.g., which roads/lanes and access points/driveways would be blocked on which days and for how long), and contact information for questions and complaints. ▸ Provide notification to the public advising them of alternative routes that may be available to avoid delays. ▸ Provide notification to administrators of police and fire stations, ambulance service providers, and recreational facility managers of the timing, location, and duration of construction activities, and the locations of detours and lane closures, where applicable. Maintain access for emergency vehicles in and/or adjacent to roadways affected by construction activities at all times. ▸ Require the repair and restoration of affected roadway rights-of-way to their original condition after construction is completed.	EID and contractor	Before and during construction activities, as appropriate	

Table 1 Summary of Mitigation Measures, Responsible Parties, and Timing			
Mitigation Measure	**Party Responsible for Monitoring**	**Timeframe for Implementation**	**Monitoring Compliance (Provide Name/Date)**
3.20 Wildfire			
WILDFIRE-1: Implement Mitigation Measure TRANS-1.	EID and contractor	Before and during construction activities, as appropriate	